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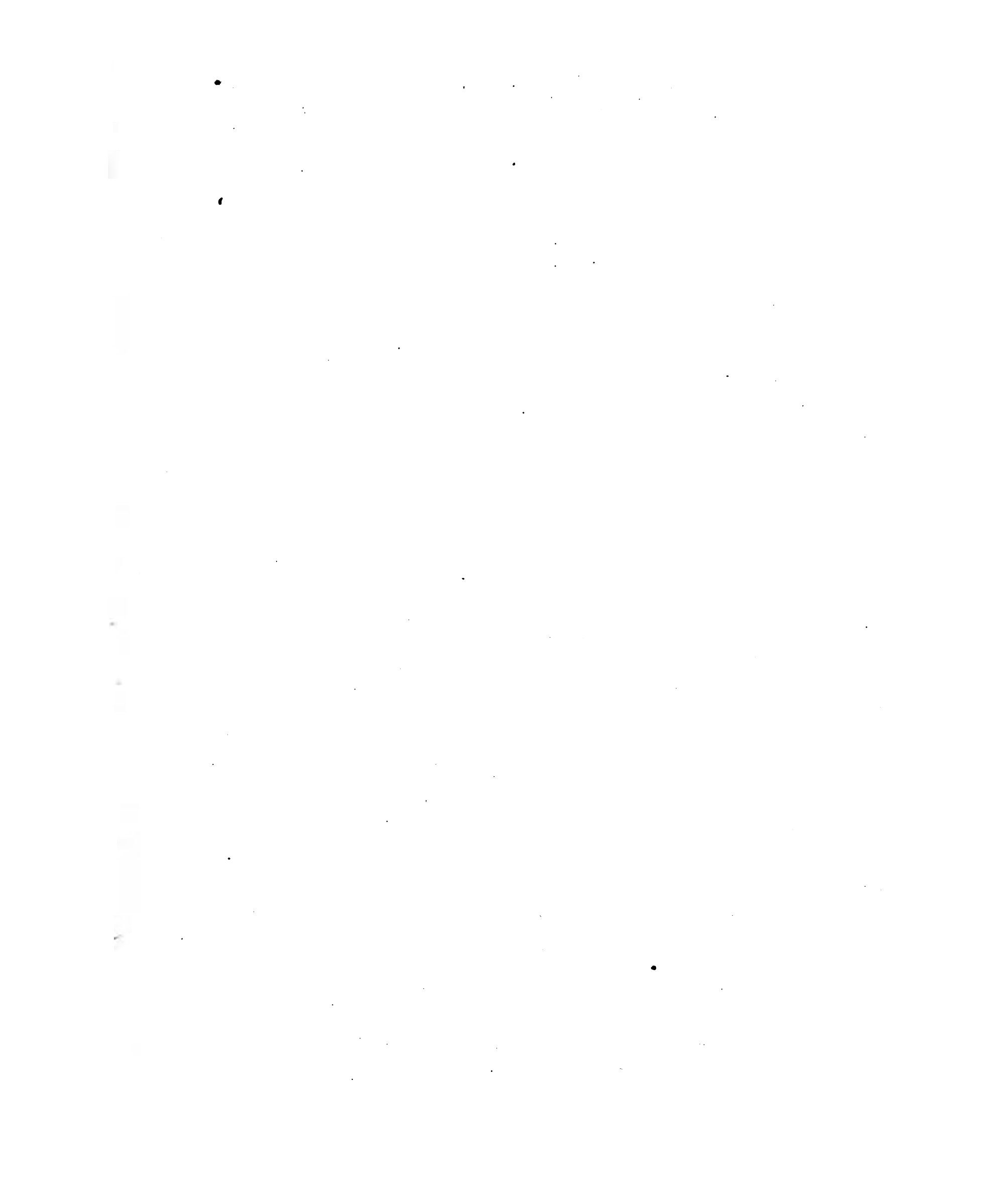
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43D CONGRESS, }
1st Session. }

SENATE.

{ Ex. Doc.
{ No. 58.

ANNUAL REPORT

OF THE

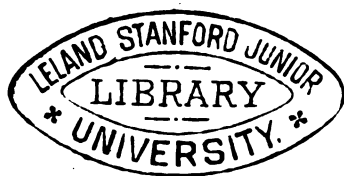
COMMISSIONER OF PATENTS

FOR

THE YEAR 1873.

FEBRUARY 2, 1874.—Ordered to lie on the table and be printed.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1874.



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LETTER

OF PATENTS,

DECEMBER 31, 1873.

UNITED STATES PATENT OFFICE,
Washington, D. C., January 31, 1874.

SIR: I have the honor herewith to submit my Annual Report for the year 1873.

Very respectfully,

M. D. LEGGETT,
Commissioner of Patents.

Hon. M. H. CARPENTER,
President pro tempore United States Senate.



REPORT OF THE COMMISSIONER.



ANNUAL REPORT
OF
THE COMMISSIONER OF PATENTS
FOR THE YEAR 1873.

To the Senate and House of Representatives of the United States of America in Congress assembled:

I submit the following as my annual report for the year ending December 31, 1873, in compliance with section 9 of the patent act.

1. Statement of moneys received.

Amount received on applications for patents, reissues, extensions, caveats, disclaimers, appeals, and trade-marks.....	\$626,170 00
Amount received for copies of specifications, drawings, and other papers.....	67,171 32
Amount received for recording assignments.....	9,850 45
Total.....	703,191 77

2. Statement of moneys expended.

Amount paid for salaries.....	\$461,277 99
Amount paid for photolithographing current issues.....	38,110 55
Amount paid for illustrations for Gazette.....	44,972 28
Amount paid for photolithographing back issues.....	52,485 30
Amount paid for contingent and miscellaneous expenses, viz:	
Advertising.....	\$3,530 83
Stationery.....	16,786 03
Painting, glazing, varnishing, paper-hanging, etc.....	694 71
Furniture, carpeting, etc.....	6,165 19
Fitting up cases in model rooms, carpenter's work, and repairing furniture.....	14,018 80
Plumbing and gas-fitting.....	812 85
English patents and foreign periodicals.....	2,448 50
Work on report and indexes.....	1,670 00
Refunding money paid by mistake.....	1,045 00
Hardware.....	1,427 85
Pay of temporary employes.....	25,856 62
Miscellaneous items, viz: Books for library, subscriptions to journals, freight, ice, washing towels, awnings, withdrawals, repairing carriage and harness, keeping horse, etc.....	19,276 95
Total.....	691,178 98

3. Statement of the balance in the Treasury of the United States on account of the patent fund.

Amount to the credit of the patent fund, January 1, 1873.....	\$794,111 42
Amount of receipts during the year 1873.....	703,191 77
Total.....	1,497,303 19
From which deduct expenditures for the year 1873.....	691,178 98
Balance January 1, 1874.....	806,124 21

4. Statement of the business of the Office for the year 1873.

Number of applications for patents during the year 1873.....	20,414
Number of patents issued, including reissues and designs.....	12,864

Number of applications for extension of patents.....	973
Number of patents extended.....	833
Number of caveats filed during the year.....	3,948
Number of patents expired during the year.....	4,482
Number of patents allowed but not issued for want of final fee.....	2,783
Number of applications for registering of trade-marks.....	534
Number of trade-marks registered.....	492
Of the patents granted there were to—	
Citizens of the United States.....	12,371
Subjects of Great Britain.....	341
Subjects of France.....	64
Subjects of other foreign governments.....	88
	—12,864

5. Number of patents issued by the United States Patent Office to residents of the different States and Territories from January 1, 1873, to December 31, 1873.

[The proportion of patents to population is shown in last column.]

States, &c.	No. of patents.	One to every—
Alabama.....	43	23,185
Arkansas.....	11	44,042
California.....	251	2,232
Colorado Territory.....	8	4,983
Connecticut.....	622	864
Dakota Territory.....	2	7,090
Delaware.....	40	3,125
District of Columbia.....	109	1,208
Florida.....	8	23,468
Georgia.....	53	22,341
Idaho Territory.....	1	14,999
Illinois.....	844	3,009
Indiana.....	311	5,404
Iowa.....	246	4,854
Kansas.....	75	4,859
Kentucky.....	114	11,590
Louisiana.....	96	7,512
Maine.....	139	4,510
Maryland.....	191	4,088
Massachusetts.....	1,379	1,057
Michigan.....	356	3,326
Minnesota.....	110	3,997
Mississippi.....	55	15,053
Missouri.....	288	5,975
Montana Territory.....	3	6,835
Nebraska.....	28	4,393
Nevada.....	19	2,236
New Hampshire.....	127	2,506
New Jersey.....	614	1,475
New Mexico.....	1	91,874
New York.....	2,826	1,551
North Carolina.....	58	18,472
Ohio.....	832	3,203
Oregon.....	19	4,785
Pennsylvania.....	1,639	2,148
Rhode Island.....	167	1,301
South Carolina.....	25	28,224
Tennessee.....	105	11,986
Texas.....	109	7,510
Utah Territory.....	8	10,848
Vermont.....	87	3,914
Virginia.....	76	16,190
Washington Territory.....	6	3,992
West Virginia.....	42	10,541
Wisconsin.....	217	4,860
Wyoming Territory.....	2	4,559
United States Army.....	8	3,750
United States Revenue-Marine Service.....	1	
For the United States at large.....	12,371	3,116

6. Comparative statement of the business of the Office from 1837 to 1873, inclusive.

Year.	Applica- tions.	Caveats filed.	Patents issued.	Cash received.	Cash expended.
1837.....			435	\$29,289 08	\$33,506 98
1838.....			520	42,123 54	37,402 10
1839.....			425	37,260 00	34,543 51
1840.....	765	228	473	38,056 51	39,020 67
1841.....	847	312	495	40,413 01	52,666 87
1842.....	761	391	517	38,505 68	31,241 48
1843.....	819	315	531	35,315 81	30,776 96
1844.....	1,045	380	502	42,509 26	36,244 73
1845.....	1,246	452	502	51,076 14	39,395 65
1846.....	1,272	448	619	50,264 16	46,158 71
1847.....	1,531	553	572	63,111 19	41,878 35
1848.....	1,628	607	660	67,576 69	58,905 84
1849.....	1,955	595	1,070	80,752 98	77,716 44
1850.....	2,193	602	995	86,927 05	80,100 95
1851.....	2,258	760	869	95,738 61	86,816 93
1852.....	2,639	996	1,020	112,656 34	95,916 91
1853.....	2,673	901	958	121,527 45	132,869 83
1854.....	3,324	868	1,902	163,789 84	167,146 39
1855.....	4,435	906	2,024	216,459 35	179,540 33
1856.....	4,960	1,024	2,502	192,588 02	199,931 02
1857.....	4,771	1,010	2,910	196,132 01	211,582 09
1858.....	5,364	934	3,710	203,716 16	193,193 74
1859.....	6,225	1,097	4,538	245,949 15	210,278 41
1860.....	7,653	1,084	4,819	256,352 59	252,820 80
1861.....	4,643	700	3,340	137,354 44	221,491 91
1862.....	5,038	824	3,521	215,754 99	182,810 39
1863.....	6,014	787	4,170	195,593 29	189,414 14
1864.....	6,932	1,063	5,020	240,919 98	229,868 00
1865.....	10,664	1,937	6,616	348,791 84	274,199 34
1866.....	15,269	2,723	9,450	495,665 38	361,724 28
1867.....	21,276	3,597	13,015	646,581 92	639,263 32
1868.....	20,420	3,705	13,378	681,565 86	628,679 77
1869.....	19,271	3,624	13,986	693,145 81	486,430 78
1870.....	19,171	3,273	13,321	669,456 76	557,149 19
1871.....	19,472	3,366	13,033	678,716 46	560,595 08
1872.....	18,246	3,090	13,590	699,726 39	665,591 36
1873.....	20,414	3,248	12,864	703,191 77	691,178 98

By the foregoing exhibit it will be seen that the entire receipts over the expenditures during the year 1873 were \$12,012.79. Of the expenditures \$52,485.03 was for photolithographing back issues, and \$35,000 of the amount paid for salaries was for the tracing of back issues, making \$87,485.03 of the expenditures which were no part of the proper current expenses of the year; and, adding the \$12,012.79, makes the excess of receipts over the proper expenses of the Office for the year 1873, \$99,497.82.

It is proper further to state that the expenditure for photolithographing current issues, \$38,110.55, is made an expense of the Patent Office during this year for the first time. Heretofore the appropriation for this work has been made to the Congressional Printer; consequently the expenditure has not before appeared in the accounts of the Commissioner of Patents.

The expenditure in the reproduction of the drawings of the back issues of patents by the process of photolithography is, in my opinion, a very wise use of the public money; and the amount appropriated for this purpose ought to be increased, that the work may be finished at an early day. This expenditure will in a few years all come back to the Treasury with considerable gain. When completed it will

reduce the work of examining at least fifteen per cent., and the sales of the copies will ultimately more than cover the entire expense of their production.

It will also be seen from the foregoing tables that the number of applications is somewhat larger than the preceding year, while the number of patents granted is a few less. The decrease in the number of patents arises partly from more thorough examinations, and partly from the fact that some applications are not being prosecuted to issue, because of the disturbance in manufacturing caused by financial disturbances.

The act approved July 8, 1870, known as the patent act, embraces all the law now in force pertaining to patents. An experience of three years and a half has shown that the law is defective in some particulars, and additional legislation seems necessary.

The receipts of the Office amount to nearly three quarters of a million dollars annually, all of which is received in small amounts, from ten cents to fifty dollars. This requires the employment of a careful and competent financial clerk. No such officer is provided by law, and it has been customary to detail a clerk of class four for such purpose, and the Commissioner is responsible upon his bonds for the accuracy and integrity of such clerk. I would respectfully recommend that section four of said act be so amended as to provide for one less clerk of class four and for the appointment of a financial clerk, at a salary of two thousand dollars per annum, and require him to give bonds in the sum of five thousand dollars.

The accumulation of models makes the question of room, wherein they can be deposited, one of serious moment. In my last annual report I suggested such amendment of section fourteen as would authorize the Commissioner of Patents, in connection with the Examiners, to look over the various classes, and select such models of rejected applications and expired patents as can safely be spared from the Office without interfering with the proper examination of applications, and deposit the same for safe-keeping with such institutions of learning in various parts of the country as will obligate themselves to take good care of them, and hold them subject to the order of the Commissioner of Patents. With such authority

conferred upon the Commissioner, I am satisfied that the present model gallery will be sufficient to retain the necessary models for many years to come.

Section 23 should be so amended as to require the payment of the final fee in such time that the Office may be enabled to issue a patent within the six months required by law. It is now the custom, to a considerable extent, to deposit the fee, on the very last day of the six months, in some Government depository distant from Washington; and notice is not received at the Office for many days, sometimes weeks and months thereafter. Applicants claim that, having paid the fee within the six months in accordance with the demands of the law, they are entitled to their patents; yet, as the Office received no information of the payment of such fee within the six months, it was impossible to issue a patent in accordance with the law. In this respect the first part of said section and the latter part are not in harmony.

By section 25 persons taking out a patent in a foreign country previous to obtaining one in the United States, the patent obtained here must expire with the patent obtained abroad. By the laws of several foreign states, the foreign patent may expire at the end of two, three, five years, etc.; and under operation of section 25 the American patent must expire at the same time.

The fact that mere first importers of an invention may obtain a patent in several foreign states makes it necessary that, if an American inventor desires to get a foreign patent, he must do so before obtaining one here; otherwise its publication here will enable persons abroad to patent it before the inventor can reach there with it. I see no good reason for this provision in our law. Either a citizen or an alien may obtain a patent here without getting one abroad at all; if so, his patent is in force for seventeen years. I am at a loss to understand why it should be in force any less length of time because of his having obtained a foreign patent. I would suggest that this section be so amended as to make the duration of an American patent entirely independent of the duration of a foreign patent to the same person. It would be an act of justice that such an amendment be retroactive, so as to include all patents issued since July 8, 1870.

Section 29 provides that, if required by the Commissioner, models shall be filed in all cases where the subject-matter of the invention admits of representation by model. Experience has clearly demonstrated that models should be demanded in all cases. An expert in a particular class may be able to comprehend and clearly understand an invention from a well-written specification and good drawings; but in the examination of applications on appeal before the board of appeals, or the Commissioner, who have not the same familiarity with the special class that the examiner may have, a model is generally found necessary for a clear and full understanding of an invention. When the case goes, as it may, before courts and juries, the necessity is still stronger. I would, therefore, recommend such amendment of this section as will make a model necessary in all cases where the invention can be represented by one. A matter of so great importance should not be left to the discretion of the Commissioner.

By the operation of the final clause in section 33, an assignee of the entire interest in a patent, who may desire to secure its reissue, must secure the signature and oath of the inventor to the application, provided the inventor is living. There seems to be no good reason for this provision, as no new matter can be introduced into a reissue, and the inventor having parted with his entire interest, there is no more reason for his signing the application than there would be in having any other disinterested person do so. Experience shows, however, that inventors very often take advantage of this clause to exact large sums of money from assignees for the simple act of signing their names to applications. The only end this clause seems to serve is to give assignors the right of extortion. The section should be amended so as to allow an assignee of the entire interest in a patent to apply for a reissue in his own name.

Section 35 should be amended to correspond with the suggestions made on section 23.

Section 36 provides for the recording in the Patent Office of assignments, yet under very many patents licenses to use the same and to manufacture under them are given all over the country, in nearly every city and town, and yet no record of the same is made in the Patent Office. It is impossible for the Office

to give to an inquirer such an abstract of title as will enable him to determine whether or not the patent is encumbered. This section can be amended so as to require licenses and shop-rights to be put in writing, and recorded the same as assignments.

It is not unusual for two parties to join in an application and obtain a patent as joint inventors, when, in fact, one makes the invention and the other pays the expenses. Of course such a patent is utterly worthless, and, under the present law, cannot be corrected. I would therefore suggest that section 53 be so amended as to make the misjoinder of parties a ground for reissue, when the misjoinder has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention.

Section 71, authorizing the issue of patents for designs, opens the door for a vast amount of deception and fraud upon the public. Patents are granted under this section for mere changes of form, and by being stamped "patented" the public are led to believe that the functions of the thing patented are covered by the monopoly.

As designs relate only to form and figure, I would recommend that this section be so amended as to make designs registerable the same as trade-marks; and that certificates of registration be issued instead of patents; and that holders of certificates of registration be forbidden to use upon the articles covered by such certificates the word "patented," or any other word calculated to lead the public to believe that the article is covered by a mechanical patent.

In my last two annual reports I have called attention to the necessity of a reorganization of the Patent Office. The present organization was adopted when the number of applications for patents was only a few hundred per annum instead of twenty thousand, as at present, and when the value attached to patents was almost nothing compared to that which they now assume.

The inventive genius of our people has largely contributed to the enormous growth in the manufacturing interests of our country during the last twenty-five years. By as careful an inquiry as I have been able to make, without legal authority to obtain exact figures, I am satisfied that fully nine-tenths of all the capital invested in manufacturing in the United States is thus invested because

of the security given to it by patents. Very few men are willing to invest their money in manufacturing, if, when they have established a market, and rendered their articles of manufacture popular, other establishments may be built up in their immediate vicinity, and compete with them in the market, and reap the advantages of their pioneer work. Consequently, manufacturers have sought patents to cover the principal articles they manufacture, thus securing a specialty that will be certain to give them a remunerative market. This fact has given to patents a largely-increased importance, and added much to their commercial value.

It is the pretense of our patent system to give an inventor an instrument that shall, for a limited time, afford him full protection for all he has invented, and yet not permit him to monopolize the rights of the public, or of other inventors. A large majority of applications for patents, embracing important and valuable improvements, are accompanied by descriptions, and by claims much broader than the inventions—so broad as to invade patents granted to others, and often to cover what is already well known, and has long been in public use.

It is the duty of the Patent Office, under the law, to ascertain just what is new and useful in the applicant's invention, and then to limit his description and claims to that of which he is really the first and meritorious inventor. A patent thus limited is the most valuable to the inventor, the least restrictive upon manufacturing and trade, and freest from annoyance to the public.

In the infancy of our patent system the Commissioner was allowed two or three assistants, who were called Examiners. The custom was for the Examiners to make a careful, expert examination as to the question of novelty, and to suggest wherein the description was erroneous, and the claim too broad or too narrow, and to report such action to the Commissioner, who reviewed their work, and granted patents or rejected the application, as seemed just and proper.

As the work of the Office increased, so that the number of Examiners extended from two or three to over seventy, the review of the work of the Examiners, by the Commissioner, became an impossibility; hence the Office, by the very necessities of its situation, has

fallen into the practice of sending an application to an Examiner in charge of a class, who examines and determines upon the question as to whether a patent should issue or not, and either rejects or passes for issue without supervision. The result is that very many applications are hastily and carelessly examined; very many patents are issued every year for subject-matter not patentable; and applications are rejected upon which patents should be granted. Many patents are granted upon applications that contain valuable inventions, yet the descriptions have been so faulty, and the claims so carelessly drawn, as either to make the patent entirely worthless, or to make it exceedingly annoying and damaging to the public, from the fact that it is permitted to cover not only the applicant's invention, but very much that is well known and open to free use by the public.

It is well known that complaints from many sections of the country, against our whole patent system, arise almost exclusively from patents that are improperly granted, because of the want of proper supervision in their examination; and with so many persons examining and passing applications for issue, it is an impossibility to establish anything like a uniformity of practice in the Office, or to get any such supervision as will attain what the law is intended to secure—that is, the rights of the inventor without infringing upon the rights of the public.

The only remedy for the evil here pointed out is for such a reorganization of the Office as will secure supervision of the work of examining. The Examiner's duty should be to examine and report to some superior officer, who should review his work and determine the question of patentability. The very fact that one's work is to be reviewed, and approved or disapproved, will secure thoroughness, when the absence of such supervision engenders haste and carelessness.

The number of applications for patents averages seventy a day, and the number of patents issued something over forty a day. From this amount of work, it will readily be seen that the Commissioner cannot, as was originally intended, give personal attention to more than a very few applications for patents.

The plan which I have suggested heretofore, and which I again earnestly recommend, is the grouping of the one hundred and forty-

five classes in the Patent Office into nine divisions, each division to be presided over by a competent man to review the work of those under him.

I am thoroughly satisfied that such an organization would relieve the country of a large number of very annoying patents which should never be granted, and will secure to real inventors the products of their brain-work with much greater certainty than is now done.

The reorganization suggested here, of course, would somewhat increase the expenses of the Patent Office, and in order to insure that the Office shall be self-sustaining it may become necessary to increase its revenues. This I think can be done without serious hardship to inventors, and with great advantage to the progress of invention and the convenience of the public.

Experience has shown that a very considerable proportion of the patents granted are for inventions that really prove to be worthless in themselves. They need additional inventions and new adaptations before they possess any practical merit to commend them to public use; consequently they lie dormant until some new inventor, possessing more practical knowledge of the subject-matter, makes the additional invention necessary, and the former invention becomes an element in the new invention, which is introduced into public use and becomes popular. When it is thus introduced, shrewd speculators frequently buy the old patent for a mere trifle and levy tribute upon the manufacturers and users of a new article, in which the old invention is a mere sub-element. Thus we find that inventions, useless in themselves, are often hindrances in the way of the development of practical machinery; either preventing such development, when it is known that they exist, or levying such tribute upon it, when reconstructed without such knowledge, as to practically drive the useful machinery out of the market.

I am convinced that it would be to the interest of inventors and the public, that holders of patents should, at the expiration of six or seven years from the date of their patents, be required to pay into the Patent Office a sum of, say, twenty dollars, otherwise their patents to become void. This would probably sweep out of existence fully twenty-five per cent.

or, perhaps, a larger proportion of all the patents granted, and would add sufficiently to the revenues of the Office to defray its necessarily increasing expenses. This tax would not be onerous upon holders of patents possessing, in themselves, any real merit, and would be beneficial in exterminating such as are without merit and stand in the way of substantial and practical improvements.

The expense, delay, and uncertainty of patent litigation in the courts go far to diminish the value of patents, and to discourage meritorious inventors. Experience has proven that when an inventor, by the exercise of his genius and skill, has developed a really valuable invention, it has usually taken nearly or quite one-half of the lifetime of his patent to demonstrate its importance and value to the public, and create a demand for it. About the time such demand has been established, and a profitable market fairly opened, infringers have generally appeared and piratically seized upon the fruits of his genius and toil. It is true, the statute provides, nominally, a remedy against infringers by actions and suits in the United States circuit courts. He finds, however, most of the courts so thronged with business, and such a reluctance upon the part of most of the judges to touch patent cases, that he has presented to him but faint hope of securing a final judgment before the patent shall have expired. The delay in reaching final decisions adds so greatly to the expenses of litigation that most inventors are compelled to abandon all hope of ever enjoying the exclusive use of the inventions which the Government has attempted to guarantee to them.

Very many meritorious inventions are applicable only in a small way, and adapted to light business, and will not warrant the expense of litigation in the circuit courts, however certain the result of such litigation might be. The dishonest are therefore encouraged to continue their piracy, and honest inventors are discouraged in their efforts to develop and perfect patentable improvements.

The judges for these courts are selected because of their legal learning and high judicial qualities, but to satisfactorily try cases growing out of the infringement of patents there must be added to these very essential qualifications a thorough knowledge of the applied sciences and the practical arts, a clear, expert use of mechanical likes and unlikes, of me-

chanical equivalents and non-equivalents, to which many of our very best and most able jurists lay no claim. In fact our ablest judges are the most pronounced in their opinion that our present judicial tribunals are not adapted to the wants of patent litigation.

To remedy these evils, and to provide a comparatively inexpensive means of trying the validity of patents and of speedily enforcing the rights secured by them, I respectfully recommend that there be established at Washington a court exclusively for the trial of patent cases, to be composed of men eminent for their legal and judicial talents, and also distinguished for their expert knowledge of the subjects presented in the trial of causes growing out of patents. This court should be easy of access, always in session, and the pleadings simple and direct. Its findings of facts should be final; its rulings on law points might be reviewed, upon proper application, by the United States Supreme Court.

Another reason for the establishment of a single court for the trial of patent causes is found in the fact that the same patent is often infringed in many different sections of the country, making it necessary, under the present system, for the owner of a patent to commence separate suits in all the different circuits where the patent is infringed, and be at the expense of taking the same testimony in all these different courts to sustain the validity of his patent, thus increasing his expenses and multiplying the labor of the courts.

Such a court could easily try all the patent cases arising in the country, and would enable the owners of patents to obtain final judgments in a less number of months than it now takes years, and at a mere fraction of the present expense. The value of meritorious patents would be greatly enhanced, and inventors would receive more substantial remuneration and encouragement.

The Patent Office Official Gazette is increasing in popularity from week to week. The promptness with which it furnishes the claims and abstracts of the drawings of patents issued, and also the decisions of the Commissioner of Patents in appeal cases, and of the United States Supreme Court and circuit courts, in the trial of patent causes, proves of very great aid to the examining corps, and also to inventors and manufacturers and all others interested in matters pertaining to this Office.

There is a very large demand for the condensed illustrations of patents issued between the first day of July, 1869, when the old form of reports ceased, and the first day of January, 1872, when the Gazette was established. It is very desirable that this gap should be bridged over by the publication of the drawings, substantially in the same form as they are now published in the Official Gazette. The claims of the patents for that time have been printed and the stereotyped plates are still preserved; hence, the expense of this work need not be very large.

In the examination of applications for patents in the Office and in answering inquiries as to particular patents that have been issued, it is necessary constantly to refer back to the Office records and the Patent-Office reports, from the time of their earliest publication. There being no general index of the patents issued, this becomes a work of very great labor, and is a fruitful source of mistakes and blunders.

Mechanics, manufacturers, inventors, and attorneys outside of the Office, who constantly have occasion to ascertain what patents, when, and to whom, have been issued in the different departments of art, very few of whom have complete sets of the Patent-Office reports, and are now unable to complete such sets, find it impossible to get the information they desire except by addressing the Office. In view of these necessities, I have caused a general subject-matter index of all the patents issued since the establishment of the Office, and a general name-index of patentees, to be compiled, and they are now ready for publication. When published they will be in very great demand among those interested in patents, and will be of great value to the Office, saving much labor and avoiding many disagreeable and harassing blunders. The subject-matter index, complete, can be published in two volumes. The name-index will require two additional volumes.

I would respectfully recommend that these indexes be published as soon as possible, and that the Commissioner of Patents be authorized to sell the same at a price that will cover the cost of their production.

During the late International Exposition there was called at Vienna an international congress for the purpose of considering the

subject of patents, with a view to such modifications of the patent laws of the various countries having such laws as would secure the rights of the inventors of one country against the piracy of their inventions in other countries, and to make the facilities of obtaining patents in one country by the citizens of another reciprocal among the nations.

The President commissioned Hon. J. M. Thacher, Assistant Commissioner of Patents, to represent the United States in that congress. When Mr. Thacher reached Vienna, however, the congress proved to be a mere unofficial convention of prominent citizens of the various European governments and a few from the United States. For this reason, I am informed, Mr. Thacher did not present his credentials, but, by invitation, participated to some extent in the convention as a citizen of the United States.

The discussions of the convention were of the greatest importance, and clearly developed the fact that the American patent system is rapidly becoming more and more popular in Europe; and strenuous efforts are being made by prominent persons in nearly all the European governments to secure such legislation at home as will assimilate their patent laws to ours.

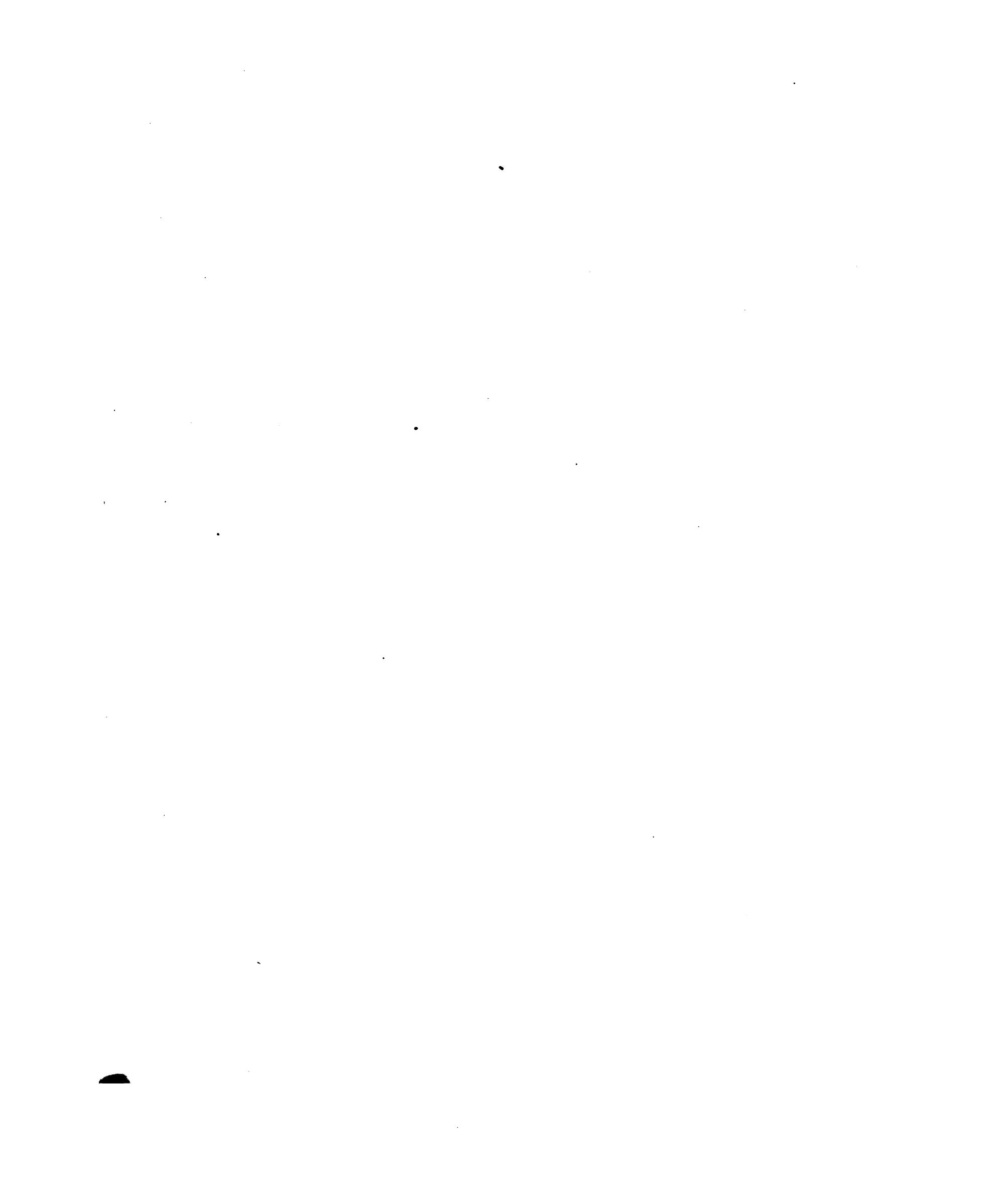
Mr. Thacher fully and clearly presented the American system before the convention, pointing out its peculiarities and its results; and the influence of his mission is evidently destined to do very much toward accomplishing the aim and desire of American inventors and manufacturers. As he has, however, made a full report to the Secretary of State, it is not proper, perhaps, that I should further enlarge upon the matter in this report.

The business of the Office has been conducted with proper dispatch and the best care that can be hoped for with our present organization, and all the classes and divisions are well up to date with the Office work. I take great pleasure in speaking in the highest terms of the capability and efficiency of nearly all the officers, clerks, and other employés of the Bureau. A large amount of over-work has been done during the year without complaint or demand for extra pay.

Respectfully submitted:

M. D. LEGGETT,

Commissioner of Patents.



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138, 309	Abbott, E. L., and S. T. Gibson, South Bend, Indiana. Table-leaf support	Apr. 29, 1873	975	306	3	478
	Abbott, J. (See Hammond, Adler & Abbott.)					
133, 222	Abbott, J., Canton, Ohio. Iron front for stone piers	Apr. 29, 1873	889	281	3	471
142, 547	Abbott, J. D., assignor to A. W. Smith, Manchester, N. H. Sectional horseshoe	Sept. 9, 1873	211	69	4	271
142, 976	Abbott, J. K., Cincinnati, Ohio. Sectional steam-boiler	Sept. 23, 1873	585	199	4	322
135, 056	Abbott, J. P., Cleveland, Ohio. Eaves-trough hanger	Jan. 21, 1873	526	170	3	77
139, 848	Abbott, N. B., Brooklyn, N. Y. Composition pavement	June 17, 1873	387	121	3	663
134, 964	Abbott, T., Blackburn, Great Britain. Machine for sizing yarn	Jan. 21, 1873	139	141	3	71
141, 093	Abel, F. H., New York, N. Y. Dumping-truck	July 22, 1873	696	234	4	93
	Abel, G. (See Pedder & Abel.)					
138, 978	Abell, J., Woodbridge, Canada. Adjustable chute for turbino water-wheels	May 20, 1873	467	147	3	559
134, 979	Abell, J., Woodbridge, and A. D. Cole, Toronto, Canada. Water-wheel	May 20, 1873	468	147	3	559
138, 832	Abraham, G. F., assignor to self and D. Claridge, Baltimore, Md. Marine-safe	May 13, 1873	336	104	3	535
	Abrahams, I. B. (See Lyons & Abrahams.)					
141, 300	Abrams, J. R., Greenville, Ala. Grave-covering	Nov. 4, 1873	106	36	4	487
139, 751	Absterdam, J., New York, N. Y. Manufacture of steel	June 10, 1873	295	3	648	
141, 908	Ackerman, W., Flint, Mich. Boot-heel screw	Aug. 19, 1873	468	153	4	190
135, 057	Ackerman, C. W., Pekin, Ill. Apparatus for filtering and rectifying spirits	Jan. 21, 1873	526	170	3	77
135, 305	Ackley, J. S., and D. S. Ranney, Modus, Conn. Tobacco-topper	Jan. 28, 1873	756	244	3	108
143, 603	Ackroyd, J. E., Chester, Pa. Apparatus for cleansing dyed wool, &c.	Oct. 14, 1873	191	64	4	404
	Ackroyd, R. (See Cockcroft & Ackroyd.)					
135, 616	Ackroyd, R., Philadelphia, and W. Cockcroft, Chester, Pa. Drawing mechanism for spinning-frames	Feb. 11, 1873	221	69	3	157
	Acme Mower and Reaper Company. (See Yost, G. W. N., assignor.)					
137, 120	Adair, I. V., Romulus, N. Y. Post-driver	Mar. 25, 1873	701	232	3	331
142, 428	Adametz, A., New York, N. Y. Process for preserving beer	Sept. 2, 1873	93	31	4	250
135, 306	Adams, A., Sandwich, Ill. Corn-sheller	Jan. 28, 1873	756	244	3	108
139, 752	Same. Draft-hook for cultivators	June 10, 1873	297	91	3	648
144, 302	Adams, A. C., Cambridge, Mass. Stocking-supporter	Nov. 4, 1873	107	36	4	487
144, 303	Same. same	Nov. 4, 1873	108	36	4	487
141, 193	Adams, A. M., Sacramento, Cal. Combined latch and lock	July 29, 1873	797	231	4	109
135, 744	Adams, C. W., Wheeling, W. Va. Tug-buckle for harness	Feb. 11, 1873	330	106	3	165
	Adams, D. (See Hearne & Adams.)					
	Adams, F., Somerville, Mass. Copper cylinder	Aug. 2, 1873			4	85
	Adams, F. F. (See Lovell, M. N., assignor.)					
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5, 464	Adams, H. P., Cleveland, Ohio. Butter-package	June 24, 1873	838	266	3	708
136, 492	Same. Splice for railway-rails	Mar. 4, 1873	44	16	3	249
	Adams, H. R. (See Adams, J. Q. and H. R.)					
136, 634	Adams, I., jr., Boston, Mass. Nickel-plating	Mar. 11, 1873	265	3	276	
138, 833	Adams, J., Pittsburgh, Pa. Lid for jelly-glasses	May 13, 1873	337	104	3	535
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144, 301	Adams, J. F., Lexington, Ky. Hemp-brake	Nov. 4, 1873	107	36	4	487
	Adams, J. M., Canton, Mass. Weeding-hoe	Oct. 18, 1873			4	401
140, 231	Adams, J. P., Ipswich, Mass. Hair-spring stud for watches	June 24, 1873	735	232	3	700
143, 111	Adams, J. Q. and H. R., Marselles, Ill. Wind-mill	Sept. 23, 1873	696	239	4	331
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135, 395	Adams, R., East Enterprise, Ind. Fire-kindler	Feb. 4, 1873	1	1	3	128
141, 305	Adams, S. M., assignor of one-third interest to J. Johnston, New York, N. Y. Process of ornamenting glass	July 29, 1873	963	4	118	
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139, 101	Adams, W. W., Rockford, Ill. Bureau and ironing-table combined	May 20, 1873	577	181	3	568
140, 396	Adamson, J. H., Auburn, Australia, assignor to W. and M. S. Taylor, Alameda, Cal. Combined harvester and thrasher	July 1, 1873	50	17, 18	4	12
145, 980	Adamson, J. H., San Francisco, Cal. Rotary-winnower	Dec. 30, 1873	874	283	4	702
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5, 610	Adamson, W., and C. F. A. Simonin, Philadelphia, Pa., assignors to W. Adamson. Treating offal, flesh, entrails, &c., for preservation, manure, &c. (Reissue) ..	Oct. 21, 1873	516	4	440	
5, 611	Same. Drying offal, entrails, flesh, &c., for preservation, manure, &c. (Reissue) ..	Oct. 21, 1873	517	4	440	
5, 612	Same. Manure from offal, flesh, &c. (Reissue) ..	Oct. 21, 1873	517	4	440	



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Alphabetical list of patentees for the year 1873—Continued.

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			Spec.	Dr'g.	Vol.	Page.
135, 745	Adderley, J. W. (See Warren & Adderley.)					
142, 756	Addy, C. J., assignor of one-half interest to J. R. Folsom, Boston, Mass. Heel-trimming machine.	Feb. 11, 1873	331	106	3	165
145, 607	Addy, C. J., Boston, Mass. Machine for trimming and burnishing the edges of boots and shoes.	Sept. 16, 1873	399	135	4	296
139, 645	Adler, J. (See Meyers, L., assignor.)					
138, 111	Adler, L., Baltimore, Md. Manufacture of bitartrate of potassa.	Dec. 16, 1873	516		4	651
140, 450	Adler, M. (See Hammond, Adler & Abbott.)					
145, 826	Adney, J. D., Chicago, Ill. Coffee-steper.	June 10, 1873	191	63	3	640
142, 071	Adrians, J. H., Washington, D. C. Dumping-wagon.	Apr. 22, 1873	768	244	3	453
137, 400	Affleck, A. H., Marshallville, Ga. Piano tuning-key.	July 1, 1873	88	31	4	15
139, 526	Agar, H., Batavia, N. Y. Whiffletree.	Dec. 23, 1873	713	234	4	679
142, 757	Agresta, A. P., New York, and A. Meneci, Clifton, N. Y. Sauce for food.	Aug. 26, 1873	629			213
137, 400	Ahl, D., Newville, Pa. Surgical instrument.	May 17, 1873				527
139, 526	Ahrend, H., Newark, N. J. Guard for door-knobs.	Apr. 1, 1873	107	35	3	365
142, 757	Same. Bag-lock.	June 3, 1873	70	24	3	614
144, 491	Ahrens, B., and D. Gerhard, Reading, Pa. Car-axle.	Sept. 16, 1873	400	135	4	296
143, 466	Aiken, A. J. (See Jordan, W. A., assignor.)					
137, 279	Same. (See McClintock & Cumberland, assignors) (Reissue.)					
139, 286	Aiken, F. H., Franklin, N. H. Machine for pointing wire.	Aug. 19, 1873	519	172	4	194
142, 884	Same. same.	Oct. 7, 1873	75	25	4	3e7
5, 430	Aiken, H., Philadelphia, Pa. Alloy for producing ornamental coatings on metals.	Apr. 1, 1873	1		3	357
144, 491	Aiken, H. V., Gibsonburgh, Pa. Lubricator.	May 27, 1873	765	242	3	590
144, 491	Aiken, J. B., Franklin, N. H. Portfolio-holder.	Sept. 16, 1873	499	171	4	305
144, 491	Aiken, J. W., Philadelphia, Pa., and J. H. Stone, Hamilton, Canada, assignors by means assignments to F. Crane, Bloomfield, N. J. Fur-set box.	June 3, 1873	176	58	3	623
143, 604	Ainée, N. U., New York, N. Y. Stilt.	Nov. 11, 1873	277	93	4	512
143, 112	Ainsworth, D. H. (See McClure & Ainsworth.)					
136, 635	Ainsworth, E., Wilmington, Del. Belt-clamp.	Oct. 14, 1873	192	65	4	405
143, 112	Ainsworth, L. E., East Bolton, Canada. Fire-escape.	Sept. 23, 1873	698	239	4	331
143, 112	Aird, A. and J., Troy, N. Y. Rotating-hooks for sewing-machines.	Mar. 11, 1873	266	89	3	276
145, 269	Aird, J. (See Aird, A. and J.)					
137, 818	Akeroyd, A., Manchester, N. H. Designers' paper.	Dec. 9, 1873	213	73	4	615
136, 198	Akers, W. R., and J. E. Johnson, Malcolm, Iowa. Heating stove.	Apr. 15, 1873	500	156	3	422
136, 198	Aland, S., Rome, N. Y. Journal-box.	Feb. 25, 1873	752	243	3	224
139, 102	Albee, J., Chelsea, Mass. Water-closet.	Feb. 25, 1873	753	243	3	224
140, 232	Alberger, J. L., Buffalo, N. Y. Steam-condenser.	May 20, 1873	578	181	3	568
139, 990	Same. same.	June 24, 1873	735	232	3	700
139, 849	Albert, C. F., Philadelphia, Pa. Needle-setter and threader for sewing-machines.	June 17, 1873	504	160	3	673
145, 827	Albert Field Tack Company. (See Lowe, J., assignor.)					
5, 261	Same. (See Starks, G., assignor.)					
139, 850	Albertson, J. M., New London, Conn. Baling-press.	June 17, 1873	387	121	3	663
137, 872	Albin, J. P., Cincinnati, Ohio. Apparatus for bending coffin-sides.	Dec. 23, 1873	714	235	4	679
137, 873	Albrecht, H., Philadelphia, Pa., assignor by means assignments to American Machine Company. Clothes-wringer.	Jan. 28, 1873	848	273	3	115
141, 532	Albrecht, H. (See Corbin & Albrecht.)					
137, 872	Albrocht, O., Philadelphia, Pa. Car-coupling.	June 17, 1873	388	121	3	663
137, 873	Albright, A. (See Holmes, K. W., assignor) (Reissue.)					
141, 532	Albright, A., Newark, N. J. Vulcanizing rubber-coated articles.	Apr. 15, 1873	543	169	3	425
137, 121	Same. Manufacture of rubber-coated harness-trimmings.	Apr. 15, 1873	544	170	3	425
139, 699	Albro, G., Columbus, Pa. Fence.	Aug. 5, 1873	105	32	4	143
5, 648	Alcorn, W. H., West Hoboken, N. J. Child's awing.	Mar. 25, 1873	701	233	3	331
138, 356	Alcott, T. J., Mount Holly, N. J. Water-wheel.	June 10, 1873	246	77, 78	3	645
6, 970	Alden, C., Newburgh, N. Y. Process and apparatus for preserving animal and vegetable substances.	Nov. 11, 1873	360	122	4	519
138, 356	Alden, H. A., Matteawan, N. Y. Billiard-cushion.	Apr. 29, 1873	1, 013	319	3	481
145, 475	Alden, J. B., Worcester, Mass. Carpet.	Nov. 4, 1873			4	478
139, 103	Alden, J. M., administrator. (See Alden, M.) (Extension.)					
145, 475	Alden, M., deceased, by J. M. Alden, administrator, Auburn, N. Y. Cultivator. (Extension.)	May 10, 1873			3	497
139, 103	Aldrich, E. D., Pittsfield, Mass. Scythe-holder for rag-cutters.	Dec. 16, 1873	397	131	4	641
136, 354	Aldrich, W., Dayton, Ohio. Steam-pump.	May 20, 1873	579	182	3	568
136, 355	Alexander, C. D., et al. (See Wiley, E., assignor.)					
140, 233	Alexander, C. W. (See Russell, A., assignor.)					
135, 874	Alexander, E. H., New York, N. Y. Braider for sewing-machines.	Mar. 4, 1873	1	1	3	245
144, 379	Same. Braiding-attachment for sewing-machines.	Mar. 4, 1873	2	1	3	245
135, 874	Same. Attachment for sewing-machines.	June 24, 1873	737	232	3	730
144, 379	Alexander, F. M., administratrix. (See Alexander, J. B.)					
140, 336	Alexander, J., Gartsherrie, Scotland. Coal-mining machinery.	Feb. 18, 1873	463	149	3	190
135, 460	Alexander, J. B., deceased, by F. M. Alexander, administratrix, Washington, D. C. Railway-switch.	Nov. 11, 1873	183	63	4	505
144, 379	Alexander, J. S., Pittsburgh, Pa. Tool for working in leather.	July 1, 1873	1	1	4	8
137, 280	Alexander, M. H., Newark, N. J. Wood pavement.	Feb. 4, 1873	65	20	3	132
136, 803	Alexander, T. J., Westerville, Ohio. Wagon-seat.	Nov. 11, 1873	277	94	4	512
137, 280	Algeo, C. C., Pittsburgh, Pa. Sash-holder.	Apr. 1, 1873	1	1	3	357
136, 804	Algeo, R. J., assignor of one-half interest to A. U. Noble and B. Cleenewerck, Kalamazoo, Mich. Staple-socket for hames.	Mar. 18, 1873	417	139	3	297
137, 335	Algeo, R. J., Kalamazoo, Mich. Horse-collar cap.	Mar. 18, 1873	418	139	3	297
145, 270	Alger, S. B., Oswego, N. Y. Friction-clutch.	Apr. 1, 1873	55	16	3	361
141, 910	Allbee, J., Squaw Grove, Ill. Harness-buckle.	Dec. 9, 1873	214	73	4	615
142, 659	Allen, A. E., et al. (See Etchell, S. W., assignor.)					
138, 357	Allen, A. H., Boston, Mass. Method of perfecting veneers.	Apr. 29, 1873	1, 014	319	3	481
141, 910	Allen, B. F., Boston, Mass. Fish-hooks.	Aug. 19, 1873	470	154	4	190
142, 659	Allen, C. B., Philadelphia, Pa. Piston.	Sept. 9, 1873	304	101	4	278
143, 403	Allen, C. G. (See Lufkin & Allen.)					
136, 805	Allen, C. H., Saint Louis, Mo. Guard for harness-hames.	Mar. 4, 1873	49	16	3	249
141, 744	Same. Axle-box for vehicles.	Oct. 28, 1873	539	179	4	452
138, 980	Allen, C. L., Flat Rock, assignor to J. L. Hood, Grafton, E. Armstrong, and H. C. Hood, Ash, Mich. Clover-separator.	Mar. 18, 1873	418	139	3	297
142, 606	Allen, D. B., et al. (See Ross, L. E., assignor.)					
142, 607	Allen, D. C., Concord, N. H. Cutter-head.	Aug. 12, 1873	303	99	4	168
142, 607	Allen, E., assignor to Allen Manufacturing Company, Norwich, Conn. Friction-clutch.	May 20, 1873	468	147	3	559
142, 607	Same. Feed-box for envelope machines.	Sept. 9, 1873	260	85	4	275
142, 607	Same. Inking apparatus for rotary printing-presses.	Sept. 9, 1873	261	86	4	275
142, 607	Allen, E. C., Le Roy, N. Y. Corn-planter. (Extension.)	Nov. 8, 1873			4	504

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 779	Allen, E. P., et al. (See McCoy, E., assignor.)	May 13, 1873	290	89	3	531
143, 653	Allen, F. E., Keene, N. H., and S. G. Hall, Winchendon, Mass. Watch-key	Oct. 14, 1873	233	78	4	408
	Allen, G. (See Wheeler & Wakefield, assignors.)					
	Allen, H. N. (See Tisdale, Putnam & Allen.)					
144, 820	Allen, I. S., M. P. Brown, and C. W. Moulthrop, San Francisco, Cal. Steam-plow	Nov. 25, 1873	571	195	4	558
138, 223	Allen, J. A., Philadelphia, Pa. Frame for window-awnings	Apr. 29, 1873	891	281	3	471
141, 617	Allen, J. G., Philadelphia, Pa. Ventilating railroad-cars	Aug. 12, 1873	199	63	4	159
139, 991	Allen, J. N., Providence, R. I. Button	June 17, 1873	504	160	3	673
144, 942	Same. Stop-nozzle for hose-pipes	Nov. 25, 1873	672	228	4	567
139, 350	Allen, L. H., Farmington, N. H. Cutter for sewing-machines	May 27, 1873	812	259	3	594
	Allen Manufacturing Company. (See Allen, E., assignor.)					
144, 647	Allen, N. I., and E. S. Stimpson, Milford, Mass. Loom-temple	Nov. 18, 1873	421	141	4	535
	Allen, N. W. (See Newcomb, W., assignor.)					
139, 226	Allen, R. N., Pittsford, Vt. Railway-car-axle	May 27, 1873	707	223	3	586
140, 568	Same. Railway-car journal-box	July 8, 1873	207	69	4	36
137, 163	Allen, R. T. P., Farmdale, Ky. Rotary valve and variable cut-off	Mar. 25, 1873	735	244	3	334
142, 660	Same. Steam-engine	Sept. 9, 1873	305	101	4	278
	Allen, W. (See Stewart, C., assignor.)					
144, 725	Allen, W., Worcester, Mass. Lawn-mower	Nov. 18, 1873	481	163	4	540
135, 746	Allen, W. B., Winona, Minn. Grain-separator	Feb. 11, 1873	332	106	3	166
	Allender, J., deceased, by W. Belcher, administrator, New London, Ct. Wringing-machine	Jan. 11, 1873			3	7
5, 255	Allenwood, J. M., Timbuctoo, Cal., assignor to R. R. and J. Craig. Ore-washing apparatus for hydraulic mining	Jan. 28, 1873	840	271	3	115
139, 700	Allerton, G. W., and Z. M. Powers, Robinson, Ill. Presser-foot for sewing-machines	June 10, 1873	248	78	3	645
	Alles, H. (See Haering & Alles.)					
139, 753	Alley, J. P. (See Blackledge, W. G., assignor.)					
140, 666	Allgaier, J., Philadelphia, Pa. Coach or carriage	June 10, 1873	297	92	3	648
144, 881	Same. same	July 8, 1873	289	98	4	43
135, 461	Allin, J., Philadelphia, Pa. Testing-plug	Nov. 25, 1873	625	212	4	563
	Alling, D. S., assignor of one-half interest to P. C. Lander, Albany, N. Y. Sewing-machine	Feb. 4, 1873	65	20	3	132
	Allis, E. P., & Co. (See Clarke, W. A., assignor.)					
	Allis, H. (See Haering, H., assignor.)					
137, 587	Allis, Y. V., New York, N. Y. Railway-rail joint	Apr. 8, 1873	286	88	3	301
	Allison, J. F. (See Poe, J. B., assignor.)					
137, 646	Allison, J. M., Salina, Pa. Nut-lock	Apr. 8, 1873	334	103	3	395
138, 358	Allison, J. M., New Albany, Ind. Composition for covering steam-boilers	Apr. 29, 1873	1, 015		4	481
146, 039	Allison, O. W., assignor of one-half interest to R. Dempster, Buffalo, N. Y. Steam-boiler	Dec. 30, 1873	921	298	4	706
137, 045	Allison, O. W., and P. Homelius, assignors to J. H. Small, Buffalo, N. Y. Apparatus for cleaning horses	Mar. 25, 1873	631	209	3	326
145, 775	Allison, R., Port Carbon, Pa. Hydraulic feed for revolving rock-drill	Dec. 23, 1873	674	220	4	676
142, 548	Alloways, J., Decatur, Ill. Cutter-head for molding-machines	Sept. 9, 1873	212	69	4	271
134, 831	Allstatter, R., assignor to Long & Allstatter, Hamilton, Ohio. Heel for knives for reapers and mowers	Jan. 14, 1873	315	100	3	45
140, 337	Allt, E., New York, N. Y. Compression-cock	July 1, 1873	2	1	4	8
	Allyn, J. H. (See Williamson & Allyn.)					
141, 978	Almond, T. R., Fitchburgh, Mass. Chuck	Aug. 19, 1873	520	172	4	194
141, 745	Almy, G. F., Delphos, assignor to self and H. M. Clarke, Toledo, Ohio. Hollow auger	Aug. 12, 1873	304	99	4	168
141, 979	Alter, W. W., Saint Louis, Mo. Railway-rail	Aug. 19, 1873	521	172	4	194
	Althof, Bergman, & Co. (See Browne, A. W., assignor.)					
139, 287	Althouse, J. A., New Harmony, Ind. Journal-box	May 27, 1873	766	243	3	500
141, 847	Alvord, C., Westford, Wis. Firkin	Aug. 19, 1873	407	133	4	186
	Amberg, W. (See Borchardt, J. M., assignor.)					
5, 412	Ambrose, J. E., assignor by mesne assignment to S. T. Ambrose, Colorado Springs, Col., and E. Muller, Meriden, Conn. Lamp	May 20, 1873	694	218	3	570
	Ambrose, S. T., et al. (See Ambrose, J. E., assignor.) (Reissue.)					
138, 112	Ambrun, J., and E. Olfermann, Leavenworth, Kans. Door-latch handle	Apr. 22, 1873	769	244	3	453
	American Basket Company. (See Park, J. K., assignor.) (Reissue.)					
	American Button-Hole Overseaming and Sewing-Machine Company. (See Rehfus, G., assignor.) (Design.)					
	Same. (Reissue.)					
	American Cable Screw-Wire Company. (See Goddy, L., assignor.)					
	American Clutch Company. (See Bates, F. G., assignor.)					
	American Coal-Barge Company. (See Wright, W. A., assignor.)					
	American District Telegraph Company. (See Sawyer, W. H., assignor.)					
	American Duplex Ticket Company. (See Jebb & Brush, assignors.)					
	American Enamel Decorating Company. (See Hoggson, S. J., assignor.)					
	American Machine Company. (See Albrecht, A., assignor.) (Reissue.)					
	American Metalline Company. (See Gwynn, S., assignor.)					
	American Steam and Water Recording Company. (See Steele, F., assignor.)					
	American Stop-Motion Company. (See Edson, W., assignor.)					
134, 504	Ames, A., Natchez, Miss. Propelling canal-boats	Jan. 7, 1873	1	1	3	7
	Ames, C. L., et al. (See Moody, W. F., assignor.)					
143, 397	Ames, C. L. and A. H. Frost, Chicago, Ill. Spring bed-bottom	Oct. 7, 1873	1	1	4	381
139, 351	Ames, C. W., New York, N. Y. Printer's quoin	May 27, 1873	813	260	3	594
145, 380	Same. Perforating-rule for printers	Dec. 9, 1873	305	103	4	622
	Ames, G. (See Stuart, L. W., assignor.)					
139, 227	Ames, G., Rochester, N. Y. Apparatus to prevent rapping noise in machinery	May 27, 1873	707	223	3	586
	Ames, I. (See Hunter, D. J., assignor.)					
	Ames, J. (See Peartree, P., assignor.)					
142, 137	Ames, J., jr., Lansingburgh, N. Y. Machine for driving brush-handles	Aug. 26, 1873	685	225	4	217
145, 546	Same. Machine for shaping brush-woods	Dec. 16, 1873	469	153	4	647
140, 234	Ames, J. G. and P. A., Baltimore, Md. Clothes-line fastener	June 24, 1873	738	233	3	700
	Ames, P. A. (See Ames, J. G. and P. A.)					
137, 336	Ames, T. G., Kosse, Tex. Ant-trap	Apr. 1, 1873	56	17	3	361
134, 622	Amidon, C. H., Miller's Falls, Mass. Baby-carriage	Jan. 7, 1873	114	37	3	16
140, 451	Same. Drill and bit-stock	July 1, 1873	89	31	4	15
145, 828	Amish, W. C., Hainesport, N. J. Molding apparatus	Dec. 23, 1873	715	235	4	679
138, 465	Ammidoun, M. M., West Roxbury, Mass. Boiler-flue scraper	May 6, 1873	1	1	3	497
	Amory, J., New York, N. Y. Steam-boiler furnace. (Extension.)	Apr. 19, 1873			3	415
144, 305	Amos, A., Potsdam Junction, N. Y. Horse hay-rako	Nov. 4, 1873	109	37	4	487
144, 306	Same. same	Nov. 4, 1873	110	37	4	487

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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142,364	Amaden, G. M., South Boston, Mass. Mode of attaching journals to feed-rollers.....	Sept. 2, 1873	39	13	4	245
	Amisler, C. (See Rouse, A. M., assignor.)					
141,099	Anderegg, C., Lawrenceburgh, Ind. Wheel for vehicles.....	July 22, 1873	697	234	4	93
144,045	Anders, G. L., Boston, assignor to E. B. Welsh, Cambridge, Mass. Printing-tele- graph.....	Oct. 28, 1873	621	{ 205 206 }	4	459
	Anders, R. (See Errani & Anders.)					
143,113	Andersen, C., Brooklyn, N. Y. Filter.....	Sept. 23, 1873	698	239	4	331
142,138	Anderson A., Chadwick's Mills, N. Y. Shingle-machine.....	Aug. 26, 1873	686	226	4	217
143,654	Anderson, C., Brooklyn, N. Y. Distilling pure alcoholic spirits.....	Oct. 14, 1873	233	79	4	408
137,647	Anderson, E. D., Frederick, Md. Shutter-fastening.....	Apr. 8, 1873	335	104	3	396
142,978	Anderson, H. L., assignor of one-half interest to J. M. Rand, Chicago, Ill. Device for holding wagon-boxes to the bolsters.....	Sept. 23, 1873	587	199	4	322
6,829	Anderson, J., New York, N. Y. Material for gored skirts..... (Design)	Aug. 26, 1873			4	212
136,851	Anderson, J., Gouverneur, N. Y. Truss-bridge.....	Mar. 18, 1873	539	178	3	207
139,491	Anderson, J., Brooklyn, N. Y. Sun-bonnet for horses.....	June 3, 1873	44	14	3	612
141,618	Anderson, J., assignor of one-half interest to W. J. Calais and W. H. James, Wilmington, N. C. Trussed spring-bolster for railroad-cars.....	Aug. 12, 1873	200	63	4	159
139,992	Anderson, J. E., Boiling Springs, Pa. Washing-machine.....	June 17, 1873	505	160	3	673
	Anderson, J. H., et al. (See Slusser, G., assignor.)					
137,874	Anderson, J. J., Indianapolis, Ind., assignor of two-thirds interest to G. H. Shover and G. W. Miller. Hub for heavy-wheeled vehicles.....	Apr. 15, 1873	545	170	3	425
134,624	Anderson, J. S., Flintville, Wis. Adjustable picket-fence.....	Jan. 7, 1873	115	38	3	16
135,058	Same..... Steam blow-pipe.....	Jan. 21, 1873	527	{ 170 171 }	3	77
135,059	Same..... Saw-straightening machine.....	Jan. 21, 1873	528	171	3	78
137,164	Same..... Means for propelling boats.....	Mar. 25, 1873	736	245	3	334
139,527	Same..... Railway-car brake.....	June 3, 1873	71	24	3	614
137,588	Anderson, J. W., Portland, Ind. Insect-trap.....	Apr. 8, 1873	284	89	3	392
139,528	Anderson, M., Chicago, Ill. Offal-dryer.....	June 3, 1873	72	24	3	615
	Anderson, P. (See Newman & Anderson.)					
142,549	Anderson, P., Chicago, Ill. Bed-bottom.....	Sept. 9, 1873	213	69	4	271
143,655	Anderson, S. I., P. Walden, and E. P. More, West Eaton, N. Y. Sash-holder.....	Oct. 14, 1873	234	79	4	408
145,476	Anderson, T. D., assignor of one-third interest to E. E. McKay, Bardstown, Ky. Straw- cutter.....	Dec. 16, 1873	397	131	4	641
141,746	Anderson, V. D., Springfield, Ohio. Steam-generator and apparatus for rendering fats.....	Aug. 12, 1873	305	100	4	168
145,547	Anderson, W. G., Worcester, Mass. Window-screen.....	Dec. 16, 1873	470	153	4	647
144,307	Anderton, R. L., New York, N. Y. Sash-molding.....	Nov. 4, 1873	111	37	4	487
	Andrae, M. (See Clark, E. B., assignor.)					
139,352	Andrae, B., Frankfort-on-the-Main, Germany. Gas-burner.....	May 27, 1873	813	260	3	594
144,428	Andress, T., Aurora, Wis. Car-coupling.....	Nov. 11, 1873	227	76	4	508
145,080	Andrew, W. H., Sheffield, England. Table-knife.....	Dec. 2, 1873	41	12	4	589
	Andrews, A. C., et al. (See Hermance, J. F., assignor.)					
141,848	Andrews, A. F., assignor to A. Edwards and A. F. Andrews, New Haven, Conn. Fer- tilizer.....	Aug. 19, 1873	407	.....	4	186
142,977	Andrews, A. F., assignor to the Andrews Manufacturing Company, New Haven, Conn. Treating iron and steel to anneal and toughen them.....	Sept. 23, 1873	586	199	4	322
	Andrews, E. (See Pelham, I., assignor.)					
140,569	Andrews, E., Welchville, Me. Mechanism for making counters for boots and shoes..... (Reissuc.)	July 8, 1873	208	69, 70	4	36
141,306	Andrews, E., Bryan, Ohio, assignor to E. L. Bradley and W. A. Clark, New Haven, Conn. Device for securing corners of wagon bodies and seats.....	July 29, 1873	903	296	4	118
143,487	Andrews, E. B., Lancaster, assignor of one-half interest to J. G. Deshler, Columbus, Ohio. Blast-furnace.....	Oct. 7, 1873	75	26	4	387
	Andrews, F. W. (See Waters, B. F., assignor.)					
143,398	Andrews, G., Oxford, Me. Leather-skiving machine.....	Oct. 7, 1873	1	1	4	381
143,605	Andrews, I. C., New York, N. Y. Portable fire-extinguisher.....	Oct. 14, 1873	193	65	4	405
134,721	Andrews, J., Hardin County, Ohio. Medical compound for horses, &c.....	Jan. 14, 1873	221	.....	3	38
137,752	Andrews, J., Cleveland, Ohio. Butter-package.....	Apr. 15, 1873	441	137	3	417
	Andrews, J. W. (See Wallace & Andrews.)					
	Andrews Manufacturing Company. (See Andrews, A. F., assignor.)					
135,617	Andrews, M. S., Somerville, assignor to J. W. Tufts, Medford, Mass. Soda apparatus.....	Feb. 11, 1873	221	69	3	157
144,180	Andrews, S. W., and L. Godfrey, Greenville, assignors of one-half interest to O. G. Van- derhoof, Knoxville, Tenn. Grain separator and scourer.....	Nov. 4, 1873	2	1	4	478
141,533	Andrews, T. G., and A. Riviere, Barnesville, Ga. Plow.....	Aug. 5, 1873	106	32	4	143
137,165	Andrews, W. D., Brookhaven, N. Y. Safety-attachment to hoisting-machines.....	Mar. 25, 1873	737	245	3	334
6,996	Andrews, W. H., assignor to Mallory, Wheeler & Co., New Haven, Conn. Lock case. (Design).....	Nov. 18, 1873			4	531
137,166	Same..... Reversible knob-latch.....	Mar. 25, 1873	738	245	3	334
141,479	Andriot, P. M., Oxford, Ohio. Sawing-machine.....	Aug. 5, 1873	62	19	4	140
	Angell, N. S., et al. (See Pitrat, M. J., assignor.)					
137,337	Angle, H. G., Chicago, Ill. Railway-rail.....	Apr. 1, 1873	56	17	3	361
142,608	Same..... Machine for dressing wood rails.....	Sept. 9, 1873	262	86	4	275
134,580	Annan, C. F., assignor to self and H. S. Merrill, Boston, Mass. Machine for making paper-bags.....	Jan. 7, 1873	75	24	3	13
140,867	Annin, J., New York, N. Y. Dial for pressure-gauges.....	July 15, 1873	465	157	4	65
140,107	Annin, J. B., Rochester, N. Y. Book-stand.....	June 24, 1873	633	199	3	691
144,308	Anschutz, A., A. Seidel, and M. Weber, Livingston County, Missouri. Plow.....	Nov. 4, 1873	111	38	4	487
139,353	Ansell, A. D., Hartford, Conn., assignor to Lazarus, Moses & Co., New York, N. Y. Eye- glasses.....	May 27, 1873	814	260	3	595
134,832	Anshutz, H., Allegheny, Pa. Casting fire-grates.....	Jan. 14, 1873	316	101	3	45
	Ansley, J. A., et al. (See Stewart, G. W., assignor.)					
142,187	Ansley, V., and J. W. Weaver, Morrison, Ill. Stalk-cutter.....	Aug. 26, 1873	724	239	4	220
141,412	Anthony, G. C., New York, N. Y. Sewer gas-trap.....	Aug. 5, 1873	1	1	4	135
	Anthony, E., and H. T. & Co. (See Anthony, H. T., assignor)					
	Same..... (See Barker, E. B., assignor.)					
138,359	Anthony, H. T., New York, N. Y. Photographic-plate holder.....	Apr. 29, 1873	1,015	319	3	481
143,865	Anthony, H. T., assignor to E. and H. T. Anthony & Co., New York, N. Y. Preparing soluble cotton for the manufacture of collodion.....	Oct. 21, 1873	447	.....	4	435
	Anthony, J. M. (See Seaver, Southworth & Anthony.)					
137,819	Anthony, R., and F. A. Leabert, Kingston, Pa. Railway-rail joint.....	Apr. 15, 1873	500	156	3	422
141,980	Antill, J. T., Smith's Ferry, Pa., and W. J. Sloan, Liverpool Township, Ohio. Nut and bolt fastening.....	Aug. 19, 1873	522	173	4	195
144,648	Anyan, B., Fitchville, Ohio. Combined picture frame and exhibiter.....	Nov. 18, 1873	422	141	4	535
137,524	Appleby, R., Beverly, N. J. Apparatus for cutting cigar-wrappers.....	Apr. 8, 1873	231	71	3	387
140,570	Appleton, G. P., Suncook, N. H. Machine for sawing laths.....	July 8, 1873	211	70	4	37
144,649	Apthorp, W. L., Tallahassee, Fla. Hemmer for sewing-machines.....	Nov. 18, 1873	422	141	4	535

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 314	Archbold, S., Chester, Pa. Condenser-tube fastening	Sept. 30, 1873	869	298	4	362
	Archer & Pancoast Manufacturing Company. (See Deavs, C., assignor.)					
141, 480	Archer E., Davisville, W. Va. Churn	Aug. 5, 1873	62	20	4	140
	Archer, G. W. (See Archer R. W. & G. W.) (Two cases.) (Design.)					
138, 600	Archer, R. W., Rochester, N. Y. Piano and other stools	May 6, 1873	115	38	3	507
6, 647	Archer, R. W. and G. W., Rochester, N. Y. Foot-rest for barbers' and dentists' chairs.	May 13, 1873			3	527
	(Design)	May 13, 1873			3	527
6, 648	Same..... Barbers' and dentists' chairs					
	(Design)					
	Architectural Iron Company. (See Brand, C. F., assignor.)					
145, 829	Ardrey, R., Philadelphia, Pa. Child's chair	Dec. 23, 1873	716	235	4	680
136, 688	Arey, K., Rock Falls, Ill., assignor to A. M. Phelps and F. Dyer. Hand-planter	Mar. 11, 1873	308	102	3	219
135, 060	Argerbright, D., Tippicanoe, Ohio. Wheel for vehicles	Jan. 21, 1873	529	171	3	78
144, 046	Armbruster, J., Petroleum Centre, Pa. Flue-cleaner for boilers	Oct. 28, 1873	623	206	4	459
145, 081	Armiger, R., Baltimore, Md. Refrigerator	Dec. 2, 1873	41	13	4	589
139, 646	Armitage, T. B., New York, N. Y. Process of reducing wood fiber to pulp	June 10, 1873	191		3	640
142, 550	Same..... Process of disintegrating woody fiber for paper pulp	Sept. 9, 1873	213		4	271
	Armour, J. B. (See Dillon, M., assignor.)					
136, 480	Armour, J. M., Syracuse, N. Y. Knitting-machine	Mar. 4, 1873	109	37	3	254
136, 200	Arms, J. C., Northampton, Mass. Game-board	Feb. 25, 1873	753	243	3	224
141, 194	Arms, J. L., New Orleans, La. Rice-cleaner	July 29, 1873	797	261	4	109
	Armstrong, A. (See Brand, Barrows & Armstrong.)					
145, 713	Armstrong, A. D., Allegheny City, assignor to Armstrong, Fawcett & McKelvy, Pittsburgh, Pa. Dryer for lead	Dec. 23, 1873	619	203	4	671
139, 754	Armstrong, A. S., New Orleans, La. Cotton-bale tie	June 10, 1873	298	92	3	648
6, 801	Armstrong, C. W., Detroit, Mich. Advertising-desk	Aug. 12, 1873			4	159
141, 413	Armstrong, D. A., Sandwich, and S. T. Armstrong, Sycamore, Ill. Sand-papering machine	Aug. 5, 1873	2	1	4	135
	Armstrong, E., et al. (See Allen, C. L., assignor.)					
	Armstrong, E. S. (See Miller & Armstrong.)					
	Armstrong, Fawcett & McKelvy. (See Armstrong, A. D., assignor.)					
	Armstrong, G. (See Armstrong, J. and G.)					
139, 104	Armstrong, H. G., Trenton, N. J. Paper-bag machine	May 20, 1873	580	182	3	568
	Armstrong, J. (See Davis & Armstrong.)					
5, 569	Armstrong, J., Toledo, Ohio. Feed-water heater and filter for steam-boilers (Reissue)	Sept. 9, 1873	395	132	4	285
141, 747	Armstrong, J., Saint Joseph, and D. Cheney, Brookfield, Mo. Outlet-valve for water-tanks	Aug. 12, 1873	306	100	4	168
142, 365	Armstrong, J., Toledo, Ohio. Mechanical movement	Sept. 2, 1873	39	14	4	245
143, 606	Armstrong, J., San Francisco, Cal. Bottle-corking machine	Oct. 14, 1873	193	65	4	405
137, 281	Armstrong, J. and G., Elmira, Ill. Stalk-cutter	Apr. 1, 1873	2	1	3	357
	Armstrong, J. G. (See Plattenburg, J. W., assignor.)					
136, 123	Armstrong, J. G. and J. S., Reed Township, Ohio. Wagon-seat	Feb. 25, 1873	689	223	3	219
	Armstrong, J. S. (See Armstrong, J. G. and J. S.)					
	Armstrong, S. T. (See Armstrong, D. A. and S. F.)					
136, 689	Armstrong, T., Hamilton, Canada. Hoof-spreader	Mar. 11, 1873	309	102	3	279
140, 868	Armstrong, T., Sandwich, Ill. Invalid-chair	July 15, 1873	466	158	4	65
	Armstrong, W. (See Kelly, W., assignor.)					
141, 414	Arnold, J. J., assignor to T. E. Riddell, Boston, Mass., said Riddell assignor of one-half interest to J. W. Richardson, Medway, Mass. Toy	Aug. 5, 1873	3	1	4	135
143, 803	Arndt, A. F. R., assignor to self and W. Doeltz, Detroit, Mich. Child's carriage	Oct. 21, 1873	395	131	4	430
145, 271	Arndt, A. F. R., assignor to T. Nourse and N. D. Lapham, Detroit, Mich. Game-board	Dec. 9, 1873	214	73	4	615
135, 505	Arnold, A., and H. Merz, Chicago, Ill. Show-case	Feb. 4, 1873	101	32	3	135
139, 851	Arnold, A. A., Clyde, Ohio. Dinner-can	June 17, 1873	389	121	3	663
138, 981	Arnold, B., East Greenwich, R. I. Machine for darning stockings	May 20, 1873	469	147	3	559
138, 982	Same..... same	May 20, 1873	470	148	3	559
136, 895	Arnold, D. J., Brownsville, Nebr. Railway switch	Mar. 18, 1873	493	163	3	303
28, 244	Arnold, E. R., Brooklyn, N. Y. Cut-off valve of steam-engines (Extension)	Nov. 1, 1873			4	452
	Arnold, G. B., assignor to the Magic Ruffle Company, New York, N. Y. Ruffle. (Disclaimer filed)	Dec. 10, 1873			4	614
145, 082	Arnold, H. H. C., Nicholasville, Ky. Animal-trap	Dec. 2, 1873	42	13	4	589
141, 534	Arnold, H. L., Ottawa, Ill. Yarn take-up and tensor device for knitting machines	Aug. 5, 1873	106	33	4	143
142, 420	Same..... Set-up device for knitting-machines	Sept. 2, 1873	94	31	4	250
140, 338	Arnold, J., Newark, N. J. Trunk-fastener	July 1, 1873	2	1	4	8
139, 228	Arnold, J. P., Philadelphia, Pa. Curtain-cord fastener	May 27, 1873	708	223	3	586
	Arnold, J. B., et al. (See McIntyre, T. K., assignor.)					
138, 836	Arnold, J. W., Boston, Mass. Railway snow-plow	May 13, 1873	339	105	3	535
138, 360	Arnold, S. D., assignor to P. and F. Corbin, New Britain, Conn. Bolt for doors	Apr. 29, 1873	1,016	320	3	481
139, 647	Same..... Flush bolt for doors	June 10, 1873	192	63	3	640
	Arnold, W. F. (See Jennings & Arnold.)					
134, 625	Arnold, W. F., New Britain, Conn. Lifting-jack	Jan. 7, 1873	115	38	3	16
132, 113	Arnold, W. F., Winthrop, Conn. Try-square	Apr. 22, 1873	770	245	3	453
	Arnold, W. H. (See Duncan & Arnold.)					
135, 747	Arnot, A. H., Morristown, Tenn., assignor of one-half interest to T. J. Speck, Rogersville, Tenn. Railway track-lifter	Feb. 11, 1873	332	106	3	166
140, 179	Arnot, H., assignor to self and G. W. Diekey, Barclay, Pa. Boot-jack	June 24, 1873	695	218	3	696
	Arnot, J. P. (See Davis, E., assignor.)					
135, 061	Arthur, W., Newport, Ky. Steam-pump	Jan. 21, 1873	529	171	3	78
136, 298	Asbury, J. N. and L. M., Rockland Mills, Ky. Turbine water-wheel	Feb. 25, 1873	839	271	3	231
	Asbury, L. M. (See Asbury, J. N. and L. M.)					
146, 040	Aschenbrenner, H. M., assignor to self and T. Masac, Havana, Cuba. Sugar manufacture	Dec. 30, 1873	922	299	4	706
136, 356	Ash, A. D., Swayne County, N. C., assignor of one-half interest to J. Curtis, Knoxville, Tenn. Smut-mill	Mar. 4, 1873	3	1	3	245
5, 537	Ash, J., Sterling, Ill. Tea-kettle spout (Reissue)	Aug. 19, 1873	614	202	4	202
141, 195	Ash, R., Saint Louis, Mo. Spark-arrester	July 29, 1873	799	261	4	109
144, 821	Ash, T., and Z. Walker, Trenton, N. J. Finery-fire for the manufacture of iron	Nov. 25, 1873	572	195	4	558
145, 477	Ashby, G., Decatur, Ill. Device for marking dovetails	Dec. 16, 1873	398	131	4	641
141, 307	Ashcroft, E. H., Boston, Mass. Registering steam-gauge	July 29, 1873	904	296	4	118
144, 493	Same..... Automatic fire-extinguisher	Nov. 11, 1873	278	94	4	512
145, 143	Same..... Non-freezing battery	Dec. 2, 1873	98	32	4	593
137, 753	Ashen, P., Philadelphia, Pa. Sash-weight	Apr. 15, 1873	442	137	3	417
142, 834	Ashford, H., Philadelphia, Pa. Bout-detaching apparatus	Sept. 16, 1873	461	156	4	301
	Ashley, F. (See Ashley, J. T. and F.)					
	Ashley, J. N., et al. (See Pope, F. L., assignor.) (Reissue.)					
138, 983	Ashley, J. T., Williamsburgh, N. Y. Paper-feeding machine	May 20, 1873	471	148	3	559
144, 822	Same..... Brooklyn, N. Y. Feeding paper to rotary printing-presses	Nov. 25, 1873	573	{ 185 } { 186 }	4	558

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Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
143, 740	Ashley, J. T. and F., Brooklyn, N. Y. Paper-feeding machine.	Oct. 21, 1873	337	113	4	426
	Ashman, L., & Co. (See Robertson, J., assignor.)					
	Ashurst, J. L. (See Blunt, G. G., assignor.)					
6, 385	Ashworth, D., Kenton County, Ky. Lamp. (Design)	Feb. 11, 1873			3	156
144, 943	Ashworth, D., Wappinger's Falls, N. Y. Pipe-coupling.	Nov. 25, 1873	673	228	4	567
139, 755	Ashworth, H., Walsden, England. Spinning-machine.	June 10, 1873	299	92	3	648
144, 590	Aspinwall, A., Albany, N. Y. Corn-husking machine.	Nov. 18, 1873	369	125	4	531
145, 478	Assmus, A., assignor of one-half interest to C. Assmus, Chicago, Ill. Magazine fire-arm.	Dec. 16, 1873	399	131	4	641
	Assmus, C. (See Assmus, A., assignor.)					
138, 837	Aston, J., Hythe, England. Breech-loading fire-arm.	May 13, 1873	340	105	3	535
142, 366	Aston, J. A., and C. C. McMurphy, Leavenworth, Kans. Combined chest-protector and shirt-bosom support.	Sept. 2, 1873	40	14	4	245
142, 661	Aston, J. B., Pittsburgh, Pa. Device for blackwashing molds.	Sept. 9, 1873	306	101	4	279
142, 662	Same. Core-barrel for castings.	Sept. 9, 1873	307	102	4	279
136, 016	Atherton, G., Sparta Township, Mich. Horse hay-fork.	Feb. 18, 1873	580	191	3	199
	Athey, J. (See McCarver, Athey & Jennings.)					
	Athol Machine Company. (See Starrett, L. S., assignor.)					
141, 911	Atkins, C. J., Louisiana, Mo. Ferry-bridge.	Aug. 19, 1873	470	154	4	190
139, 756	Atkins, E. C., Indianapolis, Ind. Saw-handle.	June 10, 1873	300	93	3	649
	Atkins, G. (See McAmirch & Atkins.)					
136, 017	Atkins, G., Youngstown, Ohio. Reverberatory furnace.	Feb. 18, 1873	580	191	3	199
142, 322	Atkins, C., assignor of one-half interest to J. B. Swann, Louisville, Ky. Paddle-wheel.	Sept. 2, 1873	1	1	4	242
136, 201	Atkins, J., Augusta, Me. Machine for planing clapboards.	Feb. 25, 1873	754	243	3	224
140, 235	Same. Planing-machine.	June 24, 1873	739	233	3	700
136, 636	Atkins, S. H., Melrose, Mass. Water-proof furze fabric.	Mar. 11, 1873	267	89	3	276
140, 667	Atkinson, B., Indianapolis, Ind. Car-coupling.	July 8, 1873	290	98	4	43
	Atkinson, H. (See Landenberger & Atkinson.)					
5, 410	Atkinson, I., Hamilton, Canada. Curing and packing meats. (Reissue)	May 13, 1873	463		3	546
134, 965	Same. same.	Jan. 21, 1873	140		3	71
135, 683	Atkinson, J., Cameron, Tex. Dumping-platform.	Feb. 11, 1873	283	89	3	162
144, 181	Atkinson, J., Burlington, N. J. Scroll-saw.	Nov. 4, 1873	5	2	4	479
	Atkinson, T. O. (See Kuhn & Atkinson.)					
	Same. same. (Reissue.)					
142, 188	Atkinson, W., assignor to T. Wood, Philadelphia, Pa. Bobbin-winding machine.	Aug. 26, 1873	725	240	4	221
135, 748	Atkinson, W., and C. C. Kleis, assignors to T. Wood, Philadelphia, Pa. Shuttle-box mechanism for looms.	Feb. 11, 1873	333	107	3	166
138, 835	Atkinson, W. B., Philadelphia, Pa. Railway-frog.	May 13, 1873	338	104	3	535
	Atlantic Giant-Powder Company. (See Judson, E., assignor.)					
	Atlantic Giant-Powder Company et al. (See Nobel, A., assignor.)					
	Atlantic Giant-Powder Company. (See Nobel, A., assignor.) (Reissue.)					
	Atlantic Giant-Powder Company et al. (See Varney, T., assignor.)					
	Atlantic Refining Company. (See Perkins, G. H., assignor.)					
	Atterbury, J. S. (See Atterbury, T. B., assignor.) (Three cases.)					
	Atterbury, J. S. (See Atterbury, T. B. and J. S.) (Design.)					
6, 882	Atterbury, J. S. and T. B., Pittsburgh, Pa. Lamp-bowl. (Design)	Sept. 16, 1873			4	296
139, 993	Same. Method of and mold for manufacturing glass-ware.	June 17, 1873	506	{ 160 161 153 154 }	3	673
145, 548	Same. Combined lamp-shade and drip-cup.	Dec. 16, 1873	470	{ 153 154 }	4	647
	Atterbury, T. B. (See Atterbury, J. S. and T. B.) (Two cases.)					
	Same. same. (Design.)					
	Atterbury, T. B., et al. (See Zellers, T. A., assignor.)					
6, 613	Atterbury, T. B., Pittsburgh, Pa. Glass-ware. (Design)	Apr. 29, 1873			3	471
140, 236	Atterbury, T. B., assignor to self and J. S. Atterbury, Pittsburgh, Pa. Molasses-pitcher.	June 24, 1873	739	233	3	700
140, 988	Same. Lamp.	July 22, 1873	599	203	4	85
143, 951	Same. Salt and pepper dredge combined.	Oct. 28, 1873	539	179	4	452
6, 948	Atterbury, T. B. and J. S., Pittsburgh, Pa. Lamp-foot. (Design)	Oct. 7, 1873			4	360
	Attix, T. F. (See Carson, T., assignor.)					
144, 494	Atwater, A. A., Smith Valley, N. Y. Car-coupling.	Nov. 11, 1873	279	94	4	513
	Atwater Manufacturing Company. (See Deebler, J., assignor.)					
	Same. (See Knowles, W. W., assignor.)					
	Atwell, J., et al. (See Haner, W. W., assignor.)					
142, 551	Atwell, R. H., Baltimore, Md. Motor for driving sewing machines.	Sept. 9, 1873	214	69, 70	4	271
140, 339	Atwood, A., Brooklyn, N. Y., assignor of one-half interest to I. D. Condit, Millburn, N. J. Car-wheel.	July 1, 1873	3	1	4	8
136, 404	Atwood, A. N., Philadelphia, Pa. Composition for burial-caskets.	Mar. 4, 1873	45		3	249
	Atwood, E. A. (See Bodwell & Atwood.)					
5, 656	Atwood, E. A., and H. H. Bodwell, San Francisco, Cal. Windmill. (Reissue)	Nov. 18, 1873	560	190	4	547
142, 885	Same. same.	Sept. 16, 1873	500	171	4	305
138, 114	Atwood, J. E., Mansfield, Conn. Rolling-mill.	Apr. 22, 1873	770	245	3	453
138, 780	Atwood, J. E., Pittsburgh, Pa. Compound for lining bottoms of Bessemer or Kelly converters.	May 13, 1873	290		3	531
138, 781	Same. Compound for tuyeres.	May 13, 1873	291		3	531
144, 495	Same. Car-wheel.	Nov. 11, 1873	280	94	4	513
144, 726	Same. Manufacture of Bessemer-steel-converter tuyeres.	Nov. 18, 1873	481		4	540
	Atwood, L. J., et al. (See Capowell, G. J., assignor.)					
135, 749	Atwood, L. J., assignor to The Plume & Atwood Manufacturing Company, Waterbury, Conn. Lamp.	Feb. 11, 1873	334	107	3	166
138, 601	Same. Lamp-burner.	May 6, 1873	116	38	3	507
141, 251	Same. Shade or globe-holder for lamps.	July 29, 1873	857	280	4	113
141, 252	Same. Shade-holder.	July 29, 1873	858	280	4	113
	Aubin, A. N. N. (See Hulbert & Aubin.)					
136, 690	Aufdembrinke, H., Cincinnati, Ohio. Pitman.	Mar. 11, 1873	309	102	3	279
142, 138	Augapferger, J. K., Trenton, Ohio. Harvester-rake.	Aug. 26, 1873	687	226	4	217
140, 668	Auguste, B., assignor of one-third interest to B. Gotia, Chicago, Ill. Artificial marble.	July 8, 1873	291		4	43
142, 189	Aulbach, J., assignor of one-half interest to A. Pregamann, West Meriden, Conn. Lamp chandelier.	Aug. 26, 1873	726	240	4	221
145, 608	Auld, D. Jr., Glasgow, North Britain. Furnace-door.	Dec. 16, 1873	517	169	4	651
141, 619	Auld, J. E., Buffalo, N. Y. Oil-can.	Aug. 12, 1873	200	63	4	159
	Aust, W. (See Pfefferkorn & Aust.)					
135, 875	Austin, C., Concord, N. H. Reed-organ.	Feb. 18, 1873	464	149	3	190
136, 952	Austin, E. H., New York, N. Y. Pipe for gas, water, &c.	Mar. 18, 1873	540	178	3	307
134, 115	Same. Subterranean telegraph-line.	Apr. 22, 1873	771	246	3	453
143, 315	Austin, E. H., Scott's Hill, Tenn. Feed-regulator for grinding-mills.	Sept. 30, 1873	870	298	4	362
135, 684	Austin, H. K., assignor to self and G. V. Millett, Charlestown, Mass. Handle for files.	Feb. 11, 1873	284	89	3	162

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 237	Austin, J., & Co. (See Wheatcroft, H. B., assignor.)					
140, 989	Austin, J. E., Philadelphia, Pa. Exercising device	June 24, 1873	740	233	3	700
	Austin, R. M., Philadelphia, Pa. Combined ruler and blotter	July 22, 1873	600	203	4	85
	Austin, S. (See Steel & Austin.)					
	Austin, T. P. (See Farrington & Austin.)					
135, 750	Austin, T. P., New York, N. Y. Machine for stamping sheet-metal ware	Feb. 11, 1873	335	107	3	166
141, 748	Austin, W., Philadelphia, Pa. Sheet-metal bucket	Aug. 12, 1873	307	100	4	168
	Autenrieth, G. (See Springer, T., assignor.)					
	Automatic Boiler-Feeder Company. (See Cook, S., assignor) (Reissue.)					
	Automatic Car-Brake Manufacturing Company. (See Ea-Earl, G., assignor.)					
135, 751	Averell, E. D., New York, N. Y. Paper-ruling machine	Feb. 11, 1873	337	108	3	166
143, 488	Averell, J. D., New York, N. Y. Commode	Oct. 7, 1873	76	26	4	387
143, 555	Averell, J. D., New York, assignor of part interest to S. A. Joice, Brooklyn, N. Y. Oxy-hydrocarbon gas-burner	Oct. 14, 1873	151	51	4	401
	Averill Chemical Paint Company. (See Averill, D. R., assignor) (Reissue.)					
5, 695	Averill, D. R., New Centreville, N. Y., assignor to The Averill Chemical Paint Company, New York, N. Y. Paint	Dec. 23, 1873	807		4	686
141, 415	Averill, J. W., New Market, N. H. Gas-burner	Aug. 5, 1873	4	1	4	135
	Avery, B. F. (See Wiard, E., assignor.)					
138, 361	Avery, O. M., Pensacola, Fla. Dumping-car	Apr. 29, 1873	1,016	320	3	481
	Avis, J. W. (See Tait & Avis.)					
140, 804	Awrey, E. M., Smithville P. O., Canada. Harvester	July 15, 1873	412	140	4	61
	Axford, W. (See Johnson & Axford.)					
	Axtell, H. A., et al. (See Park, F., assignor.)					
140, 755	Ayer, D. M., assignor to E. W. Ayer, Lawrence, Mass. Drip-cup for candles	July 15, 1873	371	127	4	58
	Ayer, E. W. (See Ayer, D. M., assignor.)					
137, 292	Ayers, A. P., Benton Harbor, Mich. Spool-holder and thread-cutter	Apr. 1, 1873	3	1	3	357
135, 685	Ayers, C., Farmington Centre, Wis. Tree protector	Feb. 11, 1873	285	89	3	162
137, 648	Ayers, J. W., West Meriden, Conn. Handle of pocket-knives	Apr. 8, 1873	335	104	3	396
	Ayres, J. A. (See Pierce & Ayres.)					
137, 754	Ayres, J. A., Mystic River, Conn. Water-elevator	Apr. 15, 1873	442	{ 137 138 }	3	417
	Babbett, A., deceased, by H. M. Babbett, executrix, Auburn, N. Y. Jacquard-machine. (Extension)	Oct. 18, 1873			4	400
25, 796	Same. Jacquard-machine. (Disclaimer filed)	Oct. 11, 1873			4	401
	Babbett, H. M., executrix (See Babbett, A.) (Disclaimer.)					
	Same. same. (Extension.)					
139, 944	Babbitt, B. T., New York, N. Y. Propelling-device for vessels	June 17, 1873	508	161	3	673
142, 663	Same. Boiler and condenser	Sept. 9, 1873	308	102	4	279
142, 664	Same. same	Sept. 9, 1873	309	103	4	279
142, 665	Same. same	Sept. 9, 1873	310	103	4	279
135, 876	Same. Marine-condenser	Sept. 9, 1873	510	103	4	279
	Babbitt, G. R., assignor by mesne assignment to self and W. A. Harris, Providence, R. I. Steam-tight joint of valve-stems	Feb. 18, 1873	465	149	3	190
136, 405	Babbitt, G. R., and W. A. Harris, Providence, R. I. Piston-packing	Mar. 4, 1873	46	16	3	249
145, 776	Babbitt, S., Brazil, Ind., assignor to self and W. E. Sibley, Boston, Mass. Shoe-fastening	Dec. 23, 1873	675	221	4	676
	Babcock, C. (See Tisdale, W. D., assignor.)					
	Babcock, E. N. (See Nixon & Babcock.)					
134, 505	Babcock, G. H., Plainfield, N. J. Bronzing-machine. (Extension)	Oct. 25, 1873			4	425
135, 877	Babcock, G. H., Plainfield, N. J., and S. Wilcox, Brooklyn, N. Y. Sectional steam-boiler	Jan. 7, 1873	1	1	3	7
136, 691	Same. Sectional steam-boiler	Feb. 18, 1873	466	150	3	190
139, 448	Same. Steam-generator	Mar. 11, 1873	310	103	3	279
136, 953	Same. Steam-engine	June 3, 1873	1	1	3	60
	Babcock, J. F., W. A. Leonard, and E. B. Crane, Boston, Mass. Watch composition	Mar. 18, 1873	541		3	307
	Babcock, J. K., et al. (See Spencer, J. C., assignor.)					
135, 958	Babcock, J. W., Chicopee, Mass. Machine for lifting and carrying barrels, boxes, &c	Feb. 18, 1873	529	174	3	195
134, 966	Babcock, S. P., Adrian, Mich. Tuck-creaser	Jan. 21, 1873	141	141	3	71
143, 741	Same. Tuck-creaser for sewing-machines	Oct. 21, 1873	341	114	4	426
	Bach, J. (See Green, J., assignor.)					
134, 833	Bacheller, S. B., McDonough, N. Y. Fly-trap	Jan. 14, 1873	317	107	3	45
138, 224	Backmayr, M., Lyons, Wis. Blinders for cattle	Apr. 29, 1873	891	281	3	471
	Backus, O. J. (See Hyde, I., assignor.) (Reissue.)					
144, 727	Backus, S. D., New York, N. Y. Chain-tackle block	Nov. 18, 1873	482	163	4	540
145, 714	Bacon, C. H., assignor to self and J. H. Sawyer & Co., Boston, Mass. Peg-cutter	Dec. 23, 1873	620	203	4	672
145, 381	Bacon, E. N., Chelsea, Vt. Combined bow-fastener and guard for ox-yokes	Dec. 9, 1873	306	103	4	622
	Bacon, G. (See Bacon, J. & G.)					
138, 065	Bacon, J. & G., Medina, Wis. Weather-strip	Apr. 22, 1873	733	232	3	450
	Bacon, J. T., & Co. (See Davis, W. F., assignor.)					
144, 246	Bader, J., Olathe, Kans. Door-check	Nov. 4, 1873	68	22	4	483
	Badger, S. (See Haynes, W. A., assignor.) (Design.)					
141, 687	Badley, D. L., Afton, Iowa. Tire-upsetting machine	Aug. 12, 1873	259	84	4	164
	Baechler, C., et al. (See Moore, C., assignor.)					
	Bagby, G. K. (See Bailey & Bagby.)					
	Bagger, L. (See Moore & Bagger.)					
139, 995	Bagger, L., Washington, D. C. Bath-tub	June 17, 1873	508	161	3	673
145, 144	Baggs, A. H., assignor to La Belle Glass Company, Bridgeport, Ohio. Manufacture of glass-ware	Dec. 2, 1873	98	{ 32 33 }	4	583
145, 145	Same. Salver	Dec. 2, 1873	99	33	4	593
	Baggs, A. J. (See Baggs, J. T., assignor.)					
138, 362	Baggs, J., Easton, Md. Butchers' combined knife, saw, and spring-scales	Apr. 29, 1873	1,017	320	3	481
138, 552	Baggs, J. T., assignor of one-fourth interest to A. J. Baggs, Bridgeport, Ohio. Sawing-machine	May 6, 1873	77	25	3	504
134, 967	Bagley, A., Ypsilanti, Mich. Self-locking rail-fence	Jan. 21, 1873	142	141	3	71
144, 247	Bagnall, W., Otsego, Ohio. Cultivating-plow	Nov. 4, 1873	69	22	4	483
139, 529	Bailey, A. S., assignor of one-half interest to E. Little, Paxton, Ill. Car-pusher	June 3, 1873	72	25	3	615
137, 589	Bailey, C., assignor to self and H. C. Bailey. Dentist's flask	Apr. 8, 1873	287	89	3	392
138, 363	Bailey, C., and G. K. Bagby, Kinston, N. C. Cotton-chopper	Apr. 29, 1873	1,018	320	3	481
	Bailey, C. M. (See Hoskin, R., assignor.) (Design.)					
	Bailey, C. M. (See Webster, A., jr., assignor.) (Design.)					
143, 053	Bailey, E. H., Brooklyn, N. Y. Machine for manufacturing carpet-linings	Sept. 23, 1873	653	223	4	327
	Bailey, Farrell & Co. (See Bailey, H. J., assignor.)					
135, 618	Bailey, F. L., Boston, and J. Watson, Everett, Mass. Printing-press	Feb. 11, 1873	223	69	3	157
143, 489	Bailey, F. L., Boston, assignor to J. Watson, Everett, Mass. Inking apparatus	Oct. 7, 1873	77	26	4	387
	Bailey, H. C. (See Bailey, C., assignor.)					
5, 286	Bailey, H. C. W., Sterling, Ill. Spring bed-bottom. (Reissue.)	Feb. 18, 1873	681	220	3	206
141, 416	Bailey, H. J., assignor to Bailey, Farrell & Co., Pittsburgh, Pa. Gage-cock	Aug. 5, 1873	5	2	4	135

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136, 806	Bailey, J., assignor of one-half interest to H. Breitenstein, Quincy, Ill. Direct-acting steam-engines	Mar. 18, 1873	419	139	2	297
139, 852	Bailey, J., Springport, Ind. Cooper's croze	June 17, 1873	390	122	2	663
138, 364	Bailey, J. J., New York, N. Y. Refrigerator	Apr. 29, 1873	1, 019	321	2	481
135, 256	Bailey, J. M., Meridian, Miss. Machine for sharpening gin-saws	Jan. 28, 1873	718	230	3	105
145, 715	Bailey, L., New Britain, Conn. Try-square	Dec. 23, 1873	620	203	4	672
	Bailey, S. A., Woonsocket, R. I. Machine for wringing clothes (Extension)	Apr. 5, 1873			3	325
	Bailey Tool Company. (See Brown & Williams, assignors.)					
112, 758	Bailey, T. W., Savannah, Ohio. Eaves-trough hanger	Sept. 16, 1873	400	135	4	296
	Bailey, W., et al. (See Reed, G. D., assignor.)					
139, 038	Bailey, W., Brooklyn, assignor to G. B. Sloan, Oswego, N. Y. Machine for stretching and drying cloth	May 20, 1873	517	163	3	563
	Bailey Washing and Wringing Machine Company. (See Glass, H., assignor) (Reissue.)					
	Bailey, W. W. (See Towne & Bailey.)					
135, 257	Bainbridge, D., Philadelphia, Pa. Vibrating propeller for vessels	Jan. 28, 1873	719	230	3	105
141, 535	Baines, J. A., assignor of one-half interest to J. Barker, New York, N. Y. Metallic plane	Aug. 5, 1873	108	33	4	144
139, 648	Baird, D. W., Geneva, N. Y. Spring-clip for carriages	June 10, 1873	193	63	3	641
143, 316	Same..... Concealed jointed brace for carriage-tops	Sept. 30, 1873	871	298	4	362
144, 429	Baird, J. C., and M. Miller, Heaton, Ill. End-gate for wagons	Nov. 11, 1873	228	76	4	508
	Baird, J. M. (See Orr & Baird.)					
141, 308	Baird, J. M., assignor to self and R. Stanley, Wheeling, W. Va. Hoe	July 29, 1873	905	297	4	118
143, 431	Baird, J. M., Wheeling, W. Va. Fastening for bedsteads, &c	Oct. 7, 1873	32	11	4	383
138, 116	Baird, O. D., Newark, assignor to S. Southworth and E. Dorchester, Geneva, N. Y. Rail-way snow-plow	Apr. 22, 1873	772	246	3	453
136, 954	Baird, R., Stirling, Scotland. Punching-machine	Mar. 18, 1873	542	179	3	307
	Baisley, G. H. (See Wilson & Baisley.)					
140, 756	Baisley, G. H., and G. Wilson, said Baisley assignor to I. V. Splawn, Hamilton, Mo. Earth-auger	July 15, 1873	371	127	4	58
137, 167	Baker, A. E., assignor to H. W. Gardner, Providence, R. I. Reciprocating steam-engine	Mar. 25, 1873	739	245	3	334
	Baker, A. O. (See Black, J. B., assignor.)					
	Baker, A. O. (See Grant, S. W., assignor.)					
	Baker, A. S. (See Shaw & Baker.)					
	Baker, C. E. (See Scholfield & Baker.)					
144, 496	Baker, C. L. W., assignor to J. L. Mason, Camden, N. J. Brush	Nov. 11, 1873	280	95	4	513
144, 728	Same..... Feather-duster	Nov. 18, 1873	483	163	4	540
145, 479	Same..... Brush-holder	Dec. 19, 1873	401	132	4	642
140, 041	Baker, C. L. W., Camden, assignor to J. L. Mason, New Brunswick, N. J. Clamp for splicing broom-handles, &c	Dec. 30, 1873	923	299	4	707
138, 838	Baker, D. C., Fulton, N. Y. Cultivator	May 13, 1873	342	106	3	535
139, 649	Baker, E., Millstone, N. J. Manufacture of spiegelolisen	June 10, 1873	193		3	641
	Baker, E. L. (See Chase, C. M., assignor.)					
139, 996	Baker, H. H., New Market, N. J. Propelling canal-boats	June 17, 1873	509	161	3	673
	Baker, H. M., et al. (See Hunter, G. W., assignor.)					
143, 866	Baker, I. L., Dayton, Ohio. Mold for sealing-wax	Oct. 21, 1873	447	149	4	435
7, 024	Baker, J. G., Philadelphia, Pa., assignor to Enterprise Manufacturing Company of Pennsylvania. Fly-wheel	Dec. 9, 1873			4	614
135, 752	Same..... Machine for setting saws	Feb. 11, 1873	339	108	3	166
143, 867	Same..... Grinding-mill	Oct. 21, 1873	448	149	4	435
145, 382	Baker, J. G., Philadelphia, Pa. Blowing-machine	Dec. 9, 1873	307	103	4	623
136, 692	Baker, J. H., and A. Doney, Saratoga Springs, N. Y. Bed-springs	Mar. 11, 1873	311	103	3	279
145, 830	Baker, J. H., A. Doney, and F. N. Owen, Saratoga Springs, N. Y. Tool	Dec. 23, 1873	716	235	4	680
141, 100	Baker, J. M. B., Southsea, England. Disinfecting and deodorizing apparatus for water-closets	July 22, 1873	698	234	4	93
	Baker, L., administrator. (See Martin & Wilson.)					
134, 834	Baker, L. H., Washington, D. C. Chair	Jan. 14, 1873	317	101	3	45
	Baker, R., et al. (See Rodier & Bates, assignors.)					
144, 882	Baker, S., and S. C. McIntire, Springfield, Ohio. Rotary engine	Nov. 25, 1873	626	212	4	563
139, 853	Baker, S. E., Chicago, Ill. Pile-driver	June 17, 1873	390	122	3	663
142, 826	Baker, W. Ilion, assignor to the Biddle Manufacturing Company, New York, N. Y. Pruning-shears	Sept. 16, 1873	501	171	4	305
	Baker, W. C. (See Williams, N. W., assignor.)					
144, 047	Baker, W. C., New York, N. Y. Steam-generator	Oct. 28, 1873	624	206	4	459
144, 650	Same..... Heating-apparatus	Nov. 18, 1873	423	142	4	535
	Baker, W. E. (See Crump, C. H., assignor.) (Design.)					
138, 553	Baker, W. M., Fortville, Ind. Refrigerator	May 6, 1873	78	25	3	504
143, 607	Same..... same	Oct. 14, 1873	194	65	4	405
	Baker, W. T. (See Wheelock, W., assignor.)					
5, 461	Balback, E., jr., Newark, N. J. Separating zinc from gold and silver (Reissue)	June 24, 1873	835	265	3	708
139, 449	Same..... Retort-furnace for separating zinc from gold, silver, &c	June 3, 1873	2	1	3	609
141, 912	Same..... Furnace for smelting ores	Aug. 19, 1873	471	154	4	190
136, 807	Balcom, H., assignor to self and A. H. Partridge, Ann Arbor, Mich. Machine for pointing pickets	Mar. 18, 1873	422	140	3	297
135, 959	Balderston, J. H., Colora, Md. Bread-worker	Feb. 18, 1873	529	174	3	195
134, 835	Balding, A., Wheeling, W. Va. Water-elevator	Jan. 14, 1873	318	101	3	45
138, 310	Baldwin, F. S., Saint Louis, Mo. Lumber-measure	Apr. 29, 1873	976	307	3	478
140, 340	Same..... Electrical anemometer	July 1, 1873	4	2	4	8
136, 421	Baldwin, G., Monroe, Mich. Brick and tile machine	Mar. 4, 1873	111	37	3	254
141, 628	Baldwin, H. C., North Wolcott, Vt. Milk and cream cooler	Aug. 12, 1873	260	84	4	164
139, 530	Baldwin, J. F., Nashua, N. H., assignor to self and Miles Alarm-Till Manufacturing Company, Providence, R. I. Till-alarm	June 3, 1873	73	25	3	615
	Same..... same	Dec. 23, 1873	676	221	4	676
145, 777	Baldwin, J. F., Nashua, N. H. Till-alarm	June 17, 1873	467	146	3	669
139, 939	Baldwin, J. F., Boston, Mass., assignor to J. Sully, trustee, Dedham, Mass. Metallic plane	Nov. 25, 1873	575	196	4	558
144, 823	Baldwin, J. L., et al. (See Carter & Keith, assignors.)					
135, 062	Baldwin, J. S., Newark, N. J. Steam-generator	Jan. 21, 1873	530	172	3	78
138, 984	Same..... Means for closing hatchways	May 20, 1873	472	149	3	559
138, 985	Same..... Elevator	May 20, 1873	473	149	3	559
137, 649	Baldwin, L., Stone Mills, N. Y. Cultivator	Apr. 8, 1873	336	104	3	396
	Baldwin, M. (See Poulson, J., assignor.)					
142, 887	Baldwin, M. O., Namego, Kans. Medicine-case	Sept. 16, 1873	502	171	4	305
134, 836	Baldwin, S. W., Yonkers, N. Y. Inkstand	Jan. 14, 1873	319	102	3	45
139, 354	Same..... Machine for molding boot and shoe bottoms	May 27, 1873	814	260	3	595

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	Baldwin, W. (See Daffin, T., assignor.)					
136, 018	Baldwin, W. H., New York, N. Y. Type-setting machine.	Feb. 18, 1873	581	191	3	199
5, 271	Balkwill, S. and W. W., Cleveland, Ohio. Railway-car brake (Reissue).	Feb. 11, 1873	444	145	3	174
	Balkwill, W. W. (See Balkwill, S. and W. W.) (Reissue).					
134, 506	Ball, A., assignor to Sullivan Machine Company, Claremont, N. H. Guide for rotary rock-drills.	Jan. 7, 1873	3	1	3	8
135, 063	Ball, A., assignor to self and C. P. Nelson, Milford, Mass. Combined blind-opener and slat-regulator.	Jan. 21, 1873	531	172	3	78
5, 479	Ball, C., Augusta, Mich., assignor of one-half interest to T. Marriott. Toy (Reissue).	July 8, 1873	367	124	4	49
138, 365	Ball, C., Augusta, assignor of one-half interest to T. Marriott. Detroit, Mich. Toy.	Apr. 29, 1873	1,020	321	3	481
142, 759	Ball, C. A., assignor of one-fourth interest to E. Whritnoeur, Ridgewood, N. J. Truck for transporting railway-rails, car-axles, &c.	Sept. 16, 1873	401	135	4	296
140, 108	Ball, C. E., Philadelphia, Pa. Argand-burner.	June 24, 1873	634	199	3	691
139, 997	Ball, D. H., Sinnamahoning, Pa. Traction-engine.	June 17, 1873	510	162	3	673
	Ball, E., deceased, by D. Cobough, administrator, Canton, Ohio. Harvester (Extension).	Oct. 18, 1873			4	400
145, 831	Ball, E. P., Chicopee, Mass. Loom-shuttle.	Dec. 23, 1873	717	236	4	680
135, 506	Ball, G. M., Brooklyn, N. Y., assignor to I. Herman, New York, N. Y. Shaft-bearings.	Feb. 4, 1873	102	32	3	135
145, 778	Ball, H. S., Spartanburgh, S. C. Pen-wiper.	Dec. 23, 1873	677	221	4	676
144, 581	Ball, J. S., Mishawaka, Ind. Hay-knife.	Nov. 18, 1873	370	125	4	531
142, 979	Ball, P., Worcester, Mass. Riveting joints of sheet-metal.	Sept. 23, 1873	587	200	4	322
144, 048	Same. Valve-motion for gates and hydrants.	Oct. 28, 1873	625	206	4	459
138, 466	Ball, P., and B. Fitta, Worcester, Mass. Water-filter.	May 6, 1873	1	1	3	498
	Ball, R., & Co. (See Smith, E. H., assignor.)					
143, 114	Ball, W. E., Bethesda, Ohio. Pruning-shears.	Sept. 23, 1873	699	240	4	331
141, 481	Ball, W. H., Brooklyn, N. Y. Insect-powder gun.	Aug. 5, 1873	63	20	4	140
145, 083	Ballagh, A. H., Bownesburgh, assignor to self and M. McNitt, Mound Station, Ill. Riding attachment for plows.	Dec. 2, 1873	43	13	4	589
143, 216	Ballantine, A. T., Titusville, Pa. Oil-cup.	Sept. 30, 1873	783	271	4	354
136, 202	Ballard, A. J., Cohoes, N. Y., assignor to Union Water-Meter Company, Worcester, Mass. Steam-pressure regulator.	Feb. 25, 1873	755	244	3	224
	Rallard, Fast & Co. (See Ballard, M. L., assignor.)					
137, 046	Ballard, J., Almont, Mich. Washing-machine.	Mar. 25, 1873	633	209	3	326
137, 401	Ballard, M. L., Canton, Ohio. Nut-lock.	Apr. 1, 1873	108	35	3	368
137, 402	Ballard, M. L., assignor to Ballard, Fast & Co., Canton, Ohio. Saw-handle.	Apr. 1, 1873	109	35	3	368
141, 025	Ballou, C. C., Albany, assignor to the East New York Boot, Shoe, and Leather Manufacturing Company, New York, N. Y. Sole-channelling machine.	July 22, 1873	631	213	4	88
142, 960	Same. Heel-trimming machine.	Sept. 23, 1873	599	200	4	323
142, 140	Ballou, J., Boston, Mass. Ventilator.	Aug. 26, 1873	688	226	4	217
144, 651	Bancker, F. A., New York, N. Y. Toy gymnasium.	Nov. 18, 1873	423	142	4	535
134, 837	Bancroft, J. B., Hopedale, Mass. Shuttle-guide for looms.	Jan. 14, 1873	320	102	3	46
135, 619	Same. Warping-machine.	Feb. 11, 1873	223	70	3	157
140, 757	Same. Adjustable spinning-ring.	July 15, 1873	372	127	4	58
145, 549	Same. Machine for preparing printers' rules.	Dec. 16, 1873	471	154	4	647
145, 925	Bancroft, J. B., assignor to self and G. and W. F. Draper, Hopedale, Mass. Shuttle-guide for looms.	Dec. 30, 1873	825	269	4	698
137, 525	Bancroft, L., assignor of two-thirds interest to L. Brown and W. G. Bryant, Springfield, Ohio. Construction of sheet-metal elbows.	Apr. 8, 1873	231	71	3	387
5, 325	Bancroft, L. F., Worcester, Mass., assignor by means assignment to E. E. Quimby, trustee, New York, N. Y. Street-sprinkler (Reissue).	Mar. 18, 1873	623	206	3	314
143, 490	Bandon, J., and J. Wiggim, jr., Dayton, Ohio. Middlings-purifier.	Oct. 7, 1873	78	26	4	387
	Banes, C. H. (See Tully, F., assignor.)					
138, 117	Banister, I., Newark, N. J. Shoe-fastening.	Apr. 22, 1873	773	246	3	453
138, 986	Banker, G. W., New York, N. Y. Metal can for oil, &c.	May 20, 1873	474	149	3	560
136, 637	Bannhr, J., Hempstead, and D. H. Rhodes, Baldwinville, N. Y. Bag-tie.	Mar. 11, 1873	268	90	3	276
141, 253	Banning, E. P., sr., assignor to Banning Truss and Brace Company, New York, N. Y. Necessary.	July 29, 1873	858	280	4	114
	Banning Truss and Brace Company. (See Banning, E. P., sr., assignor.)					
141, 026	Bannister, A., Alameda, Cal. Truss-bridge.	July 22, 1873	632	213	4	88
140, 341	Banta, C. W., Orange, N. J. Apparatus for steaming hats.	July 1, 1873	6	2	4	8
139, 854	Bantz, E., Baltimore, Md. Means for creating artificial currents.	June 17, 1873	391	122	3	663
141, 749	Bapterossea, J. F., Paris, France. Machine for making buttons.	Aug. 12, 1873	308	101	4	168
142, 367	Baptista, J. B., New York, N. Y. Rudder for vessels.	Sept. 2, 1873	41	14	4	245
142, 835	Same. Means of adjusting paddle-floats.	Sept. 16, 1873	462	156	4	302
136, 203	Baquet, J., Baltimore, Md. Compound for expelling files from rooms.	Feb. 25, 1873	756		3	224
138, 839	Baranger, H., assignor to J. F. Chapman and L. H. Baranger, Saint Louis, Mo. Fare-box.	May 13, 1873	343	106	3	536
140, 669	Baranger, H., Saint Louis County, Mo. Fare-box.	July 8, 1873	292	98	4	43
	Baranger, L. H., et al. (See Baranger, H., assignor.)					
137, 403	Baranowski, J. J., London, England, assignor to D. H. Brandon, Paris, France. Machine for making plaited capsules.	Apr. 1, 1873	109	35	3	366
144, 592	Barbee, W. G., High Point, N. C. Preserving fruit and vegetables for food.	Nov. 18, 1873	371		4	531
144, 944	Barber, B. J., Ballston Spa, N. Y. Water-wheel.	Nov. 25, 1873	674	228	4	567
	Barber, R. P. (See Temple, J., assignor.)					
	Barbour Flax-Spinning Company. (See Meldrum, J. B., assignor.)					
	Barbour, J. M. (See Welpton, J. B., assignor.)					
135, 753	Barbour, J. W., assignor by means assignment of one-half interest to T. Collamer, Winooski Falls, Vt. Mop-head.	Feb. 11, 1873	340	109	3	166
134, 722	Barbour, T. P., Louisville, Ky., assignor of one-half interest to L. B. Bruen, Newark, N. J. Harvester-rake.	Jan. 14, 1873	221	71	3	38
140, 670	Barclay, D. F., Elgin, Ill. Cheese-vat.	July 8, 1873	203	99	4	43
137, 590	Bard, J. I., New Orleans, La. Construction of metallic casks.	Apr. 8, 1873	288	89	3	392
140, 869	Bardell, A., Williamsburgh, N. Y. Sifter.	July 15, 1873	467	158	4	65
142, 191	Bardell, A., New York, N. Y. Refrigerator.	Aug. 26, 1873	728	240	4	221
134, 626	Barden, J. S., Providence, R. I. Pump.	Jan. 7, 1873	116	38	3	16
144, 049	Bardsley, J., Akron, Ohio. Spark-arrester.	Oct. 28, 1873	626	207	4	459
	Barjon, V. (See Nolf, A. L., assignor.)					
5, 671	Barker, C., assignor to self and T. C. Thomas, Maquon, Ill. Grain-car door (Reissue).	Dec. 2, 1873	207	70	4	601
141, 689	Barker, C. F., Boston, Mass. Making artificial marble.	Aug. 12, 1873	261		4	164
	Barker, C. M. (See Johnson & Barker.)					
140, 452	Barker, D., Northfleet, England. Manufacture of artificial fuel.	July 1, 1873	90		4	16
142, 072	Barker, E. A., Providence, R. I. Croquet-wicket driver.	Aug. 26, 1873	629	207	4	213
143, 606	Barker, E. B., Brooklyn, N. Y., assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic cameo-embossing press.	Oct. 14, 1873	195	66	4	405
140, 805	Barker, E. W., assignor of one-half interest to C. S. Clark, Portland, Me. Car coupling.	July 15, 1873	413	140	4	61
145, 926	Barker, G. E., and S. F. Mack, Waverly, N. Y. Air-pump.	Dec. 30, 1873	625	269	4	699
142, 190	Barker, G. F., New Haven, Conn., and A. M. Mayer, Hoboken, N. J. Thermoscope.	Aug. 26, 1873	727		4	221

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135, 507	Barker, G. R., Germantown, Pa. Ventilator.....	Feb. 4, 1873	103	33	3	135
141, 101	Same..... Hot-air fine for heating furnaces.....	July 22, 1873	699	234	4	93
143, 868	Same..... Philadelphia, Pa. Ventilator for buildings.....	Oct. 21, 1873	449	149	4	435
145, 272	Barker, G. W., Saint John's, Mich. Churn-dasher.....	Dec. 9, 1873	215	74	4	615
145, 716	Barker, H. H., Hartford, Conn. Combined step-ladder, bench, and clothes-frame.....	Dec. 23, 1873	621	204	4	672
	Barker, J. (See Baines, J. A., assignor.)					
142, 666	Barker, J., Covington, Ky. Pile or fagot.....	Sept. 9, 1873	311	103	4	279
135, 878	Barker, J. C., assignor of one-half interest to J. L. Branson, Chicago, Ill. Folding-case.....	Feb. 18, 1873	467	150	3	190
139, 650	Barker, P. M., Grand Haven, Mich. Double-acting pump.....	June 10, 1873	194	63	3	641
145, 551	Barlow, G. W., New York, N. Y. Skate-fastening.....	Dec. 16, 1873	473	154	4	647
140, 870	Barlow, W. A., Chicago, Ill. Summer stove.....	July 15, 1873	467	158	4	65
145, 550	Same..... Cullinary vessel.....	Dec. 16, 1873	473	154	4	647
142, 888	Barman, I., Portland, Oreg. Porter's box.....	Sept. 16, 1873	503	172	4	305
	Barnard, B. M. (See Dick, D., assignor.)					
	Barnard and Leas Manufacturing Company. (See Barnard, H. A., assignor.)					
6, 895	Barnard, C. S. and E. A., West Meriden, Conn. Call-bell..... (Design)	Sept. 30, 1873			4	354
135, 754	Same..... Drawer-pull.....	Feb. 11, 1873	340	109	3	166
	Barnard, E. A. (See Barnard, C. S. and E. A.)					
	Same..... same..... (Design)					
144, 050	Barnard, H. A., assignor to Barnard and Leas Manufacturing Company, Moline, Ill. Smut-mill.....	Oct. 28, 1873	627	207	4	460
143, 115	Barnard, R. W., Kennett Square, Pa. Cream-strainer.....	Sept. 23, 1873	700	240	4	331
142, 981	Barnard, T. C., West Meriden, Conn. Device for hanging picture-frames.....	Sept. 23, 1873	590	200	4	323
139, 998	Barnard, W. H., Washington, D. C. Temporary binder.....	June 17, 1873	511	162	3	673
138, 987	Barnes, C. E., Boston, Mass. Stop-mechanism for looms.....	May 20, 1873	475	149	3	560
144, 051	Barnes, D. A., Chicago, Ill. Can-opener and pipe-cutter.....	Oct. 28, 1873	628	207	4	460
135, 064	Barnes, E. F. and G. A., New Haven, Conn. Metal turning-lathe.....	Jan. 21, 1873	532	172	3	78
	Barnes, G. A. (See Barnes, E. F. and G. A.)					
138, 554	Barnes, G. B., and J. A. Leasure, Bellaire, Ohio. Sifter, mixer, and grinder for glass stock.....	May 6, 1873	79	25	3	504
135, 462	Barnes, H. R., Rock Stream, N. Y. Hoe.....	Feb. 4, 1873	66	21	3	132
137, 755	Same..... same.....	Apr. 15, 1873	443	138	3	417
	Barnes, J. (See Barnes, W. F. and J., and P. Mesick.)					
	Barnes, J. (See Rice & Barnes.)					
135, 960	Barnes, J., assignor to self and J. Woodhouse, Holyoke, Mass. Spindle-bolster.....	Feb. 12, 1873	530	175	3	195
142, 141	Barnes, P. W., Albany, N. Y. Fire-escape.....	Aug. 26, 1873	689	226	4	217
5, 216	Barnes, S. H., deceased, by F. L. Egbert, executrix, New York, N. Y. Corset-spring. (Reissue).....	Jan. 7, 1873	206	66	3	23
	Barnes, W., et al. (See Mears, J. H., assignor.)					
141, 300	Barnes, W., Maquoketa, Iowa. Pump-valve.....	July 29, 1873	905	297	4	118
136, 487	Barnes, W. A., Bridgeport, Conn. Fire-alarm.....	May 6, 1873	3	1	3	498
141, 258	Barnes, W. B., Plymouth, assignor of one-half interest to S. Talbot, jr., Boston, Mass. Car-coupling.....	July 29, 1873	662	282	4	114
141, 921	Barnes, W. F. and J., and P. Mesick, Rockford, Ill. Bobbin-holder for sewing-machines.....	Aug. 19, 1873	522	173	4	195
	Barnes, W. G., et al. (See Mears, J. H., assignor.)					
143, 399	Barnett, J. P., Navasota, Tex. Medical compound.....	Oct. 7, 1873	2		4	381
137, 876	Barnett, S. M., New York, N. Y. Exercising-machine.....	Apr. 15, 1873	547	171	3	426
134, 627	Barney, A., Wilmington, Del. Railway-car seat.....	Jan. 7, 1873	119	39	3	16
143, 656	Barney, C. H., assignor to G. Mooney and J. Shaw, jr., Providence, R. I. Manufacture of globe-holders.....	Oct. 14, 1873	235	79	4	408
137, 526	Barney, E. H., Springfield, Mass. Skate.....	Apr. 8, 1873	232	71	3	387
5, 468	Barney, G., Swanton, Vt., and V. G. Barney, Charles City, Iowa. Machine for dressing tiles.....	July 1, 1873	195	65, 66	4	24
	Barney, S. E., New Haven, Conn. Ruffing..... (Design)	Dec. 30, 1873			4	698
	Barney, V. G. (See Barney, G. and V. G.)					
	Barnum, C. (See Devlan, P. S., assignor.)					
137, 047	Barnum, D. and E. B., Brooklyn, N. Y. Tuckor for sewing-machines.....	Mar. 25, 1873	633	209	3	326
	Barnum, E. B. (See Barnum, D. and E. B.)					
145, 325	Barnum, H. W., Omaha, Nebr. Apparatus for compressing cast metals in a liquid state.....	Dec. 9, 1873	264	88	4	619
	Barnum, R. (See Goodrich & Barnum.)					
135, 065	Barnum, R. S., assignor to H. C. Goodrich, Chicago, Ill. Tuck-creaser for sewing-machines.....	Jan. 21, 1873	532	172	3	78
142, 552	Barnum, R. S., and H. C. Goodrich, said Barnum assignor to said Goodrich, Chicago, Ill. Device for sharpening needles.....	Sept. 9, 1873	215	70	4	271
	Barr, J. H. (See Likes, M., assignor.)					
145, 480	Barr, R. J., Philadelphia, Pa. Steam-trap.....	Dec. 16, 1873	401	132	4	642
139, 105	Barr, W., Ypsilanti, Mich. Grater for cider-mills.....	May 20, 1873	581	182	3	568
140, 871	Barrett, E. and G. W., Fenimore, Tenn., assignors to W. H. Kirkpatrick, Franklin, Tenn. Reciprocating churn.....	July 15, 1873	468	158	4	66
	Barrett, E. A. (See Walton & Barrett.)					
135, 066	Barrett, E. A., assignor to self and J. J. Walton, New York, N. Y. Pulley-block.....	Jan. 12, 1873	533	173	3	78
138, 225	Same..... Life-boat.....	Apr. 29, 1873	892	282	3	471
6, 682	Barrett, J., New York, N. Y., assignor to D. Powers & Sons, Lansingburgh, N. Y. Floor-cloth..... (Design)	May 27, 1873			3	586
6, 683	Same..... Floor-cloth..... (Design)	May 27, 1873			3	586
6, 810	Barrett, J., New York, N. Y., assignor to T. Potter, Sons & Co., Philadelphia, Pa. Oil-cloth..... (Design)	Aug. 19, 1873			4	185
144, 497	Barrett, J. C., New Canaan, Conn., assignor of one-half interest to A. E. Cowl, Patterson, N. Y. Thill-coupling.....	Nov. 11, 1873	280	95	4	513
143, 217	Barrett, O. D., Washington, D. C. Wood-screw.....	Sept. 30, 1873	784	271	4	354
	Barrett, R. (See Codd, H., assignor.)					
139, 531	Barrett, T., New York, N. Y. Portable water-closet.....	June 3, 1873	74	25	3	615
	Barrett, W. A. (See Wilson, J. B., assignor.)					
140, 109	Barritt, C. L., Brooklyn, N. Y. Wardrobe-bedstead.....	June 24, 1873	634	199	3	691
145, 779	Barron, T., Black Oak, Mo. Apparatus for unloading corn from wagons.....	Dec. 23, 1873	677	221	4	676
135, 307	Barrows, H. G., Benton, Me. Potato-digger.....	Jan. 28, 1873	757	244	3	108
	Barrows, J. (See Brand, Barrows & Armstrong.)					
140, 608	Barry, C. S., Providence, R. I. Piston-packing.....	July 8, 1873	245	83	4	39
	Barry, S. (See Blair & Barry.)					
138, 468	Barry, S., and F. Perkins, Brunswick, Ohio. Wrench.....	May 6, 1873	4	1	3	498
139, 988	Barsaloux, J., and B. Graham, Kingsbury, assignors to G. A. Prescott, Sandy Hill, N. Y. Machine for extracting spikes.....	May 20, 1873	476	150	3	560
	Barsaloux, J. (See Prescott & Barsaloux.)					
135, 508	Barsaloux, J., and G. A. Prescott, Sandy Hill, N. Y. Slab and siding holder for saw-mills.....	Feb. 4, 1873	103	33	3	136
137, 996	Barstow, A. C., Providence, R. I. Cooking-stove.....	Apr. 22, 1873	661	209	3	445
144, 430	Barth, G. M., assignor to self and A. Sauer, Philadelphia, Pa. Window.....	Nov. 11, 1873	229	76	4	508
136, 204	Barth, H., Cincinnati, Ohio. Machine for planing stereotype-plates.....	Feb. 25, 1873	756	244	3	224

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
139, 229	Barth, H., Cincinnati, Ohio. Stop-cylinder printing-press	May 27, 1873	709	{ 223 224 }	3	586
139, 651	Barthel, A. E., assignor to self and A. B. Bary, Detroit, Mich. Tap and die	June 10, 1873	195	64	3	641
135, 879	Barthel, P., Frankfort-on-the-Main, Germany. Treating asphalt	Feb. 18, 1873	468	150	3	190
141, 027	Bartholf, J., Hillsborough, Wis. Tilting chair	July 22, 1873	633	213	4	88
137, 877	Bartholomew, S., Sturgis, Mich. Fishing torch	Apr. 15, 1873	547	171	3	426
140, 328	Bartholomew, S. W., Louisburgh, N. C. Wash-boiler	June 24, 1873	740	234	3	700
136, 693	Bartle, W., Franklin, Pa. Combined tool	Mar. 11, 1873	312	103	3	279
141, 982	Bartle, W. S., Newark, N. Y. Rotary valve and out-off	Aug. 19, 1873	523	173	4	195
137, 168	Bartle, W. S., and J. Garlock, Newark, N. Y. Feed-outer	Mar. 25, 1873	740	246	3	334
145, 042	Bartlett, C., Providence, R. I. Dish-washer	Dec. 2, 1873	1	1	4	586
137, 338	Bartlett, D. L., assignor to Bartlett, Robbins & Co., Baltimore, Md. Expansion-bolt	Apr. 1, 1873	57	17	3	361
139, 106	Bartlett, D. L., Ogdensburgh, N. Y. Packing-box	May 20, 1873	582	182	3	588
145, 717	Bartlett, E. G. W., assignor to Providence Tool Company, Providence, R. I. Method of forming receivers for breech-blocks of fire-arms	Dec. 23, 1873	622	204	4	672
	Bartlett, G. E., et al. (See Rogers, I. R., assignor.)					
	Bartlett, J. (See Phelps, J. M., assignor.)					
136, 578	Bartlett, J. E., Boston, Mass. Dumping-scow	Mar. 11, 1873	219	73	3	272
141, 621	Same..... Heating-drum	Aug. 12, 1873	201	64	4	159
134, 628	Bartlett, J. J., New York, N. Y. Composition for forming stone, &c	Jan. 7, 1873	190		3	16
140, 239	Same..... Artificial stone	June 24, 1873	741		3	700
135, 961	Bartlett, L., Yarmouth, Me. Fly-catcher	Feb. 18, 1873	531	175	3	195
139, 701	Bartlett, N. Bayonne City, N. J., assignor to self and S. C. West, Elizabeth, N. J. Manufacture of zinc-white	June 10, 1873	249	78	3	645
	Bartlett, Robbins & Co. (See Bartlett, D. L., assignor.)					
138, 469	Bartlett, W. E., assignor to the North British Rubber Company, (limited,) Edinburgh, North Britain. Traction-wheel	May 6, 1873	4	2	3	498
138, 989	Barton, C., Philadelphia, Pa. Station-indicator	May 20, 1873	477	{ 150 151 }	3	560
	Barton, E., et al. (See Getty, G. B., assignor.)					
140, 872	Barton, I., Williamsport, Pa. Steam-generator	July 15, 1873	469	159	4	66
138, 366	Barton, I. T., Union City, Mich. Machine for thrashing and hulling clover	Apr. 29, 1873	1, 021	{ 321 322 }	3	482
139, 355	Same..... Thrashing-machine	May 27, 1873	816	261	3	595
137, 122	Barton, R. T., New Haven, Conn. Brick-machine	Mar. 25, 1873	702	233	3	331
141, 620	Barton, S., jr., London, England. Distributing-apparatus for garden-hose, syringes, &c.	Aug. 12, 1873	201	63	4	159
145, 383	Barton, W. E., East Hampton, Conn. Lathe-chuck for sleigh-bells	Dec. 9, 1873	307	103	4	623
139, 999	Barwick, M. J., New York, N. Y. Fire-damper for windows	June 17, 1873	513	163	3	673
	Bary, A. B. (See Barthel, A. E., assignor.)					
137, 048	Bary, A. B., Detroit, Mich. Bobbin-winder for sewing-machines	Mar. 25, 1873	635	210	3	336
139, 652	Bass, D., jr., Woonsocket, R. I. Quill-bobbin for spinning-machines	June 10, 1873	196	64	3	641
	Bass, J. P. (See Bucknam, A. C., assignor.)					
140, 000	Bassett, E., assignor of one-half interest to A. P. Chapin, Topeka, Kans. Shirt-bosom stretcher	June 17, 1873	514	163	3	673
140, 758	Bassett, E., Topeka, Kans. Ironing-board	July 15, 1873	373	127	4	58
5, 586	Bassett, G., Syracuse, N. Y., assignor of one-half interest to T. G. Bassett. Concrete pavement (Reissue)	Oct. 7, 1873	142	47	4	392
138, 118	Bassett, J. W., New York, N. Y. Fire-proof ceiling and floor	Apr. 22, 1873	773	247	3	454
139, 356	Bassett, R. M., Birmingham, Conn. Puddlers' ball-roller	May 27, 1873	817	261	3	595
	Bassett, R. N. (See Chaffee, C. S., assignor.)					
	Bassett, T. G. (See Bassett, G., assignor.) (Reissue)					
135, 067	Bassford, A., Fort Wayne, Ind. Lemon-squeezer, &c	Jan. 21, 1873	534	173	3	78
138, 602	Bastet, L., New York, N. Y. Galvanic battery	May 6, 1873	116	38	3	507
144, 248	Same..... Propelling canal-boats and other vessels	Nov. 4, 1873	70	22	4	483
	Bastine, A. J. (See Cross, J. R., assignor.) (Reissue)					
139, 532	Baaye, H. T., Dyersburgh, Tenn. Bin for preserving sweet potatoes, &c	June 3, 1873	75	25	3	615
140, 240	Same..... Potato-plow	June 24, 1873	742	234	3	700
136, 555	Bataille, A., New York, N. Y. Gridiron	Mar. 18, 1873	543	179	3	307
139, 533	Batchelder, A. R., Newburyport, Mass. Toy	June 3, 1873	76	26	3	615
136, 124	Batchelder, D. G., Salem, Mass. Machine for making sheet-lead	Feb. 25, 1873	689	223	3	219
138, 603	Batchelder, J. H. and S. J. Sargent, Lincoln, Vt. Wash-boiler	May 6, 1873	117	39	3	507
6, 741	Batcheller, F. S., Providence, R. I. Plaster cast (Design)	July 1, 1873			4	8
142, 192	Bate, W. H., Charlestown, Mass. Self-closing faucet	Aug. 26, 1873	729	240	4	221
141, 102	Bate, W. S., Philadelphia, Pa. Compound faucet	July 22, 1873	700	235	4	93
143, 317	Same..... Refrigerator building	Sept. 30, 1873	872	288	4	362
145, 609	Same..... Washstand-faucet	Dec. 16, 1873	517	169	4	651
137, 878	Bate, W. T., Norristown, Pa. Combined heater and filter	Apr. 15, 1873	548	171	3	426
137, 650	Bateman, J. S., Baltimore, Md. Refrigerator and water-cooler combined	Apr. 8, 1873	337	104	3	396
145, 326	Bates, A. E., Monroe, Mich. Composition for lining furnaces, crucibles, &c	Dec. 9, 1873	265		4	619
140, 806	Bates, C. E., South Deerfield, Mass. Tobacco-transplanter	July 15, 1873	414	140	4	61
	Bates, F. G. (See Rodier & Bates.)					
136, 019	Bates, F. G., Springfield, Mass., assignor to American Clutch Company, Middletown, Conn. Railway-car brake	Feb. 18, 1873	582	192	3	199
138, 555	Bates, F. L., Bremond, Tex. Cotton-optimizer	May 6, 1873	79	26	3	504
	Bates, G. (See Mansuro, R., jr., assignor.)					
142, 073	Bates, G. G., New York, N. Y. Packing or show case	Aug. 26, 1873	630	207	4	213
140, 990	Bates, H. W., Allston, Mass. Carpet-cleaner	July 22, 1873	600	203	4	85
136, 638	Bates, J. C., Cold Spring, N. Y. Window-sash ventilator	Mar. 11, 1873	269	90	3	276
141, 254	Same..... same	July 29, 1873	659	261	4	114
134, 629	Bates, J. W., Minneapolis, Minn. Car-coupling	Jan. 7, 1873	120	39	3	16
142, 667	Bates, L. L., Boston, Mass. Fastener for the meeting rails of sashes	Sept. 9, 1873	312	104	4	279
135, 193	Bates, P., jr., Pittsburgh, Pa. Car-starter	Jan. 28, 1873	653	211	3	100
137, 283	Bates, S. D., Lewisburgh, and S. W. Murray, assignors to Murray, Dougall & Co., Milton, Pa. Screw-cutting die	Apr. 1, 1873	4	2	3	357
	Bates, T. L. (See Witsil, G. L., assignor.)					
145, 610	Bates, T. S., Boston, Mass. Copper-plate printing-press	Dec. 16, 1873	518	170	4	651
143, 116	Bates, W., Burslem, England. Covered vessel	Sept. 23, 1873	701	240	4	331
135, 258	Batty, J., Manchester, N. J. Meat-chopper	Jan. 28, 1873	720	230	3	105
5, 316	Batty, S. M., assignor to W. K. Miller, Canton, Ohio. Harvester (Reissue)	Mar. 11, 1873	403	134	3	287
137, 879	Batwell, E., Ypsilanti, Mich. Horse-collar	Apr. 15, 1873	549	171	3	426
143, 400	Batzel, E., Philadelphia, Pa. Hose-bridge	Oct. 7, 1873	3	1	4	381
142, 760	Baudvin, A. E. P., Paris, France. Alloy to resemble silver	Sept. 16, 1873	402		4	287
136, 579	Bauer, C. A., Hamilton, Ohio. Lathe-rest	Mar. 11, 1873	220	73	3	272
136, 205	Bauer, J., assignor to C. M. and J. H. Theberath, Newark, N. J. Gig saddle-tree	Feb. 25, 1873	757	244	3	224
137, 404	Bauer, L., San Francisco, Cal. Channeling and edging tool	Apr. 1, 1873	110	36	3	366

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
	Baugh, A. M. (See Held & Baugh.)					
	Baugh, J. (See Brayton & Baugh.)					
5, 217	Baughman, D. C., Tiffin, Ohio. Thrashing-machine..... (Reissue.)	Jan. 7, 1873	206	67	3	23
135, 962	Baughman, H., Dorn's Gold Mines, S. C. Saw-gummer.....	Feb. 18, 1873	531	175	3	195
145, 327	Same..... Saw-gumming machine.....	Dec. 9, 1873	265	89	4	619
136, 956	Baughman, J., and B. R. Chalk, Mount Washington, Md. Chair.....	Mar. 18, 1873	543	179	3	307
	Baughman, S. S. (See Strasser, W., assignor.)					
139, 357	Baumann, A., London, England. Piston-valve for steam-engines.....	May 27, 1873	817	261	3	595
135, 308	Baumann, F. F., Cambridge, Mass. Shoemaker's edge-plane.....	Jan. 28, 1873	758	245	3	109
141, 622	Baumann, H. W., Memphis, Tenn. Baling-press.....	Aug. 12, 1873	202	64	4	159
145, 328	Baumgartner, F., Brooklyn, N. Y. Carriage-curtain fastener.....	Dec. 9, 1873	266	89	4	619
145, 384	Baxendale, S., Boston, Mass. Lubricating packing for journals, shafting, &c.....	Dec. 9, 1873	303	.....	4	623
	Baxter, G. H., et al. (See Morrill, J. A., assignor.)					
6, 340	Baxter, I. J., Peekskill, N. Y. Heating-stove..... (Design.)	Jan. 14, 1873	.....	.....	3	38
139, 757	Baxter, J. C., Washington, D. C. Manufacture of wine.....	June 10, 1873	301	93	3	649
138, 311	Baxter, J. T., Finksburgh, assignor of one-half interest to W. A. McKellip, Westminster, Md. Car-replacer.....	Apr. 29, 1873	977	307	3	478
139, 039	Baxter, J. W., Vevay, Ind. Dental drill.....	May 20, 1873	519	164	3	563
134, 968	Baxter, T. W., Chicago, Ill. Method of setting black diamonds.....	Jan. 21, 1873	142	142	3	71
137, 527	Baxter, W. D., assignor to Sands & Baxter, New York, N. Y. Pump.....	Apr. 8, 1873	234	71	3	387
136, 957	Bayard, E., and B. A. Mason, New York, N. Y. Glass-furnace.....	Mar. 18, 1873	544	179	3	307
	Bayer, C. J. (See Olds, H. D., assignor.)					
138, 840	Bayles, A. G., and J. W. H. Canoll, New York, and G. D. Miner, Williamsburgh, N. Y. Folding bedstead.....	May 13, 1873	344	106	3	536
	Bayley, C. E. (See McKay, W., assignor.)					
	Baylie, T. S. (See Foster, Baylie & Harbin.)					
134, 507	Bayliss, E., et al. (See Hodges, P. F., assignor.)					
143, 609	Bayliss, E., Massillon, Ohio. Stump-extractor.....	Jan. 7, 1873	4	2	3	8
	Bayliss, E., J. O. Brown, and F. T. Lomont, assignors to selves and P. F. Hodges, Massillon, Ohio. Harvesting-machine.....	Oct. 14, 1873	196	66	4	405
	Bay State Suspender Company. (See Potter & Smith, assignors)..... (Reissue.)					
	Bazan, F. (See Mégy, De Echeverria & Bazan.)					
143, 269	Bazin, E., Paris, France. Dredging-apparatus.....	Sept. 30, 1873	831	{ 285 } { 286 }	4	358
139, 534	Bazin, J. A., Canton, Mass. Folding stereoscope.....	June 3, 1873	76	26	3	615
	Bazzoni, L. J. (See Brown, G. B., assignor.)					
	Beach, E. (See Read, H. F., assignor.)					
6, 971	Beach, E. R., Philadelphia, Pa. Gas-burner..... (Design.)	Nov. 4, 1873	.....	.....	4	478
145, 084	Beach, H. L., assignor to Beach Wheel Horse-Rake Manufacturing Company, New York, N. Y. Scroll-saw.....	Dec. 2, 1873	43	13	4	589
	Beach Patent Shifting Carriage-Seat Manufacturing Company. (See Beach, S. W., assignor)..... (Reissue.)					
145, 461	Beach, R. C., and G. A. Berry, Tidionte, Pa. Window-blind slat-adjuster.....	Dec. 16, 1873	402	132	4	642
5, 262	Beach, S. W., Ypsilanti, Mich., assignor to Beach Patent Shifting Carriage-Seat Manufacturing Company. Clamping movable seats for carriages. (Reissue.)	Jan. 28, 1873	848	273	3	116
5, 272	Same..... Whip-socket..... (Reissue.)	Feb. 11, 1873	445	145	3	174
137, 123	Beach, T., assignor of one-half interest to J. C. McClelland, Freeport, Pa. Air-pump and engine.....	Mar. 25, 1873	703	233	3	331
139, 841	Beach, T. S., New York, N. Y. Explosive compound.....	May 13, 1873	345	.....	3	536
135, 509	Beach, W. H., and C. N. Hanson, assignors to selves, H. F. White, and W. W. Smith, Hamburgh, Iowa. Earth-anger.....	Feb. 4, 1873	104	33	3	136
135, 510	Same..... Means for operating earth-angers.....	Feb. 4, 1873	105	33, 34	3	136
	Beach Wheel Horse-Rake Manufacturing Company. (See Beach, H. L., assignor.)					
6, 617	Beagle, H., jr., Philadelphia, Pa. Hames-top..... (Design.)	Apr. 29, 1873	.....	.....	3	471
143, 318	Beals, J. C., Searport, Me. Marine drag.....	Sept. 30, 1873	873	299	4	362
	Beals, J. M. (See Robertson, A. S., assignor.)					
140, 807	Beam, J. A., California, Mo. Egg-carrier.....	July 15, 1873	415	140	4	61
135, 620	Beamisdarfer, J., sr., Campbelltown, Pa. Railway-gates.....	Feb. 11, 1873	224	70	3	157
143, 657	Bean, B. F., Pawling, Pa. Mail-pouch holder and catcher for railways.....	Oct. 14, 1873	236	80	4	408
	Bean, D. (See Wheelton, W. A., assignor.)					
5, 423	Bean, E. E., Abington, assignor by mesne assignment to the Shoe-Machinery Manufacturing Company, Boston, Mass. Wax-thread sewing-machine..... (Reissue.)	May 27, 1873	903	291	3	602
134, 508	Bean, E. E., Boston, Mass. Wax-thread sewing-machine.....	Jan. 7, 1873	6	2	3	8
134, 509	Bean, E. E., Boston, and F. Bean, Medford, assignors to Consolidated Wax-Thread Sewing Company, Boston, Mass. Wax-thread sewing-machine.....	Jan. 7, 1873	7	3	3	8
137, 528	Bean, E. E., Boston, and F. Bean, Medford, Mass. Wax-thread sewing-machine.....	Apr. 8, 1873	235	72	3	387
	Bean, F. (See Bean, E. E. and F.)					
5, 427	Bean, J. H., assignor to F. W. Brown, Cincinnati, Ohio. Tucker for sewing-machines. (Reissue.)	May 27, 1873	908	292	3	602
136, 896	Bean, J. H., Cincinnati, Ohio. Shank-laster for shoemakers.....	Mar. 18, 1873	494	164	3	303
140, 397	Same..... Blower for gas-engines.....	July 1, 1873	51	18	4	12
141, 255	Same..... Lasting-tool.....	July 29, 1873	860	281	4	114
141, 623	Same..... Tucker for sewing-machines.....	Aug. 12, 1873	203	64	4	159
141, 624	Same..... Magazine fire-arm.....	Aug. 12, 1873	204	64	4	160
145, 482	Same..... Tucker for sewing-machines.....	Dec. 16, 1873	403	132	4	642
140, 671	Bean, J. H., Macon, Ill. Horse hay-rake.....	July 8, 1873	294	89	4	43
142, 836	Same..... Apparatus for elevating and loading hay.....	Sept. 16, 1873	462	157	4	302
136, 560	Bean, J. M., Watertown, Mass. Elevator.....	Mar. 11, 1873	220	73, 74	3	272
145, 385	Bean, R. E., Franklin, N. H. Game-apparatus.....	Dec. 9, 1873	308	104	4	623
136, 482	Bean, S. L., and L. Mills, Galesburgh, Ill., assignors to Brown, Harris & Hopkins, New York, N. Y. Door and gate spring.....	Mar. 4, 1873	112	37	3	254
140, 873	Beard, E. J., Saint Louis, Mo. Band or hoop-tie for cotton-bales.....	July 15, 1873	470	159	4	66
143, 319	Beard, G. N., Saint Louis, Mo. Cotton-bale tie.....	Sept. 30, 1873	874	299	4	362
145, 273	Same..... same.....	Dec. 9, 1873	216	74	4	615
136, 125	Beard, M. M., Canton, Miss. Wash-boller.....	Feb. 25, 1873	690	223	3	219
	Beard, W. L. (See Rosin, H. C., assignor.)					
142, 430	Beardsley, C. T., assignor to self and G. O. Catlin, Ansonia, Conn. Needle-threader for sewing-machines.....	Sept. 2, 1873	94	31	4	250
	Beardsley, J. H., et al. (See Clark & Lilliendahl, assignors.)					
136, 299	Bearse, I. M., Boston, Mass. Deck-light.....	Feb. 25, 1873	840	272	3	231
135, 259	Bearsley, J., assignor to Tapley Heel-Burnishing Association, Lynn, Mass. Method of burnishing boot and shoe heels by machinery.....	Jan. 28, 1873	721	230	3	105
141, 983	Bearsley, J., and J., jr., assignors of one-half interest to G. W. Keene, Lynn, Mass. Machinery for burnishing the sole-edges of boots and shoes.....	Aug. 19, 1873	524	173	4	195
141, 984	Same..... same.....	Aug. 19, 1873	525	174	4	195

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
138, 842	Beattie, J. H. B., et al. (See Hemenway, C. V., assignor.)	May 13, 1873	346	107	3	536
144, 014	Beatty, C., Elizabeth, N. J. Extension settee	Oct. 23, 1873	599	198	4	457
143, 556	Beatty, G. F., Boston, Mass. Railway-switch					
139, 107	Beatty, W. E. (See Schultz, F. W., assignor.)					
143, 556	Beaudry, J., Montreal, Canada. Tailor's measure	Oct. 14, 1873	152	51	4	401
139, 107	Beaulien, L., Woonsocket, R. I. Washing-machine	May 20, 1873	583	183	3	568
142, 193	Beaumont, W., Philadelphia, Pa. Gas-retort. (Extension)	June 23, 1873			3	680
137, 049	Beauregard, N., San Francisco, Cal. Bolt and rivet machine	Aug. 26, 1873	730	241	4	221
141, 750	Beaver, P. H., Montandon, Pa. Collar-pad	Mar. 25, 1873	636	210	3	326
134, 630	Becher, G. F., Brooklyn, N. Y. Portable fence	Aug. 12, 1873	309	101	4	168
144, 431	Bechler, J. A., Philadelphia, Pa. Child's carriage	Jan. 7, 1873	121	39, 40	3	16
136, 808	Beck, C., assignor to Gorham Manufacturing Company, Providence, R. I. Jewel-case	Nov. 11, 1873	229	77	4	508
141, 196	Beck, H., assignor to self and U. Kreid, Detroit, Mich. Hospital-canteen	Mar. 18, 1873	423	140	3	298
144, 052	Beck, M., and C. Schneidt, Philadelphia, Pa. Boot-brushing apparatus	July 29, 1873	799	261	4	109
140, 398	Beckenbaugh, J. P., Springfield, Ill. Draught-equalizer	Oct. 28, 1873	629	207	4	460
139, 108	Becker, A., Peotone, Ill. Wash-boiler	July 1, 1873	51	18	4	12
135, 755	Becker, E. J. M., New York, N. Y. Centrifugal-machine	May 20, 1873	583	183	3	568
142, 668	Becker, P., Philadelphia, Pa. Saddle-tree	Feb. 11, 1873	341	109	3	166
138, 604	Beckett, J. R., assignor to self and C. B. Payson, Cushing, Me. Street-railway	Sept. 9, 1873	313	104	4	279
135, 890	Beckley, J., Stiles, Iowa. Churn	May 6, 1873	118	39	3	507
143, 320	Beckmann, J., and J. Gibson, Cincinnati, Ohio. Stove-pipe-elbow machine	Feb. 18, 1873	469	151	3	190
138, 782	Beckwith, J. F., Albion, N. Y. Stove-pipe shelf	Sept. 30, 1873	875	299	4	362
135, 621	Beckwith, L. H., Port Jervis, N. Y. Safety-hook for filing papers	May 13, 1873	291	89	3	531
135, 963	Beckwith, P. D., Dowagiac, Mich. Heating-stove	Feb. 11, 1873	225	71	3	157
139, 492	Beckwith, R. E., Nashua, N. H. Sash-fastener	Feb. 18, 1873	532	175	3	195
5, 575	Beckwith, S. V., Brooklyn, N. Y., assignor to self and T. B. Carpenter, New Haven, Conn. Currency and postage-stamp holder	June 3, 1873	45	14	3	612
138, 605	Bedell, O. T., New York, N. Y., assignor by mesne assignment to W. D. Taber, P. P. Josef, and E. Striber. Egg-carrier (Reissue)	Sept. 23, 1873	778	268	4	338
141, 103	Bedell, S. D., New York, N. Y. Fruit-basket	May 6, 1873	118	39	3	507
139, 040	Bedeasem, M. (See Roosen & Bedeasem.)					
134, 631	Beddow, T., and A. T. Jackson, New Albany, Ind. Car-coupling	July 22, 1873	701	235	4	94
136, 406	Beebe, C. V. (See Beebe, J. M., assignor.)					
145, 043	Beebe, E. W., Evansville, Wis. Sewing-machine	May 20, 1873	519	164	3	563
139, 855	Beebe, H., Jersey City Heights, N. J. Lantern	Jan. 7, 1873	123	40	3	16
141, 625	Beebe, J. M., assignor to self and C. V. Beebe, Cassadaga, N. Y. Fence-post	Mar. 4, 1873	47	17	3	249
136, 020	Beecher, C. T., Bethany, Conn. Harness whiffletree	Dec. 2, 1873	1	1	4	586
143, 270	Beecher, H. M., Plantsville, assignor to Beecher Manufacturing Company, West Meriden, Conn. Clip king-bolt and plate	June 17, 1873	392	129	3	663
144, 883	Beecher, H. M., West Meriden, Conn. Mode of making axle-clips	Aug. 12, 1873	205	65	4	160
142, 982	Beecher Manufacturing Company. (See Beecher, H. M., assignor.)					
142, 983	Beecroft, N. D., Bangor, Me. Hoe	Feb. 18, 1873	583	192	3	199
145, 611	Beekman, A., New York, N. Y. Propelling boats	Sept. 30, 1873	632	286	4	254
	Same..... Steam-engine	Nov. 25, 1873	627	213	4	563
	Beekman, J. V., assignor to self and J. A. Lighthall, Brooklyn, N. Y. Rotary steam-eggino	Sept. 23, 1873	591	201	4	323
	Same..... Feed-water heater	Sept. 23, 1873	592	201	4	323
			520	170	4	652
				171		
137, 405	Beelman, J. H. (See Snyder, U. C., assignor.)					
144, 182	Beer, C. (See Bockstaller, G., assignor.)					
143, 610	Beerbrower, S. D. (See Thompson & Beerbrower.)					
6, 697	Beers, G. W., Bridgeport, Conn. Curtain-fixtute	Apr. 1, 1873	111	36	3	366
134, 838	Beers, J. B., San Francisco, Cal. Artificial crowns for teeth	Nov. 4, 1873	5	2	4	479
137, 756	Beery, S., Urbana, Ohio, and J. W. McDonald, Houston, Tex. Policeman's baton	Oct. 14, 1873	197	66	4	405
141, 197	Beesley, J., assignor to S. Smith, Philadelphia, Pa. Heating-stove (Design)	June 3, 1873			3	608
135, 964	Beesley, T., Muscatine, Iowa. Balanced slide-valve	Jan. 14, 1873	320	102	3	46
139, 535	Beggs, J., Philadelphia, Pa. Saw-set	Apr. 15, 1873	444	138	3	417
6, 967	Beggs, C. C. & Co. (See Cole, I., assignor.)					
134, 581	Behel, J., Chicago, Ill. Steam hoisting-apparatus	July 29, 1873	800	262	4	109
134, 582	Behel, J. (See Richardson & Behel.)					
144, 053	Behel, J., Rockford, Ill, assignor to self and G. R. Richardson, Earlville, Ill. Cultivator	Feb. 18, 1873	533	176	3	195
145, 329	Behel, J., Rockford, Ill. Manufacture of cultivator-teeth	June 3, 1873	77	26	3	615
134, 581	Beiderhase, B. D., New York, N. Y. Handle of spoons, forks, &c. (Design)	Oct. 28, 1873			4	452
134, 582	Beiderhase, B. D., and C. Witteck, New York, N. Y. Device for producing pearl-finish on metallic surfaces	Jan. 7, 1873	78	25	3	13
144, 053	Beil, R. P., Peoria, Ill. Ice-cream freezer	Jan. 7, 1873	79	25	3	13
145, 329	Beissel, S., Shamokin, Pa. Meat-holder	Oct. 28, 1873	630	208	4	460
145, 832	Belcher, W., administrator. (See Allender, J.) (Extension.)	Dec. 9, 1873	267	89	4	619
136, 357	Belden, J. C., et al. (See Hart, J., assignor.)					
143, 117	Bélégnic, E. C., Paris, France. Ship's hull	Dec. 23, 1873	718	236	4	680
137, 406	Belford, L., Caldwell, Ohio. Hand-rest	Mar. 4, 1873	4	1	3	245
136, 843	Belford, S. (See Hardenbrook & Belford.)					
134, 839	Belknap and Burnham Manufacturing Company. (See Laws, A. D., assignor.)					
143, 658	Belknap, J., Adrian, Mich. Violin	Sept. 28, 1873	701	240	4	331
143, 658	Belknap, J. O., Mobile, Ala. Revolving attachment for gas-burners	Apr. 1, 1873	112	37	3	366
143, 658	Belknap, J. O., Mobile, Ala. Reflector	May 13, 1873	347	107	3	536
143, 658	Bell, A. H., Cedar Falls, Iowa. Bed-bottom	Jan. 14, 1873	321	102	3	46
143, 658	Same..... Bag-holder weighing-scales	Oct. 14, 1873	238	80	4	408
135, 310	Bell, C. S., et al. (See Slusser, G., assignor.)					
140, 180	Bell, F. G., New York, assignor to S. E. Cox, Haverstraw, N. Y. Leather-dressing compounds	Jan. 28, 1873	760		3	109
134, 632	Bell, J. D., Wattsborough, Va. Broom	June 24, 1873	696	218	3	696
138, 312	Bell, N. and H., Winfield, Pantego Township, N. C. Cotton cultivator	Jan. 7, 1873	124	40	3	16
141, 417	Bell, T., Bellport, N. Y. Water-elevator	Apr. 29, 1873	978	307	3	478
139, 230	Bell, T., and J. F. Hillerick, Louisville, Ky. Idler for belt-gearing	Aug. 5, 1873	6	2	4	135
145, 833	Bell, T. G., Brooklyn, N. Y. Thimble for ship's rigging	May 27, 1873	714	225	3	586
134, 723	Bell, T. G., Brooklyn, N. Y., assignor to J. J. Walton, New York, N. Y. Rigging-stopper	Dec. 23, 1873	716	236	4	680
135, 309	Bell, T. M., New York, N. Y. Metallic bottom for milk-cans	Jan. 14, 1873	322	71	3	38
144, 727	Bell, V., Minneapolis, Minn. Barrel-truck	Jan. 28, 1873	759	245	3	109
141, 104	Bell, W. O., et al. (See Pease, J., assignor.)					
141, 104	Bellairs, W. and W. Ough, Atkinson, Ill. Tire-tightener	Nov. 18, 1873	483	164	4	540
141, 536	Bellemere, A. (See Frontier & Bellemere.)					
141, 104	Bellemere, J. F., and F. R. Fleer, Reading, Pa. Gauge-cock	July 22, 1873	702	235	4	94
141, 536	Same..... Sleeve or patch for stopping leaks in hose	Aug. 5, 1873	109	34	4	144

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 496	Bellido, F. D., New York, N. Y. Automatic water-meter.	Nov. 11, 1873	281	95	4	513
	Bellinger, E., Illon, N. Y. Composition for kindling fire (Extension).	Dec. 13, 1873			4	614
138, 119	Bellis, W., Indianapolis, Ind. Shaft-hanger.	Apr. 23, 1873	774	247	3	454
142, 761	Bellows, S. H., Middletown, Conn. Machinist's gauge.	Sept. 16, 1873	402	136	4	297
	Belmont Glass Works. (See Hobbs, J., assignor.) (Design.)					
136, 958	Beman, W. E., assignor of two-thirds interest to M. Sampson, Portland, Me. Car-coupling.	Mar. 18, 1873	544	180	3	307
137, 407	Bement, W. B., Philadelphia, Pa. Feeding-device for punching-machines.	Apr. 1, 1873	113	37	3	366
	Bemis, F. (See Crossman, C. P., assignor.)					
145, 085	Bemis, W. C., Springfield, Mass. Wrench.	Dec. 2, 1873	44	14	4	589
138, 313	Benda, J., Yatton, Iowa. Medical compound or liniment.	Apr. 29, 1873	979		3	474
141, 310	Bender, C., New York, N. Y., C. H. Latrobe, Baltimore, Md., and C. S. Smith, Saint Louis, Mo. Iron bridge.	July 29, 1873	906	297	4	118
	Bender, H. F. W. (See Lorenz & Bender.)					
138, 367	Benecke, L., Brunswick, Mo. Bracket.	Apr. 29, 1873	1,022	322	3	482
	Benedict and Burnham Manufacturing Company. (See Hallas & Weedon, assignors.)					
	Same. (See Weedon, W. N., assignor.)					
140, 571	Benedict, H., Philadelphia, Pa. Bed-bottom.	July 8, 1873	212	71	4	37
	Benedict, I. (See Wright & Benedict.)					
141, 105	Benjamin, A., Newark, N. J. Hardening steel wire and thin sheets of steel.	July 22, 1873	703		4	94
137, 294	Benjamin, E., assignor of half interest to S. W. Pease, Chicago, Ill. Sawing-machine.	Apr. 1, 1873	5	2	3	357
142, 669	Benjamin, E., assignor to self and S. W. Pease, Chicago, Ill. Cutter-head.	Sept. 9, 1873	314	104	4	279
	Benjamin, G. T. (See De Silva & Benjamin.)					
144, 824	Benjamin, O. D., Toledo, Ohio. Billiard-cue clamp.	Nov. 25, 1873	576	196	4	558
142, 762	Benckendorf, F., Brooklyn, N. Y. Sewing-case.	Sept. 16, 1873	403	136	4	297
	Benckendorf, A. (See Brunjes & Benckendorf.)					
	Benner, J. (See Kitson & Benner.)					
134, 840	Benner, L. D., assignor to self and Northend & Foster, Boston, Mass. Car-starter.	Jan. 14, 1873	321	103	3	46
137, 890	Benner, L. D., Boston, Mass. Whip-socket.	Apr. 15, 1873	549	172	3	426
138, 844	Benner, L. D., Boston, Mass., assignor to Union Paper-Bag Company, Pennsylvania. Paper-bag machine.	May 13, 1873	347	107	3	536
143, 321	Benner, L. D., Boston, Mass. Paper bag.	Sept. 30, 1873	875	299	4	362
	Benner, S. T., et al. (See Brandeis, S., assignor.)					
	Bennett, E. R., et al. (See Powell, A. H., assignor.)					
	Bennett, D., et al. (See McPherson, W. H., assignor.)					
138, 368	Bennett, D., Baldwin Township, and M. Krebs and J. Haley, assignors to the Crystal Glass Company, Pittsburgh, Pa. Glass-mold carriage.	Apr. 29, 1873	1,023	322	3	482
	Bennett, E. R. (See Wood, J., assignor.) (Reissue.)					
136, 206	Bennett, G. W., Smithville, Ind. Apple-parer, corer, &c.	Feb. 25, 1873	757	245	3	294
143, 869	Bennett, J., El Paso, Ill. Washing-machine.	Oct. 21, 1873	450	150	4	435
135, 311	Bennett, J. B., Brooklyn, N. Y. Rotary steam-engine.	Jan. 28, 1873	760	245	3	109
	Bennett, J. G., et al. (See Davies, H. J., assignor.)					
138, 990	Bennett, J. M. C., assignor to self and W. C. Bennett, Ovid, Mich. Metallic sweat and collar pad.	May 20, 1873	478	151	3	560
142, 142	Bennett, L. D., Willimantic, Conn. Car-coupling.	Aug. 26, 1873	690	227	4	218
135, 260	Bennett, M. J., Braddocks, Pa. Molasses jug or pitcher.	Jan. 28, 1873	722	231	3	105
140, 808	Bennett, S., New Orleans, La. Water-elevator.	July 13, 1873	415	141	4	61
	Bennett, T. (See Miller & Bennett.)					
142, 194	Bennett, W. C. (See Bennett, J. M. C., assignor.)					
	Bennett, W. W., Jersey City, N. J. Piano-forte.	Aug. 26, 1873	731	241	4	221
	Benner, J. (See McLean & Benner.)					
5, 667	Benner, J., assignor by mesne assignment to N. D. Stoops and J. B. Myers, Philadelphia, Pa. Extension-table for sewing-machines.	Nov. 25, 1873	761	257	4	574
136, 959	Benner, J., Philadelphia, Pa., assignor of half interest to J. N. McLean. Extension-table for sewing-machines.	Mar. 18, 1873	545	180	3	307
140, 874	Benner, J., assignor to N. D. Stoops and J. B. Myers, Philadelphia, Pa. Sewing-machine table.	July 15, 1873	470	159	4	66
140, 875	Same. Sewing-machine table.	July 15, 1873	471	159	4	66
140, 876	Same. same.	July 15, 1873	472	160	4	66
140, 877	Same. Extension-table for sewing-machines.	July 15, 1873	472	160	4	66
141, 985	Same. Sewing-machine table.	Aug. 19, 1873	526	174	4	195
143, 742	Same. same.	Oct. 21, 1873	342	114	4	426
145, 612	Same. same.	Dec. 16, 1873	521	171	4	652
138, 190	Benseman, W., and E. Slocum, Washington, D. C. Machine for affixing stamps to letters.	Apr. 22, 1873	775	247	3	454
	Benson, J. (See Benson, S. & J.)					
136, 021	Benson, J., and A. H. Watkins, Boston, Mass. Vapor-burner.	Feb. 18, 1873	584	192	3	199
136, 022	Same. same.	Feb. 18, 1873	585	192	3	199
	Benson, L. L., et al. (See Williams, H. B., assignor.)					
137, 651	Benson, S. and J., Centralia, Ill. Steam-injector.	Apr. 8, 1873	338	105	3	396
140, 878	Benson, W. H., Waynesborough, Va. Device for transferring motion.	July 15, 1873	473	160	4	66
139, 653	Bentley, J. H., Cambridge, Mass. Paper-file box.	June 10, 1873	196	64	3	641
142, 074	Benton, J. F., Penn Yan, N. Y. Plow.	Aug. 26, 1873	630	207	4	213
145, 981	Bentz, J., Parkersburgh, W. Va. Steam-cooker.	Dec. 30, 1873	875	284	4	703
	Berger, A. (See Jacobsen & Berger.)					
144, 183	Berghausen, B., and A. L. Kiesling, Cologne, Germany. Railway-car heater.	Nov. 4, 1873	6	2	4	479
135, 622	Bergner, G., Washington, Mo. Apple-parer.	Feb. 11, 1873	226	71	3	157
140, 001	Bergstreser, E. L., Hublersburgh, Pa. Photography.	June 17, 1873	514	163	3	673
145, 330	Bergtold, L., Buffalo, N. Y. Muff-stand.	Dec. 9, 1873	268	90	4	619
145, 146	Bering, J. E., Newburgh, N. Y. Car-axle box.	Dec. 2, 1873	100	33	4	593
145, 834	Same. Car-axle lubricator.	Dec. 23, 1873	719	236	4	680
134, 583	Berkey, D., Huntington, Ind. Vapor-stove for heating soldering-irons.	Jan. 7, 1873	79	25	3	13
	Bernard, W. M. (See Coffee & Bernard.)					
141, 028	Berndt, B., assignor to Riley & Maitland, Williamsport, Pa. Saw-mill.	July 22, 1873	634	213	4	88
	Berner, English & Over. (See King, J., assignor.)					
136, 960	Berney, A., Jersey City, N. J. Process for using anthracite-coal dust or slack as fuel in locomotive-boilers.	Mar. 18, 1873	545		3	307
137, 890	Same. Process of using anthracite coal-dust as fuel in furnaces.	Apr. 15, 1873	501		3	422
139, 288	Same. Artificial fuel and methods of burning the same.	May 27, 1873	766		3	590
142, 609	Berns, L., Middletown, N. Y. Lamp.	Sept. 9, 1873	263	86	4	275
	Berry, G. A. (See Beach & Berry.)					
144, 432	Berry, G. E., and F. C. Pingree, Detroit, Mich. Automatic hatchway-guard.	Nov. 11, 1873	230	77	4	509
142, 553	Berry, J. I., Williamsport, Pa. Shook-holder.	Sept. 9, 1873	216	70	4	271
	Berry, L. H. (See Richards & Berry.)					
135, 261	Berry, S., New York, N. Y. Washing-machine.	Jan. 28, 1873	722	231	3	105
142, 984	Berry, W. J., Brooklyn, N. Y. Lantern.	Sept. 23, 1873	592	201	4	323

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Berryman, B. A. (See Wakefield & Berryman.)					
135, 068	Berryman, B. A., Saint Louis, Mo. Carriage-axle and axle-box	Jan. 21, 1873	534	173	3	78
137, 881	Berryman, B. A., and A. B. Wakefield, Saint Louis, Mo. Hose-pipe nozzle	Apr. 15, 1873	550	172	3	428
135, 756	Berryman, R., Hartford, Conn. Feed-water heater and condenser	Feb. 11, 1873	341	109	3	166
135, 757	Same. Feed-water apparatus for steam-boilers	Feb. 11, 1873	342	110	3	166
135, 758	Same. Steam-radiator	Feb. 11, 1873	343	110	3	166
139, 758	Bertelson, A., West Salem, Wis. Hulling-machine	June 10, 1873	301	93	3	649
145, 613	Berthet, A., and P. Laberio, assignors of one-fourth interest to D. P. White, New Orleans, La. Fiber-disintegrator	Dec. 16, 1873	522	171	4	652
142, 892	Bertonniere, L. M. F., assignor to self and E. Croissant, Laval, France. Producing coloring matter from vegetable substances	Sept. 16, 1873	506		4	305
136, 407	Beschke, W., assignor of one-half interest to S. Sellers, Philadelphia, Pa. Construction of buildings	Mar. 4, 1873	47	17	3	249
	Betteley, A., Boston, Mass. Elevator for warehouses, factories, mines, &c. (Extension)	Aug. 2, 1873			4	85
143, 659	Bettesworth, A. P., Carlinville, Ill. Pruning-implement	Oct. 14, 1873	238	80	4	408
	Bettes, A. (See Graham, J. F., assignor.)					
144, 593	Bettesworth, G. W., Cedar Rapids, Iowa. Numerical filing-case	Nov. 18, 1873	371	125	4	531
144, 499	Betta, A., assignor to E. and A. Betts, Wilmington, Del. Device for changing the speed of machinery	Nov. 11, 1873	283	96	4	513
	Betta, E., et al. (See Betta, A., assignor.)					
141, 913	Betta, G. W., Shadoville, Ohio. Land-marker	Aug. 19, 1873	472	155	4	190
141, 311	Betta, L. F., Philadelphia, Pa. Lantern	July 29, 1873	908	298	4	118
6, 791	Betts, R. W., assignor to self and O. P. Dorman, New York, N. Y. Collar-box. (Design)	Aug. 5, 1873			4	135
135, 312	Bevelander, B., Boston, Mass. Nail-separating machine	Jan. 28, 1873	761	245 246	3	109
	Same. Machine for assorting nails	May 13, 1873	292	90	3	531
138, 783	Beven, T., Loughborough, assignor to J. Mundella, Nottingham, England. Machine for uniting the selvages of knit fabrics	Apr. 22, 1873	662	209 110	3	445
137, 997	Bex, T. H., Syracuse, N. Y. Instrument for administering balls to animals	June 17, 1873	392	123	3	663
139, 856	Bibb, B. C. (See Klotz, P., assignor.)					
142, 985	Bibb, W. C., Madison, Ga. Insect-destroying compound	Sept. 23, 1873	593		4	323
135, 069	Bickel, H., Myerstown, Pa. Wash-boiler attachment	Jan. 21, 1873	535	173	3	78
141, 312	Bickell, E., Milton, Pa. Car-coupling	July 29, 1873	908	298	4	118
136, 639	Bickford, D., New York, N. Y. Knit fabrics and methods of knitting them	Mar. 11, 1873	289	90	3	276
130, 207	Bickford, H., assignor to L. Fagin, trustee, Cincinnati, Ohio. Scroll-saw	Feb. 25, 1873	758	245	3	224
139, 857	Bickings, L. C., Norristown, Pa. Thrashing-machine	June 17, 1873	393	123	3	663
145, 044	Same. Concave for thrashing-machine	Dec. 2, 1873	2	1	4	586
	Bicknell, E. J., et al. (See Ralston, J., assignor.)					
	Biddle Manufacturing Company. (See Baker, W., assignor.)					
	Same. (See Lyon, W., assignor.)					
134, 783	Bidwell, J. A., and W. Chisholm, Cleveland, Ohio. Wood screw	Jan. 14, 1873	270	88	3	42
140, 342	Biedinger, N., Cincinnati, Ohio. Bag-machine	July 1, 1873	7	2	4	8
139, 289	Bierbower, J., assignor of one-half interest to A. Kauffman, Philadelphia, Pa. Dust-conveying attachments for thrashing-machines	May 27, 1873	768	243	3	500
140, 453	Biersdorf, J., Chicago, Ill. Sofa-bedstead	July 1, 1873	92	31	4	16
136, 023	Bigelow, A., Killingworth, Conn. Lemon-squeezer	Feb. 18, 1873	586	193	3	199
	Bigelow, G. B., trustee. (See Duchemin, W., assignor.)					
144, 945	Bigelow, G. W., New Haven, Conn. Dynamometer	Nov. 25, 1873	674	229	4	567
	Bigelow, L. A., trustee. (See McCracken, E. D., assignor.)					
	Bigelow, L. A., administrator. (See Tufts, O.) (Disclaimer.)					
	Same. (See Tufts, O.) (Extension.)					
	Bigelow, L. C. (See Bigelow, S., and L. C.)					
138, 470	Bigelow, S., Newburgh, and L. C. Bigelow, Kirtland, Ohio. Potato-digger	May 6, 1873	5	2	3	498
6, 538	Bigelow, W. P., Natick, Mass. Music-stand. (Design)	Apr. 1, 1873			3	356
135, 686	Bigler, C. S., Harrisburgh, Pa. Car-coupling	Feb. 11, 1873	285	89	3	162
143, 557	Bignall, S. L., Chicago, Ill. Door-hanger	Oct. 14, 1873	153	51	4	401
143, 052	Same. Grindstone hanger	Oct. 28, 1873	540	179	4	452
144, 652	Billesbach, T., Kearney Junction, Nebr. Method of burning brick	Nov. 18, 1873	424	142	4	535
	Billingshurst, W., Rochester, N. Y. Fishing-reel. (Extension)	Aug. 9, 1873			4	108
138, 471	Billings, C. E., Hartford, Conn. Die for making blanks for ship-hooks	May 6, 1873	6	2	3	498
144, 730	Billings, C. H., and G. W. Stockley, Cleveland, Ohio. Telegraph-key	Nov. 18, 1873	484	164	4	541
	Billings, G. W. (See Lakey, J. H., assignor.)					
137, 050	Billings, G. W., Chicago, Ill. Railway-switch	Mar. 25, 1873	636	210	3	326
137, 882	Same. Railway-frog	Apr. 15, 1873	550	172	3	426
139, 358	Same. Machine for rolling blooms	May 27, 1873	818	262	3	595
139, 359	Same. Process for manufacturing rolled iron	May 27, 1873	819		3	595
140, 759	Same. Treating Bessemer steel and other metals to anneal them for punching, &c.	July 15, 1873	373	128	4	58
142, 075	Billings, H., Boston, Mass. Playing-cards	Aug. 26, 1873	631	207	4	213
5, 538	Billings, O., Elyria, O. Harvester. (Reissue)	Aug. 19, 1873	614	202 203	4	202
	Billington, J. H. & Co. (See Pilkington, J., assignor.)					
141, 914	Billiu, W. G., Thibodeaux, La. Apparatus for treating cane-juice with sulphur fumes	Aug. 19, 1873	472	155	4	190
134, 724	Billow, G. W., Shelby, Ohio. Paper-file	Jan. 14, 1873	223	71	3	38
	Bills, C. M. (See Bills, J. C., and C. M.)					
140, 991	Bills, J. C., Ottumwa, and C. M. Bills, Albia, Iowa. Paint for roofing, wood, metals, &c.	July 22, 1873	601		4	85
135, 070	Billups, C., Norfolk, Va. Cultivator	Jan. 21, 1873	535	174	3	78
135, 194	Bingham, A., Newtonville, Mass., assignor to F. Curtis, Boston, Mass. Sewing-machine	Jan. 28, 1873	654	211	3	100
134, 841	Bingham, A. D., Vergennes, Vt. Horse-shoe-nail machines	Jan. 14, 1873	322	103	3	46
	Bingham, E. B., et al. (See Bingham, S. H., assignor.)					
141, 106	Bingham, G. E., and J. F. Ewing, Chicago, Ill. Stove-platform	July 22, 1873	704	235	4	94
143, 870	Bingham, J., assignor to self, F. L. and D. R. Carnell, Philadelphia, Pa. Machines for making earthenware-pipe	Oct. 21, 1873	451	150 151	4	435
145, 147	Bingham, J., and O. M. Pond, Waterloo, Iowa. Wheel-plow	Dec. 2, 1873	101	33	4	593
134, 969	Bingham, S., Saratoga Springs, N. Y. Hinge	Jan. 21, 1873	145	142	3	71
139, 360	Bingham, S. H., Philadelphia, Pa., assignor to self, E. B. Bingham, Newark, N. J., G. W. Van Allen, New York, N. Y., and W. N. Stone, Philadelphia, Pa. Rotary printing-press	May 27, 1873	820	262	3	595
	Binkly, C. G. (See Eichenberger & Binkly.)					
137, 408	Binnix, G. W., Sunbury, Pa. Chain-machine	Apr. 1, 1873	114	38	3	366
143, 743	Binna, L., Oakenshaw, England. Endless band	Oct. 21, 1873	342	114	4	426
145, 386	Binna, L., Bradford, England. Machine for making endless bands	Dec. 9, 1873	309	104 105	4	623

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
137, 169	Birch, W., Manchester, England. Machine for opening, smoothing, and guiding fabrics	Mar. 25, 1873	741	246	3	334
145, 045	Birch, W., Walworth, Great Britain, assignor of one-half interest to C. I. Temple, Chester, Pa. Treating horn to resemble whalebone	Dec. 2, 1873	3		4	586
135, 881	Birchard, J. F., Milwaukee, Wis. Fokling-table	Feb. 18, 1873	470	151	3	190
141, 986	Bird, C., Lower Merion Township, and W. H. Sullenberger, Harrisburgh, Pa. Bearings for shafts	Aug. 19, 1873	527	174	4	195
142, 670	Bird, J., Philadelphia, Pa. Salt and pepper caster	Sept. 9, 1873	314	104	4	279
134, 970	Birdsall, E. M. (See Spencer, A., jr., and T. C., assignors)					
134, 970	Birge, W. H., Franklin, Pa. Rivet-pocket for oil-well pumps	Jan. 21, 1873	146	142	3	71
141, 751	Birkenhead, J. (See Card, S. W., assignor.)					
141, 751	Birkenhead, J., Mansfield, Mass. Spindle-bolster for spinning-machines	Aug. 12, 1873	310	101	4	168
142, 763	Birkett, H. M. (See Birkett, J. W., assignor.)					
142, 763	Birkett, J. W., assignor, to H. M. Birkett, Brooklyn, N. Y. Stop-cock	Sept. 16, 1873	403	136	4	297
137, 170	Biabing, I. W., Philadelphia, Pa., and J. S. McCune, Camden, N. J., assignors to said Biabing, J. O. Cuthbert, Haddonfield, and L. Norris, Camden, N. J. Machines for shearing and booking tobacco	Mar. 25, 1873	743	247	3	334
138, 226	Biesel, J. J., Williamsport, assignor to self and M. V. B. Steinmetz, Lancaster, Pa. Dry-goods stand	Apr. 29, 1873	893	282	3	471
137, 998	Bishop, E. B., San Francisco, Cal. Dredger	Apr. 22, 1873	664	211	3	445
137, 863	Bishop, G. W., Saratoga Springs, N. Y. Saah-fastener	Apr. 15, 1873	551	172	3	426
142, 431	Bishop, G. W., assignor of one-half interest to L. E. Whiting, Saratoga Springs, N. Y. Saah-fastener	Sept. 2, 1873	95	31	4	250
144, 731	Bishop, G. W., Brooklyn, N. Y. Mechanism for reversing engines	Nov. 18, 1873	485	164	4	541
135, 396	Bishop, J., Northville, Mich. Saah-fastener	Feb. 4, 1873	1	1	3	128
140, 760	Bishop, J., Owego, N. Y. Railway rail-joint	July 15, 1873	374	128	4	58
145, 387	Bishop, J., assignor to self and C. Parker, Meriden, Conn. Steam-trap	Dec. 9, 1873	313	105	4	623
144, 884	Bishop, J. V., Atlanta, Ga. Locomotive smoke-stack	Nov. 23, 1873	627	213	4	563
	Bishop, P. A. (See Elder & Bishop.)					
141, 482	Bishop, W., Brooklyn, N. Y. Water-closet for vessels	Aug. 5, 1873	64	20	4	140
	Bissell and Moore Manufacturing Company. (See Moore, D. and E., assignors.) (Reissue.)					
145, 835	Bissell, T. A., Detroit, Mich. Berth-lock for sleeping-cars	Dec. 23, 1873	719	237	4	680
138, 483	Bixby, F. N., West Meriden, Conn. Shipping-mechanism for machinery	Mar. 4, 1873	113	37	3	254
137, 409	Same..... Tumbling-barrels for cleaning castings	Apr. 1, 1873	115	38	3	366
140, 609	Bixler, W. H., Easton, Pa. Needle-cushion	July 8, 1873	246	83	4	40
140, 992	Same..... Griddle-greaser	July 22, 1873	602	203	4	84
140, 399	Bizzell, W. B., assignor to self and W. H. Hardee, La Grange, N. C. Saw-filing machine	July 1, 1873	52	18	4	12
	Black, F. (See Mixer, A. A., assignor.)					
136, 126	Black, H., Lewisburgh, Ohio. Railway-switch	Feb. 25, 1873	691	{ 223 } { 224 }	3	219
	Black, J. (See Holdsworth, S., assignor.)					
144, 732	Black, J., and G. W. Jones, Philadelphia, Pa. Propelling boats	Nov. 18, 1873	486	164	4	541
139, 261	Black, J. B., assignor to A. O. Baker, Providence, R. I. Manufacture of joints for bracelets	May 27, 1873	820	282	3	595
144, 584	Black, J. H., Columbia, Pa. Sportsman's cartridge-holding vest	Nov. 18, 1873	372	125	4	531
136, 408	Black, S., West Alexandria, Ohio. Drill-teeth	Mar. 4, 1873	48	17	3	249
	Blackburn, D. W., et al. (See Smith, A. C., assignor.)					
140, 002	Blackburn, M., Sullivan, Ind. Circular-saw mill	June 17, 1873	515	163	3	673
143, 554	Blackham, J. W., Brooklyn, N. Y. Ornamenting felt-shirts, &c.	Sept. 9, 1873	216	70	4	271
140, 672	Blackledge, W. G., Metamora, Ind., assignor of one-half interest to J. P. Alley, Cincinnati, Ohio. Saw-gummer	July 8, 1873	295	99	4	43
3, 264	Blackman, A. L., Cross Plains, Tenn., assignor of part interest to S. K. Schwenk, and J. E. Saunders. Wheel for vehicles	Jan. 28, 1873	850	274	3	116
135, 623	Blackman, A. L., Cross Plains, Tenn. Wheel for vehicles	Feb. 11, 1873	227	71	3	157
0, 342	Blackman, J. F., Brooklyn, assignors to Vanderburg, Wells & Co., New York, N. Y. Wood-type	Jan. 21, 1873			3	70
139, 858	Blackman, L. R., Newport, R. I. Mold for making suppositories	Jan. 17, 1873	394	123	3	664
	Blackmar, H. (See Fling, L. J., assignor.)					
138, 369	Blackstone, B., Warren, Ill. Quilting-frame	Apr. 29, 1873	1,024	322	3	492
143, 660	Blackstone, W., Shelby County, Ill. Plow	Oct. 14, 1873	239	80	4	408
145, 388	Blades, L. J., Harrington, Del. Ticket-case	Dec. 9, 1873	314	105	4	623
140, 454	Bladon, T., assignor of one-half interest to J. C. Metzger, Oak Harbor, Ohio. Combined stove-pipe shelf and drum	July 1, 1873	92	32	4	16
139, 536	Blair, B. X., Huntingdon, Pa. Mail-bag fastening	June 3, 1873	77	26	3	615
138, 472	Blair, H. H., and S. Barry, Brunswick, Ohio. Spring-bed bottom	May 6, 1873	7	3	3	498
	Blair, J. B., Philadelphia, Pa. Ruling-machine	Mar. 8, 1873			3	244
138, 729	Same..... Umbrella	May 13, 1873	245	77	3	527
139, 654	Same..... Apparatus for testing hydro carbon oils	June 10, 1873	197	64	3	641
135, 397	Blair, L., Painesville, Ohio. Gas-retort scraper	Feb. 4, 1873	2	1	3	128
	Blair, R. (See Phillips, H. S., assignor.)					
135, 313	Blaisdell, P., Worcester, Mass. Drilling-machine	Jan. 28, 1873	762	{ 246 } { 247 }	3	109
142, 432	Blaisdell, W. S., and C. K. Young, Factory Point, Vt. Lamp	Sept. 2, 1873	95	32	4	250
142, 195	Blaisdell, W. S., and E. Estabrook, Factory Point, Vt. Coffee-pot	Aug. 26, 1873	733	241	4	221
140, 003	Blaisse, G. F., Philadelphia, Pa. Sliding chandelier	June 17, 1873	516	164	3	674
139, 537	Blaisse, G. F., and J. Brannen, Philadelphia, Pa. Soldering-iron	June 3, 1873	78	27	3	615
144, 309	Blaisse, G. F., and W. F. Crites, Philadelphia, Pa. Drop-light and hanger	Nov. 4, 1873	112	38	4	487
138, 370	Blake, A., Waterbury, Conn. Animal-trap	Apr. 26, 1873			3	444
145, 274	Blake, C. E., San Francisco, Cal. Clamp for dental purposes	Apr. 29, 1873	1,025	323	3	482
145, 275	Same..... Metallic foil for dental purposes	Dec. 9, 1873	217		4	615
145, 962	Same..... Dental filling	Dec. 9, 1873	217	74	4	615
134, 584	Same..... Filling for decayed teeth	Dec. 30, 1873	876		4	703
	Blake, C. H., D. D., and F. M., Worcester, Mass. Machine for making shank-pieces for boots and shoes	Jan. 7, 1873	80	25	3	13
	Blake Crusher Company et al. (See Marsden, H. R., assignor.)					
	Blake, D. D. (See Blake, C. H., D. D., and F. M.)					
145, 983	Blake, E. H., Coatsburg, Ill. Draught equalizer	Dec. 30, 1873	877	284	4	703
	Blake, E. W., et al. (See Marsden, H. R., assignor.)					
	Blake, F. M. (See Blake, C. H., D. D., and F. M.)					
142, 196	Blake, G. W., Brooklyn, N. Y. Steam-boiler for warming buildings	Aug. 26, 1873	733	242	4	221
	Blake, J. W., et al. (See Smith, T. S., assignor.)					
5, 696	Blake, L. R., Boston, and A. S. Libby, Lawrence, Mass., assignors to G. McKay, trustee, Boston, Mass. Nailing-machine for boots and shoes	Dec. 23, 1873	808	{ 264 } { 265 }	4	687
138, 300	Blake, L. R., Brooklyn, N. Y. Lasting-tool	Feb. 25, 1873	841	272	3	231
138, 845	Same..... Hydraulic hose	Mar. 13, 1873	349	108	3	536
140, 400	Blake, L. R., Brooklyn, N. Y., and A. S. Libby, Lawrence, Mass. Nailing boots and shoes	July 1, 1873	53	19	4	12
143, 322	Blake, L. R., Brooklyn, N. Y. Lasting mechanism	Sept. 30, 1873	876	300	4	362

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 661	Blake, L. R., Brooklyn, N. Y. Hydraulic hose	Oct. 14, 1873	240	81	4	408
145, 389	Blake, L. R., Brooklyn, N. Y., and A. S. Libby, Lawrence, Mass. Heel for boots and shoes	Dec. 9, 1873	314	106	4	623
144, 500	Blake, R., Pontiac, Ill. Process for tanning leather	Nov. 11, 1873	283		4	513
135, 624	Blake, W. E., New York, N. Y. Combined gun-stock and spade	Feb. 11, 1873	227	71	3	157
135, 511	Blakeley, M. A., and J. Cahill, Chattanooga, Tenn. Elevating apparatus	Feb. 4, 1873	105	34	3	136
145, 836	Blakemore, F. W., Philadelphia, Pa. Burglar-alarm	Dec. 23, 1873	720	237	4	680
	Blakeslee, C., et al. (See Kruks, J. S., assignor.)					
	Same. (See Miller, C. G., assignor.)					
145, 897	Blakeslee, C. W., Plantsville, Conn. Tack-puller	Dec. 23, 1873	721	237	4	680
7, 015	Blakesley, G. H., Bristol, Conn. Clock-case (Design)	Dec. 2, 1873			4	595
139, 859	Blakey, J., Leeds, England. Apparatus for manufacturing boot and shoe heels	June 17, 1873	395	123	3	664
				124		
136, 897	Blakestone, Z. D., Saint Mary's County, Md. Tobacco-hiller	Mar. 18, 1873	494	164	3	303
136, 898	Same. Tobacco-cultivator	Mar. 18, 1873	496	164	3	303
137, 339	Blaklee, J. B. and C. F., Saint Petersburg, Pa. Manufacture of traveling-bag frames	Apr. 1, 1873	58	17	3	361
137, 124	Blanchard, E., Poolesville, Md. Combined garden hoe and roller	Mar. 25, 1873	705	234	3	351
141, 987	Blanchard, H. A., Boston, Mass. Sewing-machine	Aug. 19, 1873	528	175	4	195
144, 433	Blanchard, J., assignor of one-half interest to H. W. Carter, East Saginaw, Mich. Plow	Nov. 11, 1873	320	77	4	509
140, 879	Blanchard, J. M., and W. E. Prall, Washington, D. C. Pneumatic apparatus for elevating water	July 15, 1873	474	161	4	66
	Blanchett, C. E., et al. (See Roosevelt, W. H., assignor.)					
	Bland, P. E. (See Rouse, A. M., assignor.)					
	Blanding, A. J. (See Blanding, F. and A. J.)					
134, 971	Blanding, F. and A. J., Lowell, Mass. Loom-shuttle	Jan. 21, 1873	147	143	3	71
	Blaney, C. J. (See Vaughn & Blaney.)					
144, 733	Blank, H. F., Liberty, Ill. Hay-press	Nov. 18, 1873	487	165	4	541
141, 313	Blatterlein, J. F. A., West Meriden, Conn. Curtain-fastener	July 29, 1873	909	298	4	118
141, 988	Blauser, N. G., Etna, Ohio. Corn-cultivator	Aug. 19, 1873	529	175	4	195
141, 849	Blauvelt, M., Ithaca, N. Y. Dress-makers' marking and cutting gauge	Aug. 19, 1873	408	133	4	186
	Blazer, J. B. (See Bye, W. C., assignor.)					
143, 118	Beckman, F., Washington, assignor to J. F. Imbs, Saint Louis, Mo. Middlings-purifier	Sept. 23, 1873	701	241	4	332
137, 999	Blessing, C. A., Philadelphia, Pa. Turning-lathe for wood	Apr. 22, 1873	665	211	3	445
				212		
5, 549	Blessing, J. H., assignor to self and F. Townsend, Albany, N. Y. Steam-trap (Reissue)	Aug. 26, 1873	835	278	4	230
134, 972	Blessing, J. H., Albany, N. Y. Steam-boiler feeder	Jan. 21, 1873	147	143	3	71
137, 285	Blessing, J. H., assignor to F. Townsend and J. H. Blessing, Albany, N. Y. Steam-trap	Apr. 1, 1873	5	2	3	357
142, 323	Blessing, J. H., assignor to self and F. Townsend, Albany, N. Y. Steam-trap	Sept. 2, 1873	1	1	4	242
142, 889	Blessing, L. W., assignor to self and H. Pusey, Wilmington, Del. Top prop for carriages	Sept. 16, 1873	504	172	4	305
	Blessing, W., Jeffersonville, Ohio. Seed-planter (Extension)	Dec. 13, 1873			4	614
135, 463	Blinn, J., Rockford, Ill. Gate	Feb. 4, 1873	67	21	3	133
139, 940	Bliss, E. S., Richburgh, N. Y. Washing-machine	June 17, 1873	468	147	3	669
135, 314	Bliss, F. D., assignor to self and D. P. Gardner, New Bedford, Mass. Die-plate	Jan. 28, 1873	763	247	3	109
138, 000	Bliss, M. H., Dalton, Mass. Trunk	Apr. 22, 1873	669	212	3	445
143, 432	Bliss, S. B., New York, N. Y. Toy-device for making soap-bubbles	Oct. 7, 1873	32	11	4	383
	Bliss, S. S. (See Dean, N. C., assignor.)					
	Same. (Reissue)					
137, 171	Bloch, B. A., Paris, France. Hydraulic motor	Mar. 25, 1873	744	247	3	334
	Blocher, C. (See Moreland & Blocher.)					
140, 343	Blocher, D., Baltimore, Md., assignor of one-half interest to J. H. Seymour, Hagerstown, Md. Brick-kiln	July 1, 1873	8	3	4	8
135, 398	Blom, J. H., New York, N. Y. Elevator	Feb. 4, 1873	2	1	3	128
145, 614	Blom, C., jr., assignor of one-half interest to T. J. Tubbs, Grand Haven, Mich. Ironing-table	Dec. 16, 1873	523	172	4	652
	Blondin, C. L. (See Delker & Blondin.) (Design)					
145, 615	Bloodgood, F. W., New York, N. Y. Machine for making batting	Dec. 16, 1873	523	172	4	652
	Bloodgood, W. (See Totton, S. E., jr., assignor.) (Reissue)					
	Bloss, J. W. (See Craine & Bloss.)					
141, 029	Blunk, G., New York, N. Y. Parallel ruler	July 22, 1873	634	214	4	88
133, 860	Blunt, G. G., assignor to self and J. L. Ashurst, Bath, Ill. Grain-drill	June 17, 1873	397	125	3	664
	Blunt, J. G., et al. (See Fullam, A. J., assignor.) (Reissue)					
	Same. (See Priest, J. K., assignor.)					
	Same. (See Smith, R. T., assignor.)					
5, 367	Blunt, J. G. (See Whipple & Blunt.)					
	Blunt, J. G., assignor of one-half interest to M. H. Insley, Leavenworth, Kans. Process and apparatus for puddling iron and steel (Reissue)	Apr. 22, 1873	878	277	3	462
137, 884	Blunt, J. G., Leavenworth, Kans. Blast-furnace	Apr. 15, 1873	552	173	3	426
137, 885	Same. Manufacture of steel	Apr. 15, 1873	553	173	3	426
145, 927	Bly, D. (See Locke, H. H., assignor.) (Reissue)					
	Bly, W. H., Syracuse, N. Y. Hand-rubber	Dec. 30, 1873	826	269	4	699
	Blymer, J. S. (See Lippy & Blymer.)					
137, 172	Blythe, G., Chillicothe, Mo. Saw-thing machine	Mar. 25, 1873	746	247	3	334
136, 961	Boardman, D. G., Albia, Iowa. Corn-planter	Mar. 18, 1873	547	180	3	307
136, 962	Same. Combined chair and lounge for invalids	Mar. 18, 1873	547	181	3	307
142, 197	Boardman, L. M., Ottawa, Minn. Fanning mill	Aug. 26, 1873	734	242	4	221
	Bobrownicki, A. (See Christy & Bobrownicki.)					
139, 109	Boch, M., New York, N. Y. Shoe-fastening	May 20, 1873	584	183	3	568
	Boch, W., sr., deceased, by N. Maidhof, executrix, New York, N. Y. Water-closet basin (Extension)	Nov. 29, 1873			4	557
5, 517	Bock, H., New York, N. Y., assignor to W. W. McFarlan, Brooklyn, N. Y. Machine for making glass buttons (Reissue)	Aug. 5, 1873	181	58	4	150
	Bockoven, D. C. (See Jeffers & Bockoven.)					
139, 450	Bockstaller, G., assignor of one-half interest to C. Beer, Chicago, Ill. Carriage-top	June 3, 1873	3	1	3	619
142, 890	Boda, W. J., Dayton, Ohio. Molding-machine	Sept. 16, 1873	504	172	4	305
				173		
140, 880	Bodenhamer, L. I., Kernersville, N. C. Reciprocating churn	July 15, 1873	476	161	4	66
	Bodine, J. F. (See Hewitt, T. B., assignor.)					
	Bodkin, J. S. (See Bodkin, L. P. & J. S.)					
138, 846	Bodkin, L. P. and J. S., Brooklyn, N. Y. Cooking-vessel	May 13, 1873	349	108	3	536
135, 195	Bodley, P., Saint Louis, Mo. Dumping-wagon	Jan. 28, 1873	656	211	3	101
135, 702	Bodmer, C., deceased, by E. and J. A. Duenz, administrators, Fayetteville, Ill. Lock	Feb. 11, 1873	297	94	3	163
	Bodwell, H. H. (See Atwood & Bodwell.) (Reissue)					
	Bodwell, H. H. (See Atwood & Bodwell.)					
142, 198	Bodwell, H. H., and E. A. Atwood, San Francisco, Cal. Windmill	Aug. 26, 1873	735	242	4	221
	Bodwell, J. H. (See Green & Bodwell.)					
136, 694	Boeckeh, C., Toronto, Canada. Broom	Mar. 11, 1873	312	103	3	279
142, 199	Boehne, E. A., Saint Louis, Mo. Manufacturing white lead	Aug. 26, 1873	736		4	221

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr g	Vol.	Page.
135, 196	Boeklen, R., Brooklyn, N. Y. Machine for making bungs	Jan. 28, 1873	657	212	3	101
139, 861	Boeklen, R., New York, N. Y. Machine for swaging screw-threads on bolt and screw blanks	June 17, 1873	390	125	3	664
142, 200	Boeklen, R., Brooklyn, N. Y., assignor of one-half interest to J. Fuchs, New York, N. Y. Apparatus for emptying cellars, water-closets, &c.	Aug. 26, 1873	737	243	4	221
135, 965	Boerckel, J. F. (See Krapf & Boerckel.)					
135, 965	Boesen, P., and M. Bedessem, Kenosha, Wis. Bed-bottom	Feb. 18, 1873	535	177	3	195
137, 886	Boettcher, J. G. L., Brooklyn, N. Y. Manufacture of sheet-metal vessels	Apr. 15, 1873	555	174	3	426
142, 891	Bogart, G., W. H. Cramer, & W. L. Lewis, Laporte City, Iowa. Butter-coloring compound.	Sept. 16, 1873	505		4	305
134, 633	Bogart, P., jr. (See Swenson, G., assignor.)					
5, 697	Bogert, T. O., assignor to Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer	Jan. 7, 1873	125	40	3	17
143, 491	Bogia, M. C., Philadelphia, Pa. Machine for removing snow and ice from road-ways	Dec. 23, 1873	813	265	4	687
135, 071	Bohaker, A. W., Granville, Nova Scotia. Car-coupling	Oct. 7, 1873	79	27	4	387
5, 534	Bohn, J. C., Centralia, Ill. Spool-box	Jan. 21, 1873	536	174	3	78
144, 434	Bohner, G., Chicago, Ill. Hanging lamp	Aug. 19, 1873	610	201	4	201
135, 759	Boies, H. M., Scranton, Pa. Package of powder-charges for blasting	Nov. 11, 1873	231	77	4	509
141, 989	Boileau, E., assignor to Boileau Patent Stove and Furnace Fire-Plate Company, Saint Louis, Mo. Fire-plates for steam-boilers	Feb. 11, 1873	343	110	3	167
143, 953	Boileau, E., Saint Louis, Mo. Hinge	Aug. 19, 1873	530	175	4	155
136, 809	Boileau Patent Stove and Furnace Fire-Plate Company. (See Boileau, E., assignor.)					
141, 418	Bois, J. J., Rantoul, Ill. Grain-sampler	Oct. 28, 1873	541	179	4	452
136, 024	Bois, J. M., Salamanca, N. Y. Siphon pump	Mar. 18, 1873	423	140	3	298
136, 810	Boles, W. A., Shelbyville, Ind. Carpet-stretcher	Aug. 5, 1873	7	2	4	135
137, 887	Bolin, J. P., Orangeburgh County, S. C. Water-regulator	Feb. 18, 1873	586	193	3	199
140, 401	Bolinger, J. B., Michigan City, Ind. Treadle	Mar. 18, 1873	424	140	3	298
140, 401	Bolitho, E. (See Eaton, I. F., assignor.)					
142, 368	Boller, A. P., Orange, N. J. Turn-table	Apr. 15, 1873	555	174	3	426
137, 125	Bolles, T. (See Decker, L. H., assignor.)					
140, 762	Bollinger, O. J., York, Pa. Water-wheel	July 1, 1873	54	19	4	12
141, 419	Bollman, S. C. (See Chubb, J. J., assignor.)					
143, 954	Bolser, G. A., Indianapolis, Ind. Machine for turning wagon-axles	Sept. 2, 1873	41	15	4	245
140, 762	Bolton, O., jr., Pittsburgh, Pa. Cupola and other metallurgic furnaces	Mar. 25, 1873	705	234	3	331
141, 419	Bolton, O., jr., Chartier's Township, Allegheny County, Pa. Utilizing gas as a motive power	July 8, 1873	296		4	43
135, 512	Bolton, O., jr., and J. Pedder, Pittsburgh, Pa. Manufacture of iron and steel	July 15, 1873	375		4	58
140, 673	Bolton, O., jr., Chartier's Township, and J. Pedder, Pittsburgh, Pa. Manufacture of steel for boiler-plates, &c.	Oct. 28, 1873	542	180	4	453
140, 761	Bolton, O., jr., and J. Pedder, Pittsburgh, Pa. Manufacture of iron and steel	July 15, 1873	375		4	58
143, 955	Bond, H., assignor to M. How, Haverhill, Mass. Guide for sewing shoes	Oct. 28, 1873	543	180	4	453
135, 513	Bond, J. N. B., New York, N. Y. Hoisting-apparatus	Feb. 4, 1873	107	34	3	126
136, 208	Bond, L. L., Chicago, Ill. Device for coupling cars	Mar. 11, 1873	270	90	3	276
139, 759	Bond, N. O., Fairfax Court-House, Va. Portable cooking stove	June 10, 1873	303	94	3	642
136, 640	Bond, T. W., et al. (See Smith, J. H., assignor.)					
139, 760	Bonack, C. F., New York, N. Y. Manufacture of friction-matches	Aug. 5, 1873	64	20	4	140
141, 915	Bonnaz, A., Paris, France. Micrometer-gauge	Aug. 19, 1873	473	155	4	190
135, 760	Bonnell, J. C., Burlington, Iowa. Blank book	Feb. 11, 1873	344	110	3	167
135, 882	Bonney, C. S., Philadelphia, Pa. Clamp	Feb. 18, 1873	471	151	3	190
135, 883	Bonney, C. S., Philadelphia, Pa. Saw-filing vise	Feb. 18, 1873	471	152	3	190
138, 121	Bonney, O., jr., San Francisco, Cal. Band-sewing machine	Apr. 22, 1873	775	247	3	454
140, 455	Bonzano, A., et al. (See Clarke, T. C., assignor.)					
145, 483	Bonzano, A., Phenixville, assignor to Clarke, Reeves & Co., Philadelphia, Pa. Connection for wrought-iron beams and columns	July 1, 1873	93	32	4	16
134, 634	Boobar, E. C., San Francisco, Cal. Means for sinking broken piles	Dec. 16, 1873	404	133	4	642
141, 690	Boody, H. F., and E. P. Merrill, Portland, Me. Feed-water heater	Jan. 7, 1873	126	41	3	17
134, 635	Booker, E. H. (See Booker, T. L., assignor.)					
5, 256	Booker, T. S., Shady Grove, Va., assignor to self and E. H. Booker, Donaldsonville, S. C. Hame-fastener	Aug. 12, 1873	261	84	4	164
135, 514	Bookwalter, J. W., Springfield, Ohio. Steam-generator	Jan. 7, 1873	127	41	3	17
142, 324	Boomer, G. B., Syracuse, N. Y., T. G. Morse, Erie, Pa., and R. E. Boschert, Syracuse, N. Y., said Morse assignor to said Boomer. Cheese-press	Jan. 20, 1873	841	271	3	115
143, 218	Boomer, G. B., Syracuse, N. Y. Cheese-hoop	Feb. 4, 1873	108	34	3	136
6, 777	Boon, A. T., assignor of one-half interest to T. O. Jones, Galesburgh, Ill. Windmill	Sept. 2, 1873	3	1	4	242
6, 778	Boone, W. C. (See Pittman & Boone) (Extension.)					
6, 792	Boorn, S., Lowell, Mass. Loom-picker	Sept. 30, 1873	784	271	4	354
138, 371	Boot and Shoe Improvement Company. (See Farnsworth, L. H., assignor.)					
136, 025	Booth, H., assignor to T. Dolan & Co., Philadelphia, Pa. Nubia	July 22, 1873			4	85
138, 122	Booth, H., assignor to T. Dolan & Co., Philadelphia, Pa. Nubia	July 22, 1873			4	85
138, 123	Booth, H., assignor to T. Dolan & Co., Philadelphia, Pa. Nubia	July 22, 1873			4	85
144, 595	Booth, H., assignor to T. Dolan & Co., Philadelphia, Pa. Nubia	Aug. 5, 1873			4	135
145, 616	Booth, E., assignor of one-half interest to H. V. Colsten, Great Bend, Pa. Henmer for sewing-machine	Apr. 29, 1873	1,025	323	3	482
143, 271	Booth, G., Philadelphia, Pa. Metal-coated ware	Feb. 18, 1873	587		3	199
143, 272	Booth, G., Philadelphia, Pa. Metal-coated ware	Apr. 22, 1873	776	248	3	454
143, 273	Booth, G., Philadelphia, Pa. Metal-coated ware	Apr. 22, 1873	776	248	3	454
143, 274	Booth, G., Toronto, Canada. Fire-extinguisher	Nov. 18, 1873	373	126	4	531
143, 275	Booth, J. L., Rochester, N. Y. Grain-separator	Sept. 20, 1873			4	295
143, 276	Booth, O. W., Providence, R. I. Weather-strip	Dec. 16, 1873	524	172	4	652
143, 277	Boothby, H., et al. (See Forrest, H. E., assignor.)					
143, 362	Bootsman, T., New Brighton, N. Y. Dumping-car	May 27, 1873	821	262	3	595
143, 371	Bootsman, T., Tompkinsville, N. Y. Knife polisher and sharpener	Oct. 21, 1873	451	151	4	435
142, 076	Borchardt, J. M., assignor to M. Amberg, New York, N. Y. Buckle	Aug. 26, 1873	632	208	4	213
143, 272	Bordas, C., New York, N. Y. Apparatus for transferring embroidery-patterns	Oct. 21, 1873	452	151	4	435
144, 310	Borden, G., White Plains, and J. G. Borden, South East, N. Y. Process of preserving and condensing milk	Nov. 4, 1873	113		4	487

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 311	Borden, G., White Plains, and J. G. Borden, South East, N. Y. Condensed milk.....	Nov. 4, 1873	114	4	487
144, 885	Borden, J., and J. L. Trimble, Medford, N. J. Glass bottle.....	Nov. 25, 1873	628	213	4	563
136, 209	Borden, J. G. (See Borden, G. and J. G.)					
	Borden, T., assignor to self, D. P. Kisner, and T. Hulett, Squancum, N. J. Pruning-shears.....	Feb. 25, 1873	760	245	3	225
142, 369	Bordner, H., and D. Sullivan, Virginia City, Nev. Boot-crimping block.....	Sept. 2, 1873	42	15	4	245
145, 984	Borel, U., Sue City, Mo. Stock-feeder.....	Dec. 30, 1873	877	284	4	703
138, 606	Borgfeldt, N. H., New York, N. Y. Tobacco-cutting machine.....	May 6, 1873	119	39	3	507
	Borlinghaus, H., sr. (See Brunswick & Borlinghaus.)					
	Born, C. (See Schwartz, C. C. E., assignor.)					
139, 231	Born, F. W., Cleveland, Ohio. Base-burning stove.....	May 27, 1873	715	225	3	586
135, 029	Borneman, A., Lancaster, Ohio. Corn-sheller case.....	Jan. 21, 1873	500	161	3	75
135, 761	Borton, J., and W. H. Hartley, Quaker City, Ohio. Churn.....	Feb. 11, 1873	345	111	3	167
5, 484	Bortree, M. K., Jackson, Mich. Bustle..... (Reissue)	July 15, 1873	587	197	4	75
136, 127	Same..... Bustle.....	Feb. 25, 1873	692	224	3	219
	Borwick, A. (See Gibbs & Borwick.)					
142, 671	Boschen, J. H., New York, N. Y. Sewer basin for street corners.....	Sept. 9, 1873	315	105	4	279
	Boschert, R. E. (See Boomer, Morse & Boschert.) (Reissue)					
141, 752	Boschke, A., San Francisco, Cal. Dredging-machine..... (Extension)	Aug. 12, 1873	311	102	4	168
	Boas, J., Berlin, Md. Manufacture of watch-cases..... (Extension)	May 3, 1873	.....	.....	3	470
145, 718	Boss, M. P., Bullionville, Nev. Quicksilver-pump.....	Dec. 23, 1873	623	204	4	672
142, 370	Bostian, B. F., New Columbia, Pa. Picture and card exhibitor.....	Sept. 2, 1873	43	15	4	245
	Boston and Maine Foundry Company. (See Mingay, E., assignor.) (Design)					
145, 780	Boasworth, M. W., Binghamton, N. Y. Grain-car unloader.....	Dec. 23, 1873	673	222	4	676
	Boteler, E. M. (See Taltavull, P., assignor.)					
138, 227	Both, A. C., Portland, Me. Dredger.....	Apr. 29, 1873	893	282	3	472
134, 973	Bothwell, E. P., McArthur, Ohio. Fruit-box.....	Jan. 21, 1873	149	143	3	71
144, 596	Botsford, N., Lockport, N. Y. Vegetable-slicer.....	Nov. 18, 1873	373	126	4	532
5, 657	Bottomley, T. J., Burlington, Wis., assignor to Pratt and Letchworth, Buffalo, N. Y. Tug-holder..... (Reissue)	Nov. 18, 1873	561	190	4	547
137, 652	Bottum, J. M., New York, N. Y. Governor for steam-engines, &c.....	Apr. 8, 1873	339	105	3	396
141, 517	Bouchard, A., New Orleans, La. Self-operating switch.....	Aug. 5, 1873	110	35	4	144
135, 315	Boucher, W. F., Philadelphia, Pa. Transparent slate-frame.....	Jan. 28, 1873	765	247	3	109
144, 249	Boughton, E., South Norwalk, Conn. Hot-air draft for furnaces.....	Nov. 4, 1873	70	22	4	483
139, 232	Boughton, J. W., Philadelphia, Pa. Nursery-gate.....	May 27, 1873	716	225	3	586
140, 674	Same..... Window-screen.....	July 8, 1873	297	99	4	44
138, 730	Bouillon, E., New Orleans, La. Tucking attachment for sewing-machines.....	May 13, 1873	246	77	3	527
144, 946	Boulicault, J. B., New Albany, Ind. Flattening-oven for plate-glass.....	Nov. 25, 1873	675	229	4	567
135, 515	Boult, M. T., Battle Creek, Mich. Apparatus for turning ovals.....	Feb. 4, 1873	108	35	3	136
142, 764	Boupart, M., Fordham, N. Y. Bustle.....	Sept. 16, 1873	404	136	4	297
141, 119	Bourdecaux, P., New York, N. Y. Breach-loading fire-arm.....	July 29, 1873	801	262	4	109
143, 118	Bourguignon, W., Providence, R. I. Mosquito-canopy.....	Sept. 23, 1873	702	241	4	332
145, 484	Same..... Bottle-cover.....	Dec. 16, 1873	405	133	4	642
134, 784	Bourn, W., Geneva, N. Y. Wood-screw.....	May 13, 1873	294	90	3	531
144, 653	Bourne, E., New Iberia, La. Plow.....	Nov. 18, 1873	424	142	4	535
	Bourne, W. O., New York, N. Y. Ore-separator..... (Extension)	June 14, 1873	.....	.....	3	610
24, 367	Same..... Ore-separator..... (Disclaimer filed)	June 11, 1873	.....	.....	3	640
139, 761	Bouser, W. H., Paris, Ill. Earth-boring machine.....	June 10, 1873	304	94	3	649
138, 731	Bovey, G. C., Chillicothe, Ohio. Brick-machine.....	May 13, 1873	247	77	3	527
139, 110	Same..... Machine for pulverizing clay.....	May 20, 1873	585	183	3	568
135, 399	Bowden, J., and R. Shaw Marple, assignor of one-half interest to W. Wilson, Newcastle-on-Tyne, Great Britain. Machine for felting hat-bodies.....	Feb. 4, 1873	3	2	3	128
140, 456	Bowdish, N. S., Richfield Springs, N. Y. Roller-press for polishing photographs.....	July 1, 1873	94	32	4	16
141, 256	Same..... Camera stand.....	July 29, 1873	840	281	4	114
141, 850	Bowen, B. W., Greenville, Pa. Washing-machine.....	Aug. 19, 1873	409	133	4	186
141, 753	Bowen, K. E., George's Creek, S. C. Cotton-planter.....	Aug. 12, 1873	312	102	4	168
141, 851	Bowen, S. B., Stockton, Cal. Horse hay-fork.....	Aug. 19, 1873	409	133	4	186
	Bowen, W. H. (See Negester & Bowen.)					
140, 181	Bower, D. E., Troy, Ohio. Truss-bridge.....	June 24, 1873	696	219	3	696
134, 725	Bower, J., Lafayette, Ind. Axle-box and spindle.....	Jan. 14, 1873	223	71	3	33
135, 762	Bower, J. W., Greencastle, Ind. Railway-truck.....	Feb. 11, 1873	345	111	3	167
134, 726	Bowers, J., assignor to J. A. Ives and Brother, Baltimore County, Maryland. Sheets for forming the bodies of square or rectangular tin-cans.....	Jan. 14, 1873	221	72	3	38
142, 433	Bowers, W. H. H., Franklin, Ky. Apparatus for propelling street-cars by compressed air.....	Sept. 2, 1873	96	32	4	250
142, 765	Bowler, N. P., Cleveland, Ohio. Mold for plaster-pipe patterns.....	Sept. 16, 1873	405	137	4	297
142, 325	Bowles, H., Trempealeau, Wis. Spring for vehicles.....	Sept. 2, 1873	4	2	4	242
145, 522	Bowman, R. M. and W. H., London, Ohio. Corn-dropper.....	Dec. 16, 1873	471	155	4	617
141, 754	Bowman, W. A. D., Poughkeepsie, N. Y. Spiko-machine.....	Aug. 12, 1873	313	102	4	169
	Bowman, W. H. (See Bowman, R. M. and W. H.)					
144, 886	Bowman, W. H., London, Ohio. Nut-lock.....	Nov. 25, 1873	628	213	4	563
145, 390	Bowman, W. R., Danville, Ky. Thill-coupling.....	Dec. 9, 1873	315	106	4	623
	Bowron, W. M. (See Holmes & Bowron.)					
143, 054	Boyce, D., North Providence, R. I. Bench-hook.....	Sept. 23, 1873	654	224	4	327
	Boyd, A., executor. (See Boyd, J. C.) (Extension)					
138, 124	Boyd, A. C., assignor to E. W. Vaill, Worcester, Mass. Folding chair.....	Apr. 22, 1873	778	248	3	451
145, 985	Boyd, D., Vevay, Ind. Churn-dasher.....	Dec. 30, 1873	878	284	4	703
	Boyd, J. C., deceased, by A. Boyd, Boston, and S. Wheelwright, Lexington, Mass., executors. Elastic hose-tubing..... (Extension)	Aug. 30, 1873	.....	.....	4	210
143, 662	Boyd, J. H., Chicago, Ill. Reducing ores.....	Oct. 14, 1873	210	81	4	409
144, 184	Same..... Furnace for reducing ores containing precious metals.....	Nov. 4, 1873	8	2	4	479
144, 185	Same..... Apparatus for feeding fuel to ore-reducing furnaces.....	Nov. 4, 1873	10	3	4	479
144, 186	Same..... Furnace for reducing the ores and extracting the precious metals.....	Nov. 4, 1873	11	3	4	479
144, 250	Boyd, J. H., Plain, S. C. Guano and seed distributor.....	Nov. 4, 1873	71	23	4	184
134, 842	Boyd, L. R., New Brunswick, N. J. Oil-can stopper.....	Jan. 14, 1873	323	103	3	46
135, 072	Same..... Oil dripping-can.....	Jan. 21, 1873	537	174	3	78
	Boyd, R. (See E. H. Thurston, assignor.)					
141, 107	Boyd, T., Cambridgeport, Mass. Chimney-cap.....	July 22, 1873	704	236	4	94
142, 555	Boyden, E., Lowell, Mass. Elevator.....	Sept. 9, 1873	217	71	4	271
135, 400	Boyden, J. L., Bridgeport, Conn. Combined mop and mop-wringer.....	Feb. 4, 1873	5	2	3	128
143, 055	Boyden, W. A., Harrisburgh, Pa. Car-coupling.....	Sept. 23, 1873	654	224	4	328
143, 956	Same..... Metallic piston-packing.....	Oct. 28, 1873	544	180	4	453
	Boyer, J. E., et al. (See Foglesong, W., assignor.)					
143, 614	Boyer, W. H., Baltimore, Md. Sewing-machine table.....	Oct. 14, 1873	198	66	4	405
135, 516	Boycott, S. A., Grenada, Miss. Feather-renovator.....	Feb. 4, 1873	109	35	3	136

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	Boyington, L. C. (See Edwards, C. H., assignor.)					
143, 804	Boyle, C., Washington, D. C. Office-slate	Oct. 21, 1873	396	131	4	430
143, 744	Boyle, D. A., Attica, Ohio. Spring for wagons	Oct. 21, 1873	343	114	4	426
142, 371	Boyle, H., London, England. Heat-regulator	Sept. 2, 1873	44	15, 16	4	246
	Boyle, J. (See Koch & Brass, assignors.)					
	Same..... (See Stephens, H., assignor.)					
135, 966	Boyle, J., New York, N. Y. A-awning	Feb. 18, 1873	535	177	3	195
141, 257	Same..... Manufacture of boots and shoes	July 29, 1873	861	281	4	114
141, 755	Boyle, R. K., New York, N. Y. Electric apparatus for signaling between railway-trains	Aug. 12, 1873	313	103	4	169
143, 663	Same..... same	Oct. 4, 1873	242	81	4	409
137, 410	Boynton, A. and W., assignors to selves and E. M. Boynton, Brooklyn, N. Y. Saw-set	Apr. 1, 1873	116	38	3	366
	Boynton, E. M. (See Boynton, A. and W., assignors.)					
143, 957	Boynton, S. S. and D. Keefe, Peoria, Ill. Ice-pick	Oct. 28, 1873	544	180	4	453
	Boynton, W. (See Boynton, A. and W.)					
144, 947	Boynton, W. J., Battle Creek, Mich. Saw-set	Nov. 25, 1873	677	229	4	567
140, 457	Brabrook, G., assignor to Reed and Barton, Taunton, Mass. Collu-plate	July 1, 1873	95	32	4	16
138, 847	Brabson, T. F., Brooklyn, N. Y. Cartridge-box	May 13, 1873	350	108	3	536
138, 372	Brace, W., Washingtonville, Ohio. Work-box	Apr. 29, 1873	1,026	323	3	482
140, 310	Brace, W. H., assignor to self and J. R. Woodworth, Nunda, N. Y. Wagon-spring	June 24, 1873	645	199	3	691
142, 986	Brach, L., Philadelphia, Pa. Water-cooler	Sept. 23, 1873	593	202	4	323
145, 391	Bracher, T. W., New York, N. Y. Ornamental label for hat-linings	Dec. 9, 1873	316	106	4	623
141, 420	Brackett, J., Lynn, Mass. Lasting boots and shoes	Aug. 5, 1873	9	2	4	136
141, 597	Brackett, S. A., Boston, Mass. Attaching knobs to drawers, &c	Nov. 18, 1873	374	126	4	532
5, 391	Brackett, S. A., and W. W. Whitecomb, Boston, Mass. Seam for boots, &c (Reissue)	May 6, 1873	235	73	3	516
134, 843	Brada, J., New York, N. Y. Sofa-bedstead	Jan. 14, 1873	324	103	3	46
135, 316	Bradford, D., Hamilton, Canada. Car-coupling	Jan. 28, 1873	766	247	3	109
	Bradford, H. (See Wilford, J. B., assignor.)					
143, 219	Bradford, H., Reading, Pa. Separator for coal, ores, &c	Sept. 30, 1873	785	271	4	354
143, 323	Same..... Feeding-device for coal and ore separators	Sept. 30, 1873	877	300	4	362
143, 492	Same..... Apparatus for separating ores and other substances	Oct. 7, 1873	80	27	4	3-7
143, 745	Same..... Coal-breaker	Oct. 21, 1873	344	115	4	426
135, 073	Bradford, H. C., Providence, R. I. Crank-movement	Jan. 21, 1873	537	174	3	78
135, 763	Same..... Machine for setting button and lacing hooks	Feb. 11, 1873	346	111	3	167
135, 197	Bradford, J., assignor to Chicago Shot-Tower Company, Chicago, Ill. Revolving bullet-mold	Jan. 28, 1873	650	212	3	101
140, 458	Bradford, J., Wilmington, Del. Inclined way for building levees	July 1, 1873	95	33	4	16
136, 301	Bradford, L. G., Plymouth, Mass. Bedstead-fastening	Feb. 25, 1873	842	272	3	231
134, 727	Bradford, W. B., Charlotte, N. C. Sash-holder	Jan. 14, 1873	225	72	3	38
	Bradley and Hubbard. (See Bradley, N. L., assignor.)					
	Same..... (Design.)					
	Same..... same					
	Same..... (See Everts, J. A., assignor.)					
	Same..... (See Everts & Cinquini, assignors.) (Reissue)					
	Same..... (See Shepard, H. E., assignor.)					
	Same..... (See Stratton, H., assignor.)					
	Same..... (See Tyler, H. B., assignor.)					
	Bradley, A. C. (See Bradley, S. R. and A. C.)					
135, 401	Bradley, B. C., Chicago, Ill. Cultivator	Feb. 14, 1873	6	2	3	128
140, 111	Same..... Wrench	June 24, 1873	636	200	3	691
	Bradley, C. (See Smith, I. B. and H., and Bradley.)					
137, 591	Bradley, C. A., Monticello, Fla. Steam-washer	Apr. 8, 1873	289	89	3	392
141, 030	Bradley, C. D., Taunton, Mass. Medical compound for neutralizing the taste of cod-liver oil	July 22, 1873	636	.....	4	88
144, 948	Bradley, C. E., Wilmington, Del. Compound for filling wood	Nov. 25, 1873	678	.....	4	567
137, 411	Bradley, E. F., assignor to J. Sheldon, New Haven, Conn. Brush-machine	Apr. 1, 1873	117	32, 39	3	366
137, 340	Bradley, E. L., et al. (See Andrews, E., assignor.)					
145, 331	Bradley, E. N., Bridgeport, Conn. Wall or window washer	Apr. 1, 1873	59	18	3	361
139, 290	Bradley, G., assignor to C. R. Chandler, Rockford, Ill. Wheel cultivator	Dec. 9, 1873	268	90	4	619
5, 634	Bradley, H. D., assignor to Bristol Brass and Clock Company, Forestville, Conn. Hinge	May 27, 1873	769	244	3	591
138, 556	Bradley, J., and J. Nicholas, Gomer, O. Machine for thrashing and hulling clover. (Reissue)	Oct. 28, 1873	744	247	4	469
134, 636	Same..... Machine for thrashing and hulling corn	May 6, 1873	80	26	3	504
6, 949	Bradley, L., Jersey City, N. J. Apparatus for electric measurement	Jan. 7, 1873	128	41	3	17
6, 899	Bradley, M., Springfield, Mass., assignor to the Union Manufacturing Company, New Britain, Conn. Butt-hinge	Oct. 7, 1873	.....	.....	4	380
	Bradley, N. L., assignor to Bradley and Hubbard, West Meriden, Conn. Lamp-foot	Sept. 30, 1873	.....	.....	4	354
	Same..... Lamp-pedestal (Design)	Dec. 16, 1873	.....	.....	4	641
7, 049	Same..... Chandelier	Jan. 7, 1873	81	26	3	13
134, 585	Bradley, S. R. and A. C., Brooklyn, N. Y. Car-starter	May 13, 1873	351	109	3	536
138, 848	Bradley, W. (See Parmiter & Bradley.)					
134, 586	Bradley, W., Providence, R. I. Cover for pitchers	Jan. 7, 1873	82	26	3	13
134, 844	Bradley, W. L. (See Whittier, C., assignor.)					
	Bradley, W. L., Boston, Mass. Apparatus for treating oil	Jan. 14, 1873	325	104	3	46
	Bradt, T. D. (See Greene & Bradt.)					
144, 654	Brady, F. A., et al. (See Gifford, E. N., assignor.)					
	Brady, L. C., Chambersville, Pa. Dumping-car	Nov. 18, 1873	425	143	4	535
	Bragg, H. M. (See Duffee, E., assignor.)					
140, 675	Bragg, I. W., Kidder, Mo. Harvester	July 8, 1873	298	100	4	44
139, 291	Brahn, J., Jersey City, N. J. Railway-frog	May 27, 1873	770	244	3	591
143, 781	Same..... Railway-crossing	Dec. 23, 1873	679	222	4	676
	Braidwood, J. (See Chaput and W. and J. Braidwood.)					
	Braidwood, W. (See Chaput and W. and J. Braidwood.)					
141, 314	Braidwood, W. and H. J. Hewitt, New York, N. Y. Rotary printing-press	July 29, 1873	910	298	4	118
141, 315	Same..... same	July 29, 1873	912	299	4	118
136, 128	Bradley, P., Oakland, Cal. Swimming-bath	Feb. 25, 1873	693	224	3	219
	Bramble, J., jr. (See Entrekui & Bramble.)					
140, 182	Bramer, F., Little Falls, N. Y. Combined wheel-harrow and seeder	June 24, 1873	697	219	3	696
136, 839	Branch, G. M., Winona, assignor to W. A. Moore, Magnolia, Miss. Horse-power	Mar. 18, 1873	497	164	3	303
	Branch, H. A., et al. (See Dayton, M. E., assignor.)					
	Branch, J. H. (See Crookes, J., assignor.)					
	Branch, J. W. (See Crookes, J., assignor.)					
	Same..... (See Marriott, A., assignor.)					
143, 558	Brand, C. F., assignors of one-half interest to Philadelphia Architectural Iron Company, Philadelphia, Pa. Machine for bending sheet-metal	Oct. 14, 1873	153	51	4	401
144, 501	Same..... Assignors to the Architectural Iron Company, Philadelphia, Pa. Fire-proof partition	Nov. 11, 1873	284	96	4	513

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 782	Brand, P., J. Barrows, and A. Armstrong, Jacksonville, Ill. Wind-wheel.....	Dec. 23, 1873	679	222	4	677
140, 112	Brand, W. and G. Puder, Evansville, Ind. Rotary churn.....	June 24, 1873	636	200	3	692
142, 201	Brandis, S., assignor to self and J. R. Jones, and S. T. Benner, Philadelphia, Pa. Metallic column.....	Aug. 26, 1873	738	213	4	222
	Brandon, D. H. (See Baranowski, J. J., assignor.)					
	Brandt, H. P. (See Voss & Brandt.)					
144, 312	Branigan, T., Beloit, Wis. Boot-tree.....	Nov. 4, 1873	114	38, 39	4	488
	Braunen, J. (See Blaisse & Brannen.)					
140, 459	Brannen, J., Philadelphia, Pa. Sliding or extension chandeliers.....	July 1, 1873	96	33	4	16
	Branson, J. L. (See Barker, J. C., assignor.)					
	Brasclon, T. C. (See Grigsby & Brasclon.)					
	Brass, R. (See Koch & Brass.)					
143, 664	Brassil, M., Hartford, Conn. Spark-arrester for locomotives.....	Oct. 14, 1873	243	82	4	409
136, 409	Brate, B. F., New Scotland, N. Y. Cultivator.....	Mar. 4, 1873	49	17	3	249
134, 510	Bratt, L. H., South Bend, Ind. Horse-power.....	Jan. 7, 1873	9	3	3	8
142, 202	Braun, A. & F., Buffalo, N. Y. Billiard-table.....	Aug. 26, 1873	739	243	4	222
	Braun, F. (See Braun, A. & F.)					
138, 066	Braun, J., assignor to Goodell, Brann & Co., Philadelphia, Pa. Nut-machine.....	Apr. 22, 1873	733	232	3	450
138, 067	Same..... Machine for making machine-screws.....	Apr. 22, 1873	734	232	3	450
135, 517	Brannan, G. A., Baltimore, Md. Car-axle lubricator.....	Feb. 4, 1873	110	35	3	136
139, 493	Bray, A., Chicopee, Mass. Invalid-bedstead.....	June 3, 1873	46	14	3	612
5, 257	Bray, M., Newton, Mass. Die for forming sheet-metal ware..... (Reissue.)	Jan. 28, 1873	842	271	3	115
140, 881	Same..... Manufacture of hollow rivets.....	July 15, 1873	477	161	4	96
142, 203	Same..... Boot and shoe heel.....	Aug. 26, 1873	740	243	4	222
144, 380	Same..... Can for fruit, &c.....	Nov. 11, 1873	184	63	4	505
136, 484	Bray, W., Lambertville, N. J. Refrigerating apparatus for vessels, railway-cars, &c.....	Mar. 4, 1873	114	38	3	255
145, 834	Same..... Ice-machine.....	Dec. 23, 1873	722	238	4	680
6, 785	Brayer, N., Rochester, N. Y. Monumental urn..... (Design.)	July 29, 1873			4	108
	Brayley, J. (See Bronson, L., assignor.)					
141, 108	Brayton, E. K., and J. Baugh, Eau Claire, Wis. Trace-buckle.....	July 22, 1873	705	236	4	94
136, 695	Brear, A., Saugatuck, Conn. Smoking-tube.....	Mar. 11, 1873	313	104	3	279
145, 617	Same..... assignor to self and W. W. Wood, Washington, D. C. Rotary pump or blower.....	Dec. 16, 1873	525	172	4	652
	Brearily, J. T. (See Roberts, I., assignor.)					
5, 239	Breckenridge, R. M., West Meriden, Conn. Stove-pipe damper..... (Reissue.)	Jan. 21, 1873	633	206	3	86
137, 126	Breed, A., La Harpe, Ill. Clack-valve for wooden pumps.....	Mar. 25, 1873	705	234	3	331
	Breed, G. F., et al. (See Carey, A. C., assignor.)					
144, 251	Breedon, H. S., Barry, Ill. Scissors.....	Nov. 4, 1873	71	23	4	484
142, 672	Breese, J. W., Canandaigua, Mich. Grain-separator.....	Sept. 9, 1873	316	105	4	279
	Breitenstein, H. (See Bailey, J., assignor.)					
137, 173	Brenner, F., Cincinnati, Ohio. Apparatus for pitching cask.....	Mar. 25, 1873	747	247	3	334
143, 401	Brenner, M., Baltimore, Md. Slaughtering-apparatus.....	Oct. 7, 1873	3	1	4	381
145, 086	Breton, R., Easton, Pa., assignor to B. Douglass, Montrose, N. J. Steam and vapor generator.....	Dec. 2, 1873	45	14	4	589
138, 068	Bresnihan, J. D., Montgomery, Ala. Boiler fire-extinguisher.....	Apr. 22, 1873	736	233	3	450
139, 762	Brett, B., Geneva, Ohio. Automatic boiler-feed regulator.....	June 10, 1873	306	95	3	649
145, 392	Brett, H. W., Boston, Mass. Sand-paper roller.....	Dec. 9, 1873	317	106	4	623
136, 963	Brettell, E. W., New Haven, Conn. Permutation-lock.....	Mar. 18, 1873	548	181	3	308
	Same..... Tumbler for permutation-locks.....	Dec. 16, 1873	526	173	4	652
140, 113	Brettell, G. E., Rochester, N. Y. Mandrel for holding tempered cast rings.....	June 24, 1873	637	200	3	692
135, 317	Breval, L., Paris, France. Apparatus for expressing liquid from spent tan-bark.....	Jan. 28, 1873	767	248	3	109
	Brevoort, H. L. (See Craig & Brevoort.)					
	Brewer, J. (See Morrell & Brewer.)					
139, 655	Brewer, R., New York, N. Y. Railway-car axle-box.....	June 10, 1873	198	65	3	641
135, 030	Brewer, W. D., Charlestown, Mass. Cigar bunch-pressing and molding machine.....	Jan. 21, 1873	501	161	3	75
135, 031	Same..... Retainer for pressed and molded cigar-bunches.....	Jan. 21, 1873	502	162	3	75
	Brewster & Co. (See Mosier, J. L. H., assignor.)					
	Brewster, J. B. & Co. (See Wood, T. H., assignor.)					
135, 402	Brewster, W. S., Chicago, Ill. Lock for freight-car doors.....	Feb. 4, 1873	6		3	128
140, 676	Brice, G. A., Townville, Pa. Fifth-wheel for vehicles.....	July 8, 1873	299	100	4	44
143, 058	Same..... Spring-wagon.....	Oct. 28, 1873	545	181	4	453
138, 069	Brick, J. M., Marlton, N. J. Corn-stalk knife.....	Apr. 22, 1873	737	233	3	451
144, 313	Bridge, J., Augusta, Me. Wood-grinder.....	Nov. 4, 1873	115	39	4	488
	Bridge, L. (See Stuart & Bridge.)					
	Bridgeport Electro-Casting Company. (See Rebstock & Ottner, assignors.) (Reissue.)					
139, 862	Bridges, A., Westfield, N. J. Car-spring.....	June 17, 1873	400	125	3	664
144, 054	Brien, R. & W., Jersey City, N. J. Ventilator and pipe-hole plate for tents.....	Oct. 28, 1873	631	208	4	460
	Brien, W. (See Brien, R. & W.)					
141, 484	Brientnall, G. W., Lancaster, Pa. Shirt-collar fastener.....	Aug. 5, 1873	65	21	4	140
	Briggs, A. E. (See Briggs, J. W. H., & A. E.)					
	Briggs, C. C., et al. (See Skinner, H. M., assignor.)					
141, 199	Briggs, E., Cleveland, Ohio. Cultivator.....	July 29, 1873	802	262	4	109
	Briggs, F. M. (See Thompson, J. G., assignor.)					
134, 845	Briggs, G. W., New Haven, Conn. Die for capping screws.....	Jan. 14, 1873	326	104	3	46
139, 111	Briggs, J., Toronto, Canada. Chimney and fire-place.....	May 20, 1873	586	184	3	568
145, 087	Briggs, J. N., South Adams, Mass. Saw-set.....	Dec. 2, 1873	47	14	4	589
142, 204	Briggs, J. W. H., & A. E., Newport, Ky. Locomotive head-light.....	Aug. 26, 1873	740	244	4	222
	Briggs, L. W. (See Briggs, O. P. & L. W.)					
143, 056	Briggs, L. W., assignor of two-thirds interest to T. M. Curtiss and H. H. Ladd, Chicago, Ill. Device for raising sunken vessels.....	Sept. 23, 1873	655	224	4	328
136, 696	Briggs, O. P. & L. W., assignors of half interest to G. W. Gillett, Chicago, Ill. Bung-bush.....	Mar. 11, 1873	314	104	3	279
137, 757	Briggs, O. P. & L. W., said O. P. assignor to said L. W. Briggs, Chicago, Ill. Machine for threading nuts.....	Apr. 15, 1873	445	138	3	417
				139		
140, 882	Briggs, R., Philadelphia, Pa. Crane.....	July 15, 1873	478	162	4	66
138, 373	Briggs, S. A., Tidouste, Pa. Self-tamping torpedo.....	Apr. 23, 1873	1,026	323	3	482
	Briggs, W. H. (See Briggs, J. W. H., & A. E.)					
142, 893	Brigham, C. H., assignor to self, G. F. Smith, Marlborough, S. Moore, and H. Rodgers, Sudbury, Mass. Method of forming soles of boots and shoes.....	Sept. 16, 1873	508	173	4	306
	Brigham, C. P., et al. (See Howard & Jackson, assignors.) (Reissue.)					
141, 538	Bright, J. M., and E. Standt, Bernville, Pa. Planting-machine.....	Aug. 5, 1873	110	35	4	144
134, 974	Bright, W., Saint Louis, Mo. Newspaper-file holder.....	Jan. 21, 1873	149	144	3	71
138, 607	Brightman, N. P., New Bedford, Mass. Steam-generator.....	May 6, 1873	120	40	3	507
	Brill, G. M. (See Brill, J. G. & G. M.)					
145, 839	Brill, J. G. & G. M., Philadelphia, Pa. Operating car-doors.....	Dec. 23, 1873	723	238	4	680
	Brilmayer, F. (See Shollenback & Brilmayer.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Brimble, E. (<i>See Lane, J. W., assignor.</i>)					
140, 460	Brimingham, G. B., Trenton, Tenn. Subsoil-plow	July 1, 1873	98	33	4	17
140, 183	Brinckmann, A., New York, N. Y. Self-closing faucet	June 24, 1873	699	219	3	696
140, 461	Bringier, M. S., Ascension Parish, La. Apparatus and process for extracting saccharine matter from sugar-cane	July 1, 1873	99	34	4	16
141, 316	Same..... Apparatus for extracting saccharine matter from cane, &c.	July 29, 1873	913	299	4	118
6, 614	Bringman, G. E., Philadelphia, Pa. Knobs and plates (Design)	Apr. 29, 1873	.....	.....	3	471
145, 619	Brinkerhoff, A. W., Upper Sandusky, Ohio. Tool for molding inkstands	Dec. 16, 1873	527	173	4	652
143, 120	Brinkerhoff, G. F., Bucyrus, Ohio. Stove-pipe connection	Sept. 23, 1873	703	241	4	332
5, 218	Brinkerhoff, J., Auburn, N. Y. Clothes-wringer (Reissue)	Jan. 7, 1873	208	67	3	23
140, 004	Brinly, T. E. C., Louisville, Ky. Plow	June 17, 1873	516	164	3	674
142, 077	Brinser, E. C., assignor of one-half interest to S. C. Brinser, Middletown, Pa. Table-hinge	Aug. 26, 1873	632	208	4	213
	Brinser, S. C. (<i>See Brinser, E. C., assignor.</i>)					
	Bristol Brass and Clock Company. (<i>See Bradley, H. D., assignor.</i>)					
5, 639	Bristol, C. B., New Haven, Conn. Snap-hook (Reissue)	Nov. 4, 1873	173	58	4	492
140, 462	Bristol, H. C., assignor to self, W. D. Hart, and J. Clark, jr., East China, Mich. Water-feed for boilers	July 1, 1873	101	34	4	16
143, 612	Britt, J. L. and T. R., Raleigh, N. C. Churn	Oct. 14, 1873	199	67	4	405
	Britt, T. R. (<i>See Britt, J. L. and T. R.</i>)					
	Brittan, A. (<i>See Whitcomb, J. B., assignor.</i>)					
	Brittan, J. (<i>See Whitcomb, J. B., assignor.</i>)					
135, 764	Britton, R. G., Springfield, Vt. Child's carriage	Feb. 11, 1873	348	{ 111 112 }	3	167
138, 785	Brizee, J., Alvarado, Cal. Clothes-line reel	May 13, 1873	264	90	3	531
	Broadaway, W., et al. (<i>See Ruth, W. A., assignor.</i>)					
	Broadbent, J. F. (<i>See Cleary, D. M., assignor.</i>)					
136, 964	Broadbooks, P., assignor of one-half interest to S. Lowler and E. F. Whitney, Batavia, N. Y. Wrench and bolt-cutter	Mar. 18, 1873	550	182	3	308
137, 821	Broadbooks, P., assignor of one-half interest to C. N. Grove, Batavia, N. Y. Pruning-shears	Apr. 15, 1873	502	156	3	422
144, 734	Broadbooks, P., assignor of one-half interest to S. Wakeman, Batavia, N. Y. Cutting-nippers, &c.	Nov. 18, 1873	488	{ 165 166 }	4	541
	Broadmeadow, J. P., Bridgeport, Conn. Molding for metal-casting (Extension)	Nov. 29, 1873	.....	.....	4	557
136, 129	Broadnax, A., Mont Clair, N. J. Rendering-apparatus for fats, oil, &c. (Extension)	Feb. 25, 1873	694	{ 224 225 }	3	219
	Broadwell, B. F., et al. (<i>See Korating, F., assignor.</i>)					
	Broadwell, L. W. (<i>See Michaels & Broadwell.</i>)					
142, 987	Brobston, D., Chicago, Ill. Sand-sifter	Sept. 23, 1873	594	202	4	323
142, 988	Same..... Dredging-scraper	Sept. 23, 1873	595	202	4	323
135, 765	Brock, A. D., Washington, D. C. Steam water-elevator	Feb. 11, 1873	349	112	3	167
	Brock, J. W., et al. (<i>See Lane, D., assignor.</i>)					
	Brock, O. W., Etna, Ohio. Sawing-machine (Two cases.)					
137, 758	Brock, O. W., Etna, Ohio. Sawing-machine	Apr. 15, 1873	449	139	3	418
140, 005	Brocket, E. L., Nelson, Ohio. Bed-bottom	June 17, 1873	517	164	3	674
142, 673	Brockett, D. E., Wheeling, W. Va. Railway-switch	Sept. 9, 1873	316	105	4	279
145, 986	Brocksmith, H., Saint Louis, Mo. Wagon hay-press	Dec. 30, 1873	878	285	4	703
140, 572	Brockway, M., jr., Angola, Ind. Carriage-seat fastener	July 8, 1873	213	71	4	37
141, 109	Brockway, W. E., assignor to W. L. Brockway, New York, N. Y. Restoring tinned sheet-iron	July 22, 1873	706	.....	4	94
	Brockway, W. L. (<i>See Brockway, W. E., assignor.</i>)					
	Brodhead, J. A., administrator. (<i>See Tufts, O., assignor.</i>) (Extension)					
	Same..... same					
5, 333	Brodie, G., Plum Bayou, Ark. Metallic band for baling (Extension)	Mar. 22, 1873	.....	.....	3	296
	Brodie, G., Plum Bayou, Ark., assignor to J. J. McComb, Liverpool, England. Cotton-bale tie (Reissue)	Mar. 25, 1873	843	277	3	342
142, 894	Brodie, G., Plum Bayou, Ark. Bale-tie	Sept. 16, 1873	508	173	4	306
139, 863	Brombacher, C., Tarrytown, N. Y. Machine for seaming sheet-metal	June 17, 1873	400	125	3	664
	Bromley, J., & Sons. (<i>See Bromley, J. H., assignor.</i>) (Design)					
6, 386	Bromley, J. H., assignor to J. Bromley & Sons, Philadelphia, Pa. Carpet (Design)	Feb. 11, 1873	.....	.....	3	156
144, 949	Bromley, T. H., Stoneborough, Pa. Sleigh-brake	Nov. 25, 1873	678	230	4	567
136, 026	Bronson, E. D., Amsterdam, N. Y. Broom-bag	Feb. 18, 1873	587	193	3	199
144, 435	Bronson, H. M., Sandusky, Ohio. Implement for capping cartridges	Nov. 11, 1873	231	78	4	509
134, 511	Bronson, L., assignor to J. Brayley, Buffalo, N. Y. Horse-power	Jan. 7, 1873	9	4	3	8
139, 538	Brooke, J. M., Lexington, Va., assignor of one-half interest to T. T. Mumford. Apparatus for forcing water by direct condensation of air	June 3, 1873	79	27	3	615
134, 587	Brooke, W. M., Eaton, Ohio. Inkstand	Jan. 7, 1873	82	26	3	13
138, 608	Brookmann, A., Chicago, Ill. Button-fastener	May 6, 1873	121	40	3	508
135, 518	Brooks, B. G., Manchester, N. H. Apparatus for washing printed or bleached goods	Feb. 4, 1873	110	35	3	136
141, 691	Brooks, B. H., New Haven, Conn. Combined hook and harp	Aug. 12, 1873	262	84	4	164
	Brooks, C. H. (<i>See Smilie & Brooks.</i>)					
	Brooks, E. F. (<i>See Seal & Brooks.</i>)					
	Same..... (<i>See Seal, C. E., assignor.</i>)					
	Same..... same (Reissue)					
144, 735	Brooks, E. F., Baltimore, Md., assignor to self and C. E. Seal, Winchester, Va. Automatic lubricating water and gas cock	Nov. 18, 1873	489	166	4	541
	Brooks, E. J. (<i>See Brooks, F. W., assignor.</i>)					
	Same..... (<i>See Hamilton, F. C., assignor.</i>)					
139, 764	Same..... New York, N. Y. Combined label and seal for locks	June 10, 1873	308	95	3	649
141, 110	Brooks, F. W., assignor to E. J. Brooks, New York, N. Y. Seal for locks	July 22, 1873	707	236	4	94
	Brooks, G. D., et al. (<i>See Brooks, W. D., assignor.</i>)					
	Same..... (<i>See Spence, J. F., assignor.</i>)					
140, 678	Brooks, G. D., et al., assignor to self and M. C. Brooks, Baltimore, Md. Sheet-metal seaming-machine	July 8, 1873	360	101	4	44
142, 674	Brooks, G. W., Bloomington, Ill. Blind-slat fastener	Sept. 9, 1873	317	105	4	279
	Brooks, H. W., et al. (<i>See Shaw, A. B., assignor.</i>)					
135, 767	Brooks, J., assignor to self and C. Howard & Co., North Bridgewater, Mass. Machine for turning sewing-machine needle-blanks	Feb. 11, 1873	350	{ 112 113 }	3	167
135, 766	Brooks, J. M., Woodbury, Ga. Cotton-planter	Feb. 11, 1873	350	112	3	167
136, 697	Brooks, J. M., jr., Griffin, Ga. Cotton-press	Mar. 11, 1873	315	104	3	279
	Brooks, J. W., trustee. (<i>See Ellis, G. W., assignor.</i>) (Reissue)					
	Same..... (<i>See Ellis & Glidden, assignors.</i>) (Reissue)					
	Same..... (<i>See Fairfield, H. P., assignor.</i>)					
	Same..... (<i>See Glidden & Fairfield, assignors.</i>)					
	Same..... (<i>See Glidden, C. W., assignor.</i>)					
	Same..... (<i>See Helms, C. H., assignor.</i>) (Reissue)					
	Same..... (<i>See Knowlton, A., assignor.</i>)					

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145, 485	Brooks, M., Chicago, Ill. Drawing-knife.....	Dec. 16, 1873	405	133	4	642
	Brooks, M. C. (See Brooks, G. D., assignor.)					
	Brooks, M. C., et al. (See Brooks, W. D., assignor.)					
	Same..... (See Spence, J. F., assignor.)					
142, 434	Brooks, M. D., Boston, Mass. Rivet-setting machine.....	Sept. 2, 1873	97	32	4	250
	Brooks, S. R. (See Mulloony, Cope & Brooks.)					
135, 768	Brooks, T., Canton, Ohio. Manufacture of steel.....	Feb. 11, 1873	352	.....	3	167
144, 015	Brooks, W. C., Stoneham, Pa. Car-coupling.....	Oct. 28, 1873	599	198	4	457
137, 888	Brooks, W. D., assignor to M. C. and G. D. Brooks, Baltimore, Md. Soldering-machine.....	Apr. 15, 1873	556	174	3	426
139, 539	Same..... same..... same.....	June 3, 1873	80	28	3	615
139, 763	Same..... same..... same.....	June 10, 1873	307	95	3	649
140, 679	Same..... same..... same.....	July 8, 1873	301	101	4	44
135, 318	Brooks, W. P., Lawrence, Kans. Washing-machine.....	Jan. 28, 1873	768	248	3	109
138, 374	Brooks, W. P., and J. D. Hartzell, Ozawkie, Kans. Washing-machine.....	Apr. 29, 1873	1,027	324	3	482
140, 344	Same..... Clothes-wringer.....	July 1, 1873	9	3	4	8
	Brooks, W. P. B. (See Moulton, J., assignor.)					
139, 494	Brooks, W. R., Phelps, N. Y. Clothes-washer.....	June 3, 1873	46	14	3	612
145, 922	Brosseau, V., Saint Sebastian, Canada. Manufacture of imitation medicated wines.....	Dec. 30, 1873	827	.....	4	699
145, 719	Brotherhood, P., Notting-Hill, England. Triple-cylinder engine.....	Dec. 23, 1873	624	205	4	672
137, 412	Browell, J., San Francisco, Cal. Chimney.....	Apr. 1, 1873	118	39	3	366
	Brown, M. P. (See Allen, Brown & Moulthrop)					
6, 878	Brower, B., New York, N. Y. Inkstand..... (Design).....	Sept. 9, 1873	.....	.....	4	270
6, 879	Same..... same.....	Sept. 9, 1873	.....	.....	4	270
141, 421	Same..... Water-bowl.....	Aug. 5, 1873	11	3	4	136
141, 422	Same..... Copying-press table.....	Aug. 5, 1873	12	3	4	136
144, 825	Same..... Inkstand.....	Nov. 25, 1873	577	196	4	558
136, 210	Brower, H. L., New York, N. Y. Burglar-alarm.....	Feb. 25, 1873	760	246	3	225
140, 893	Same..... Automatic toy.....	July 15, 1873	479	162	4	66
143, 121	Brower, H. L., New York, N. Y., assignor to J. D. Brower, Yonkers, N. Y. Automatic toy-dancer.....	Sept. 23, 1873	704	241	4	332
144, 252	Brower, I. V., and J. C. Higgins, Millstone, N. J. Walk-edger.....	Nov. 4, 1873	72	23	4	484
	Brower, J. D. (See Brower, H. L., assignor.)					
134, 846	Brower, S. P., Glen's Falls, N. Y., assignor of one-half interest to W. H. Knox. Machine for sawing laths.....	Jan. 14, 1873	326	104	3	46
143, 325	Brower, S. P., and W. H. Knox, Glen's Falls, N. Y. Lath-machine.....	Sept. 30, 1873	879	300	4	362
138, 473	Brown, A., Fond du Lac, Wis. Medical compound.....	May 6, 1873	7	.....	3	498
136, 900	Brown, A. C., Chicago, Ill. Hanging-bracket or shelf.....	Mar. 18, 1873	498	165	3	303
	Brown, A. L., et al. (See Dustin, J. E., assignor.)					
138, 375	Brown, A. P., Upperville, Va. Vacuum-pan.....	Apr. 29, 1873	1,028	324	3	482
140, 006	Brown, A. P., New York, N. Y. Globe-valve.....	June 17, 1873	517	164	3	674
138, 849	Brown, C. A., Troy, N. Y. Paper-collar.....	May 13, 1873	352	109	3	536
136, 641	Brown, C. B., New Rochelle, N. Y. Clothes-line pole.....	Mar. 11, 1873	271	91	3	276
141, 031	Brown, C. B., assignor to self and A. Woodman, Lewiston, Me. Roller-clearer for spinning-machines.....	July 22, 1873	636	214	4	84
145, 620	Brown, C. D., and E. B. Denison, Portland, Me. Manufacture of paper-pulp.....	Dec. 16, 1873	328	.....	4	652
142, 372	Brown, C. F., Bristol, R. I. Machine for rolling round-tapered bars.....	Sept. 2, 1873	46	16	4	246
137, 174	Brown, C. H., and J. J. Thomas, Philadelphia, Pa. Apparatus for exhausting and washing gas.....	Mar. 25, 1873	747	248	3	335
135, 074	Brown, C. J., Plymouth, N. H. Safety-apparatus for lamps.....	Jan. 21, 1873	538	175	3	78
139, 765	Brown, C. M., Baltimore, Md. Ditching-machine.....	June 10, 1873	309	96	3	649
135, 769	Brown, C. N., Providence, R. I. Machine for gumming saws.....	Feb. 11, 1873	352	113	3	167
144, 950	Same..... Writing-tablet.....	Nov. 25, 1873	679	230	4	567
	Brown, D. (See Smith & Ogden, assignors.)					
140, 993	Brown, D., assignor to self and W. E. George, Wrentham, Mass. Hat-pressing machinery.....	July 22, 1873	602	204	4	85
145, 783	Brown, D., Clinton, Tex. Wheel for vehicles.....	Dec. 23, 1873	680	222	4	677
	Brown, E. (See McKinnon, D., assignor.)					
136, 358	Brown, E., Wappinger's Falls, N. Y. Band comb.....	Mar. 4, 1873	4	2	3	215
142, 675	Brown, E. C., Crawfordsville, Ind. Corn-planter.....	Sept. 9, 1873	318	106	4	279
	Brown, E. D. (See Nichols & Brown.)					
	Brown, F. B. (See Rowe & Brown.)					
144, 598	Brown, F. E., Pawtucket, R. I. Stud and button.....	Nov. 18, 1873	375	126	4	532
138, 125	Brown, F. E., and J. R. Shangle, Hightstown, N. J. Corn-sheller.....	Apr. 22, 1873	778	248	3	454
	Brown, F. W. (See Bean, J. H., assignor.)..... (Reissue.)					
141, 626	Brown, F. W., Cincinnati, O. Tucker for sewing-machines.....	Aug. 12, 1873	206	65	4	160
139, 364	Brown, G. B., assignor to self and L. J. Bazzoni, Newburgh, N. Y. Carriage-protector.....	May 27, 1873	823	263	3	595
142, 895	Brown, G. W., Buffalo, N. Y. Spring bed-bottom.....	Sept. 16, 1873	509	174	4	306
	Brown, Harris & Hopkins. (See Bean & Mills, assignors.)					
	Brown, H. (See Smith & Brown)..... (Design.)					
142, 896	Brown, H. F., Indianapolis, Ind. Coal and rock cutting machine.....	Sept. 16, 1873	510	174	4	306
5, 273	Brown, H. L., Adrian, Mich. Hand-car..... (Reissue.)	Feb. 11, 1873	446	145	3	174
5, 274	Same..... same..... (Reissue.)	Feb. 11, 1873	447	145	3	174
139, 292	Brown, H. L., Middletown, Conn. Automatic fire-alarm.....	May 27, 1873	770	244	3	591
145, 332	Same..... Burglar-alarm.....	Dec. 9, 1873	269	90	4	619
139, 864	Brown, H. O., Castleton, Vt. Composition-dressing for roofs.....	June 17, 1873	401	.....	3	664
139, 363	Brown, H. W., Warron, Pa. Buckle for hanging reciprocating saws.....	May 27, 1873	822	263	3	595
139, 233	Brown, I., Glenville, Md. Reciprocating steam-engine and saw-mill combined.....	May 27, 1873	716	225	3	586
144, 055	Brown, I., Edinburgh, New Britain. Watering streets and roads.....	Oct. 28, 1873	632	208	4	460
141, 290	Brown, I. F., New London, Conn. Washing-machine.....	July 29, 1873	803	262	4	109
142, 373	Brown, J., Brooklyn, N. Y. Loom shuttle.....	Sept. 2, 1873	46	16	4	246
145, 148	Brown, J., Southampton, Ill. Sower attachment to plows.....	Dec. 2, 1873	101	34	4	593
134, 637	Brown, J. B., Washington, D. C. Bag-holder.....	Jan. 7, 1873	130	42	3	17
145, 621	Brown, J. C. H., Jersey City, N. J. Chimney-top.....	Dec. 16, 1873	528	173	4	652
	Brown, J. H. (See Douglass & Brown.)					
141, 485	Brown, J. H., Lynn, Mass. Coal-hod.....	Aug. 5, 1873	66	21	4	140
	Brown, J. L. (See Brown, T. A., & J. L.)					
138, 376	Brown, J. L., Brookville, Pa. Slide-valve.....	Apr. 29, 1873	1,029	324	3	482
141, 423	Brown, J. M., Lynn, Mass. Cleaning wool on pelts.....	Aug. 5, 1873	12	.....	4	136
	Brown, J. O. (See Bayliss, Brown & Lomont.)					
	Brown, J. O., et al. (See Hodges, P. F., assignor.)					
142, 143	Brown, J. R., assignor to self and H. P. Huntoon, Cambridgeport, Mass. Pipe tongs.....	Aug. 26, 1873	691	227	4	218
144, 253	Same..... same.....	Nov. 4, 1873	72	23	4	484
145, 929	Same..... same.....	Dec. 30, 1873	827	269	4	699
145, 840	Brown, J. R., New Haven, Conn., assignor of one-half interest to H. A. Stearns, Lincoln, R. I. Process for purifying and bleaching tallow, lard, &c.....	Dec. 23, 1873	725	.....	4	680

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
135, 519	Brown, J. R., and W. A. Foskett, New Haven, Conn. Low-water alarm for steam-boilers.	Feb. 4, 1873	111	36	3	136
137, 653	Same..... Filter	Apr. 8, 1873	340	105	3	396
	Brown, J. S. (See Hull & Brown.)					
	Brown, J. W. (See Smith, J. G., assignor.)					
138, 377	Brown, J. W., Butlerville, Ind., and H. B. West, Put-in-Bay, Ohio. Gas-apparatus	Apr. 29, 1873	1,029	324	3	482
	Brown, K. (See Carr, W., assignor.)					
	Brown, L., et al. (See Bancroft, L., assignor.)					
	Brown, N. (See Newman & Brown.)					
	Brown, N. B., et al. (See Hart, J., assignor.)					
145, 622	Brown, O. B., and H. G. Carey, Malden, Mass. Music blackboard.....	Dec. 16, 1873	529	173	4	652
138, 557	Brown, O. C., Iberia, Ohio. Apparatus for loading and unloading baggage and freight from cars.....	May 6, 1873	81	26	3	504
143, 433	Brown, O. L., Hopkinton, Mass. Hemmer	Oct. 7, 1873	33	12	4	383
	Brown, P. F. (See Young, C. A., assignor.)					
145, 088	Brown, R. A., Oakland, Miss. Plow	Dec. 2, 1873	48	15	4	589
142, 078	Brown, R. H., Linneus, Mo. Heating-stove.....	Aug. 26, 1873	633	208	4	213
142, 079	Same..... same.....	Aug. 26, 1873	634	208	4	213
142, 080	Same..... Reservoir cooking-stove.....	Aug. 26, 1873	635	209	4	213
145, 089	Same..... Cooking-stove.....	Dec. 2, 1873	49	15	4	589
143, 959	Brown, R. T., Newport, Ky. Bucket	Oct. 28, 1873	546	181	4	453
	Brown, S. (See Walker & Brown.)					
143, 960	Brown, T. A. and J. L., Roanoke, Ill. End-gate for wagons	Oct. 28, 1873	546	181	4	453
136, 027	Brown, W., Butte des Morts, Wis. Harrow	Feb. 18, 1873	588	193	3	199
141, 317	Brown, W., Saint Louis, Mo. Machine for dressing and crozing barrels.....	July 29, 1873	915	300	4	119
	Brown, W. B. (See Parsons, W., assignor.)					
137, 529	Brown, W. F., assignor of two-thirds interest to W. F. Coombs and B. Housley, Hardin County, Ky. Device for cleaning wells.....	Apr. 8, 1873	237	72	3	387
	Brown, W. G., et al. (See Dustin, J. E., assignor.)					
5, 587	Brown, W. G., and J. W. Jenkins, Monmouth, Me. Car-coupling attachment. (Reissue).....	Oct. 7, 1873	143	47	4	392
135, 262	Same..... same.....	Jan. 28, 1873	723	231	3	105
144, 381	Brown, W. H., Worcester, Mass., and D. F. Williams, assignors to Bailey Tool Company, Woonsocket, R. I. Bench-plane.....	Nov. 11, 1873	185	63	4	505
136, 698	Brown, W. J., Momence, Ill. Apparatus for hoisting and dumping loaded wagons.....	Mar. 11, 1873	315	104	3	280
143, 493	Brown, W. S., Norwood, Ill. Farm-gate	Oct. 7, 1873	82	28	4	387
142, 877	Brownback, P. W., Limerick Station, Pa. Sausage stuffer.....	Sept. 16, 1873	512	174	4	306
135, 770	Browne, A. W., Bloomfield, N. J., assignor to Althof Bergman & Co., New York, N. Y. Automatic toy	Feb. 11, 1873	353	113	3	167
135, 884	Browne, C. B., Geneseo, Ill. Carpet-fastener.....	Feb. 18, 1873	471	152	3	190
143, 324	Browne, J. W., Brooklyn, N. Y. Weather-strip.....	Sept. 30, 1873	878	300	4	362
136, 410	Browne, M. A., Chicago, Ill. Attachment for sewing-machine tables.....	Mar. 4, 1873	50	18	3	249
144, 436	Browne, W. F., New York, N. Y. Balloon advertising.....	Nov. 11, 1873	252	78	4	509
136, 581	Browne, W. H., and W. M. Pegram, Baltimore, Md. Car-brake.....	Mar. 11, 1873	221	74	3	272
143, 402	Brownell, C., Troy, N. Y., assignor of one-half interest to P. J. Marsh, Lansingburgh, N. Y. Stove platform.....	Oct. 7, 1873	5	2	4	381
138, 070	Brownlee, G., Princeton, Ind. Lamp.....	Apr. 22, 1873	737	233	3	451
140, 463	Brownlee, T., Fairbury, Ill. Trace-buckle.....	July 1, 1873	102	34	4	16
136, 811	Brubaker, A. M., Millersville, assignor of two-thirds interest to W. Crompton and A. B. Greenwalt, Lancaster, Pa. Hitching-strap.....	Mar. 18, 1873	425	141	3	298
136, 642	Brubaker, A. M., and B. R. Witmer, Millersville, Pa. Bee-hive.....	Mar. 11, 1873	272	91	3	276
	Bruce, D. W. (See Herriet, J., assignor.) (Design.)					
	Bruce, D. W. (See Hlenburgh, H., assignor.) (Design.)					
	Bruce, D. W. (See Ruthven, E. C., assignor.) (Design.)					
139, 365	Bruce, D. W., New York, N. Y. Printing-type.....	May 27, 1873	824	263	3	595
137, 413	Brucek, G., New York, N. Y. Fans.....	Apr. 1, 1873	119	39	3	367
139, 112	Brucek, O., Union Hill, N. J. Rocking-chair fan.....	May 20, 1873	587	184	3	568
134, 638	Bruen, J. T., Brooklyn, N. Y. Collar.....	Jan. 4, 1873	130	42	3	17
	Bruen, L. B. (See Barbour, T. P., assignor.)					
	Bruff, R. P. (See Swan, J., assignor.) (Reissue.)					
138, 314	Bruh, S., New York, N. Y. Doublet stones.....	Apr. 29, 1873	979	307	3	478
	Bruh, D. (See Fischer & Bruh.)					
	Brumbaugh, A. B. (See Paul, J. A., assignor.)					
	Brumbaugh, D. H. (See McCool, W. C., assignor.)					
	Brummel, A. (See Follett & Brummel.)					
6, 774	Brundage, J. T., Niagara Falls, N. Y. Fan..... (Design.)	July 15, 1873			4	58
	Brundred, W. J. (See Lamason, B. P., assignor.)					
	Brune, H., et al. (See Buckner, C., assignor.)					
134, 588	Brunjes, P. O., and A. Benneckendorf, Hoboken, N. J. Machine for cutting sugar into blocks.....	Jan. 7, 1873	83	26	3	13
140, 464	Same..... same.....	July 1, 1873	102	35	4	17
141, 201	Same..... same.....	July 29, 1873	803	263	4	109
139, 041	Brunker, W. A., Farmersburgh, Ind. Lifting-jack.....	May 20, 1873	520	164	3	563
145, 486	Bruno, T., Saginaw, Mich. Lath-machine.....	Dec. 16, 1873	406	133	4	642
138, 609	Brunswick, E., Chicago, Ill. Billiard-table.....	May 6, 1873	122	40	3	508
143, 961	Brunswick, S., and H. Borlinghaus, sr., said Borlinghaus assignor to said Brunswick, Saint Louis, Mo. Billiard-table cushion.....	Oct. 28, 1873	547	181	4	453
	Brunt, S. W. (See Stevens, S. M., assignor.)					
136, 028	Brush, A. G., Susquehanna Depot, Pa. Potato-digger.....	Feb. 18, 1873	589	194	3	199
138, 126	Brush, J. N., Olmstead County, Minn. Car-brake.....	Apr. 22, 1873	779	249	3	454
	Brush, L. (See Jebb & Brush.)					
137, 175	Brush, R., New York, N. Y. Portable fountain and lawn-sprinkler.....	Mar. 25, 1873	748	248	3	335
143, 746	Bruson, W. C., Chicago, Ill. Anti-freezing fire-extinguisher.....	Oct. 21, 1873	345	115	4	426
138, 786	Brunton, D. R., Concord, N. C. Clover-harvester.....	May 13, 1873	295	91	3	531
134, 847	Bryan, E. F., Savannah, Ga. Crib-attachment for bedsteads.....	Jan. 14, 1873	328	104	3	46
140, 402	Bryan, L., New York, N. Y. Toy.....	July 1, 1873	54	19	4	12
5, 392	Bryant, A. H., Chicago, Ill. Egg-carrier..... (Reissue.)	May 6, 1873	236	74	3	516
5, 293	Same..... New York, N. Y. Egg-carrier..... (Reissue.)	Feb. 25, 1873	889	286	3	235
139, 540	Same..... Chicago, Ill. Egg-carrier.....	June 3, 1873	81	28	3	615
140, 241	Bryant, B. S., Hanson, Mass. Mode of finishing shoe-soles.....	June 24, 1873	743	234	3	700
134, 848	Bryant, H. H., Boston, Mass. Loom-shuttle.....	Jan. 14, 1873	328	105	3	46
139, 451	Same..... Construction of buildings.....	June 3, 1873	4	1	3	609
145, 023	Bryant, J. A., Pottsville, Pa. Device for removing snow from railways.....	Dec. 16, 1873	531	174	4	652
	Bryant, J. M. (See Bryant, S. H. and J. M., and H. L. McGaw.)					
44, 736	Bryant, S. H. and J. M., and H. L. McGaw, Pittsburgh, Pa. Hemmer for sewing-machines.....	Nov. 18, 1873	490	166	4	541

Alphabetical list of patentees for the year 1873—Continued.

No	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr & G.	Vol.	Page.
	Bryant, W. G., et al. (See Bancroft, L., assignor.)					
	Bryant, W. H. (See Healy, P. H., assignor.)					
	Brydges, J. G. (See Owen & Brydges.)					
141, 111	Bryer, J. Q., Wilmington, Del. Wheel for vehicles	July 22, 1873	708	236	4	94
141, 627	Bryson, J., Quincy, Ill. Platform-scales	Aug. 12, 1873	207	65	4	160
134, 849	Bubsar, M., Jersey City, N. J. Sliding support for clothes-lines	Jan. 14, 1873	329	105	3	46
141, 259	Same. Wrench	July 29, 1873	863	282	4	114
141, 318	Buchanan, G., Washington, Pa. Reclining-chair	July 29, 1873	916	300	4	119
144, 437	Buchanan, G. G., Cotton Plant, Miss. Churn	Nov. 11, 1873	243	78	4	509
	Bucher, J. R., et al. (See Gibbs, L., assignor.) (Reissue.)					
142, 610	Buckheit, B. W., East Liverpool, Ohio. Fastening for railway-rail joints	Sept. 9, 1873	263	86	4	275
145, 393	Bucholz, A., Janesville, Wis. Wheel for vehicles	Dec. 9, 1873	317	107	4	623
134, 512	Buehtel, J., Portland, Oreg. Photographic plate-holder	Jan. 7, 1873	10	4	3	8
145, 487	Same. Photographic background	Dec. 16, 1873	407	134	4	642
144, 887	Buck, E., and E. W. Kirk, Cincinnati, Iowa. Cherry-stoner	Nov. 25, 1873	629	214	4	563
139, 234	Buck, E. A., Bangor, Me. Moccasin-boot	May 27, 1873	717	226	3	587
136, 029	Buck, H., Polo, Ill. Apparatus for elevating and unloading hay	Feb. 18, 1873	589	194	3	200
136, 359	Same. Railway-car	Mar. 4, 1873	5	2	3	246
136, 360	Same. Bolster-spring for vehicles	Mar. 4, 1873	6	2	3	246
	Buck, I. D. (See Garsed & Buck.)					
136, 211	Buck, M., Lebanon, N. H. Tenoning-machine	Feb. 25, 1873	761	246	3	225
145, 046	Buck, M., North Rush, N. Y. Wagon-jack	Dec. 2, 1873	4	1	4	586
	Buckalew, I. S. (See Ferris, J. L., assignor.)					
142, 205	Buckingham, T. L., Philadelphia, Pa. Tooth plugger	Aug. 26, 1873	741	244	4	222
	Buckland, A. A., et al. (See Holt & Marshall, assignors.)					
	Buckland, E. H., et al. (See Holt & Marshall.)					
	Buckland, T. A. (See Thornton & Buckland.) (Reissue.)					
136, 030	Buckley, C., West Meriden, Conn. Curtain-ixture	Feb. 18, 1873	590	194	3	200
140, 345	Buckley, S., and P. H. Lawrence, Lawrenceburgh, Pa. Oil-tool extractor	July 1, 1873	10	3	4	9
144, 826	Buckley, T. L., Mankato, Minn. Wrench	Nov. 25, 1873	577	197	4	558
143, 613	Bucklin, C. S., Red Bank, N. J. Apparatus for filling cans with tomatoes, &c	Oct. 14, 1873	199	67	4	405
144, 827	Bucklin, E., jr., assignor to C. E. Davis and F. A. Newell, Pawtucket, R. I. Hose-wrench	Nov. 25, 1873	578	197	4	559
138, 127	Buckman, A. & E., Brooklyn, N. Y. Self-closing faucet	Apr. 22, 1873	779	249	3	454
	Buckman, E. (See Buckman, A. & E.)					
	Bucknam, C. H. (See Higgins, S., assignor.)					
142, 766	Bucknam, H. C., Bucksport, Me., assignor to J. P. Bass, Bangor, Me. Device for cleaning surface-condensers	Sept. 16, 1873	406	137	4	297
138, 474	Buckner, C., assignor of part interest to H. Brune, J. Reiners, J. H. A. Ludwig, and J. M. Ward, San Francisco, Cal. Wave-power	May 6, 1873	8	3	3	498
141, 756	Bucknor, H. B., Gilroy, Cal. Car-coupling	Aug. 12, 1873	315	103	4	169
143, 747	Bucknor, W. P., Union County, Tenn. Wagon-brake	Oct. 21, 1873	346	115	4	496
143, 057	Budd, J. C., Union Township, N. J. Piston-packing	Sept. 23, 1873	656	225	4	328
	Budenburg, A. (See Bass, E., assignor.)					
138, 315	Budge, H. T., and C. W. Russell, Cedar Falls, Iowa. Bag-holder weighing-scales	Apr. 29, 1873	980	308	3	478
142, 676	Budlong, S., Providence, R. I. Washing-machine	Sept. 9, 1873	318	106	4	279
140, 610	Buell, E., and J. W. Lilley, assignors to L. Siebert and J. W. Lilley, Columbus, Ohio. Letter file and binder	July 8, 1873	246	83	4	40
	Buffalo Dental Manufacturing Company. (See Hayes, G. E., assignor.)					
145, 394	Buffington, C. W., Cleveland, Ohio. Steering-apparatus for vessels	Dec. 9, 1873	318	108	4	623
	Buffum, D. (See Wells, W., assignor.)					
144, 502	Buford, A. G., assignor of one-half interest to A. J. McConnico and H. L. Duncan, Water Valley, Miss. Cotton-bale tie	Nov. 11, 1873	284	96	4	513
141, 990	Bugbee, G. W., assignor to J. A. Fay & Co., Cincinnati, Ohio. Device for setting saw-teeth	Aug. 19, 1873	531	176	4	195
140, 007	Buhler, M., Lamolite, Ill. Shipping and show case for boots and shoes	June 17, 1873	518	165	3	674
142, 767	Builer, J., New York, N. Y. Vapor-bath	Sept. 16, 1873	406	137	4	297
140, 763	Bull, D., assignor to self and J. H. Holmes, Amboy, Ill. Miter-machine	July 15, 1873	376	128	4	58
5, 668	Bull, J., Galesburgh, Ill., assignor to Van Wagoner & Williams, New York, N. Y. Gate-latch	Nov. 25, 1873	761	257	4	574
	(Reissue.)					
138, 001	Bullard, I., Readville, Mass., assignor of one-half interest to J. B. Warren, Boston, Mass. Capping piano-hammers	Apr. 22, 1873	670	212	3	445
140, 611	Bullard, J. H., assignor of one-half interest to A. W. Page, Chicopee Falls, Mass. Manufacture of knitting-machine needles	July 8, 1873	248	84	4	40
145, 395	Bullard, W. A., Kalamazoo, Mich. Lubricator for car-wheels	Dec. 9, 1873	319	108	4	623
143, 434	Bullitt, H. M., Louisville, Ky. Plow-carriage	Oct. 7, 1873	33	12	4	383
145, 333	Bullock, J., Windsor, N. Y. Carriage-spring	Dec. 9, 1873	270	90	4	619
136, 812	Bullock, M. C., New York, N. Y., assignor of one-fourth interest to S. E. Griscom, Mahanoy Plane, Pa. Safety-clamp for rock-drill rods	Mar. 18, 1873	426	141	3	208
143, 873	Bulman, A., Newburgh, N. Y. Means of raising floating timber and loading vessels therewith	Oct. 21, 1873	453	152	4	435
139, 042	Bunch, G., Bonnot's Mill, Mo. Stock for drilling or tapping instruments	May 20, 1873	520	164	3	563
141, 692	Bunch, W. H., Windsor, N. C. Rotary churn	Aug. 12, 1873	262	85	4	164
137, 654	Bundy, N. H., New York, assignor to self and A. F. Weaver, Brooklyn, N. Y. Balanced valve	Apr. 8, 1873	341	105	3	396
115, 553	Bunker, G. V. & W. I., Yankton, Dak. Wire mattress-frame	Dec. 16, 1873	474	155	4	648
137, 286	Bunker, R., Hudson, Wis. Draft-leveler	Apr. 1, 1873	6	2	3	357
	Bunker, W. I. (See Bunker, G. V. & W. I.)					
144, 828	Bunnell, A. W., Linesville, Pa. Mop-wringer	Nov. 25, 1873	578	197	4	559
6, 779	Bunnell, G. W., assignor to C. Rogers & Brothers, West Meriden, Conn. Casket-handle tip	July 22, 1873			4	85
	(Design.)					
141, 757	Bunster, C. E. W., Valparaiso, Chili. Elevated wire-way	Aug. 12, 1873	316	103	4	169
136, 411	Bunster, H. B., New York, N. Y. Cigar-bunching machine	Mar. 4, 1873	51	18	3	249
5, 480	Buntin, G., Boston, Mass. Design for end-frames of car-seats	July 8, 1873	367	124	4	49
138, 850	Same. Billiard-table	May 13, 1873	352	109	3	536
141, 539	Same. same	Aug. 5, 1873	112	35	4	144
144, 951	Burch, J., and B. Webb, Warren, N. Y. Clothes-drier	Nov. 25, 1873	640	230	4	567
144, 599	Burch, J. A., Buffalo, N. Y. Picture-frame	Nov. 18, 1873	375	127	4	532
	Burch, J. T. (See Cochran, W. A., assignor.)					
136, 361	Burch, N., North Fairfield, Ohio. Plow	Mar. 4, 1873	6	2	3	246
139, 941	Burch, W. H., Port Gibson, Miss. Turn-table	June 17, 1873	469	147	3	669
136, 485	Burchardt, C. T., New York, N. Y. Centrifugal machine	Mar. 4, 1873	115	38	3	255
	Burdett Organ Company. (See Sorensen, A. J., assignor.)					
5, 485	Burdett, H., Erie, Pa. Reed-organ	July 15, 1873	587	198	4	75
135, 687	Same. same	Feb. 11, 1873	286	90	3	162
144, 382	Same. same	Nov. 11, 1873	186	64	4	505
144, 056	Burdick, H. J., and C. S. Fuller, Oswego, N. Y. Middlings-purifier	Oct. 28, 1873	632	208	4	460
146, 042	Burdick, H. M., and M. R. Flanders, Ilion, N. Y. Holdback for vehicles	Dec. 30, 1873	924	299	4	707

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 414	Burdick, S. P., New York, N. Y. Wood-screw.	Apr. 1, 1873	120	39	3	367
135, 520	Burdiet, O. C., assignor to self and R. Plumb, Buffalo, N. Y. Cutter-head for pointing the heads of bolts.	Feb. 4, 1873	112	36	3	136
5, 640	Burdon, W., Brooklyn, N. Y. Steam vacuum pump.	Nov. 4, 1873	173	58, 59	4	492
5, 641	Same.	Nov. 4, 1873	174	59	4	493
135, 198	Same.	Jan. 28, 1873	660	213	3	101
135, 199	Same.	Jan. 28, 1873	661	213	3	101
135, 200	Same.	Jan. 28, 1873	662	213	3	101
135, 201	Same.	Jan. 28, 1873	663	214	3	101
135, 202	Same.	Jan. 28, 1873	664	214	3	101
135, 203	Same.	Jan. 28, 1873	665	{ 214 215 }	3	101
139, 235	Same.	May 27, 1873	718	226	3	587
141, 540	Same.	Aug. 5, 1873	113	35, 36	4	144
138, 851	Buron, F. P., Trenton, Mo., assignor of one-half interest to S. McGee, Martinsburgh, Iowa. Shank for boots, &c.	May 13, 1873	353	110	3	536
144, 254	Burritt, C., New Wimbledon, England. Composition for removing and preventing incrustation in steam-boilers.	Nov. 4, 1873	73	.....	4	484
	Burge, J. M. (See Rife, O. C., assignor.)					
134, 589	Burgess, A., Hartford, Conn. Magazine fire-arm.	Jan. 7, 1873	85	27	3	14
141, 319	Burgess, C., Portsmouth, Ohio. Manufacture of refined cast iron.	July 29, 1873	917	300	4	119
141, 320	Burgess, C., assignor to Burgess Steel and Iron Works, Portsmouth, Ohio. Manufacture of steel.	July 29, 1873	918	.....	4	119
143, 874	Burgess, C., Portsmouth, Ohio. Manufacture of cast iron for car-wheels.	Oct. 21, 1873	454	.....	4	435
144, 737	Burgess, H., Royer's Ford, Pa. Purifying water from mines.	Nov. 18, 1873	490	.....	4	541
145, 784	Burgess, J., Zanesville, Ohio. Furnace for heating soldering-irons.	Dec. 23, 1873	681	223	4	677
144, 952	Burgess, R. O., and S. La Rhett, Providence, R. I. Mordant for dyeing.	Nov. 25, 1873	680	.....	4	568
	Burgess Steel and Iron Works. (See Burgess, C., assignor.)					
137, 822	Burghardt, J. M., Great Barrington, Mass. Water-wheel gate.	Apr. 15, 1873	502	157	3	422
135, 521	Burgner, A. C. and G. F., Charleston, Ill. Corn-planter.	Feb. 4, 1873	113	36	3	136
	Burgner, G. F. (See Burgner, A. C. and G. F.)					
138, 128	Burgner, J. C., Poplar Creek, Miss. Washing-machine.	Apr. 22, 1873	780	249	3	454
141, 541	Burgy, J., Powhatan Point, Ohio. Chimney-cowl.	Aug. 5, 1873	114	36	4	144
143, 403	Burke, J., Boston, Mass. Corset-clasp.	Oct. 7, 1873	5	2	4	381
141, 292	Burke, S. G., Chambers Court-House, Ala. Portable fence.	July 29, 1873	808	264	4	109
144, 188	Burkhardt, J. G., Brooklyn, N. Y. Car replacer.	Nov. 4, 1873	13	4	4	479
137, 592	Burkhardt, J., Brookville, Ind. Grapple.	Apr. 8, 1873	289	90	3	382
	Burleigh Rock Drill Company. (See Towne & Bailey, assignors.)					
139, 366	Burnap, N. C., Argusville, N. Y. Shoulder-brace.	May 27, 1873	824	264	3	595
141, 542	Burnet, W., and G. B. Fisher, Chicago, Ill. Machine for painting barrels, casks, &c.	Aug. 5, 1873	114	36	4	144
136, 965	Burnett, H. K., Poughkeepsie, N. Y. Baling-press.	Mar. 18, 1873	551	182	3	308
137, 759	Burnett, W., San Francisco, Cal. Hydrodynamic steam-engine.	Apr. 15, 1873	449	140	3	418
145, 149	Burney, F., Faversham, Great Britain, assignor to T. S. Pope and W. S. Colvin. Manufacture of gunpowder.	Dec. 2, 1873	102	34	4	593
144, 187	Burnham, A., Revere, Mass. Machine for cutting the heads of fence-pickets.	Nov. 4, 1873	13	3	4	479
138, 732	Burnham, A. H., Bridgeton, Me. Soldering iron.	May 13, 1873	249	77	3	527
136, 901	Burnham, A. M., Lynn, Mass. Boot and shoe sole stamp.	Mar. 18, 1873	498	165	3	303
6, 746	Burnham, M. M., and J. B. Oaks, Syracuse, N. Y. Advertising-frame.	July 8, 1873	.....	.....	4	36
	Burnham, N. F., York, Pa. Water-wheel.	Feb. 22, 1873	.....	.....	3	156
5, 658	Burns, J., New York, N. Y. Cooler for coffee.	Nov. 18, 1873	561	190	4	547
140, 465	Burns, J., London, Canada. Tar and petroleum burner.	July 1, 1873	103	35	4	17
141, 916	Burns, J., Anamosa, Iowa. Earth-boring machine.	Aug. 19, 1873	474	155	4	190
	Burns, W., et al. (See Wreath, A., assignor.)					
142, 989	Burr, B., Batavia, Ill. Wagon-body.	Sept. 23, 1873	595	{ 202 203 }	4	323
	Burr, D. A. (See Prall & Burr.)					
144, 503	Burr, D. C., and J. A. Johnson, Cromwell, Conn. Tobacco-hanger.	Nov. 11, 1873	285	97	4	513
136, 486	Burr, F. O. J., Brewer, Me. Apparatus for moving and rolling hogsheads and heavy barrels.	Mar. 4, 1873	116	38	3	255
137, 415	Burr, F. S., Brooklyn, N. Y. Anti-frictional bushings.	Apr. 1, 1873	120	40	3	367
138, 991	Burr, G. A., Florence, Mass. Manufacture of whip-handle caps.	May 20, 1873	478	151	3	560
143, 220	Burr, H. J., Bloomfield, assignor to self and W. E. Simonds, Hartford, Conn. Clothes-wringer.	Sept. 30, 1873	788	272	4	355
141, 203	Burr, R. D., Kingsborough, N. Y. Glove.	July 29, 1873	808	264	4	110
135, 075	Burress, H. W., New Brighton, assignor to self and H. E. Sherman, Pittsburgh, Pa. Check-hook.	Jan. 21, 1873	539	175	3	79
140, 242	Burridge, T. H., and J. M. Kershaw, Saint Louis, Mo. Chromatic printing-press.	June 24, 1873	744	245	3	700
143, 494	Burritt, H. H., assignor to W. A. Cook, Newark, N. J. Curtain-fixtures.	Oct. 7, 1873	82	28	4	387
145, 785	Burritt, H. H., Belleville, N. J. Curtain-fixtures.	Dec. 23, 1873	681	223	4	677
145, 047	Burroughs, J. C., Clinton, Mich. Medical compound for treating horse's hoofs, &c.	Dec. 2, 1873	5	.....	4	586
	Burrows, E. F. (See Stillman & Burrows.)					
139, 452	Burson, J., Yates City, Ill., assignor of one-half interest to H. Whitall, New York, N. Y. Charging and tamping platform for submarine blasting.	June 3, 1873	5	2	3	609
144, 655	Burstow, E., Horsham, England. Fastener for meeting-rails of sashes.	Nov. 18, 1873	426	143	4	535
	Burt, E. C. (See Letsinger, H. C., assignor.)					
5, 446	Burt, J., Sturgis, Mich., assignor by mesne assignment to A. F. Hubble and E. R. Williams. Vehicle-seat.	June 17, 1873	612	193	3	681
135, 771	Burtch, J., Hall's Corners, N. Y. Carriage-painters' stand.	Feb. 11, 1873	354	113	3	167
137, 655	Burtis, P. T., Chicago, Ill. Gas-works hydraulic-main.	Apr. 8, 1873	342	106	3	386
141, 543	Burtis, P. T., assignor of one-half interest to E. T. Watkins, Chicago, Ill. Condenser for the manufacture of illuminating gas.	Aug. 5, 1873	117	36	4	144
140, 612	Burtless, M., Seneca Falls, N. Y. Farm-gate.	July 8, 1873	249	84	4	40
	Burton, B., Brooklyn, N. Y. Breech-loading fire-arm.	Dec. 20, 1873	.....	.....	4	640
26, 475	Same.	Dec. 4, 1873	.....	.....	4	641
136, 130	Burton, B., assignor to W. G. Burton, Brooklyn, N. Y. Metallic cartridge.	Feb. 25, 1873	697	226	3	220
143, 495	Burton, B., Brooklyn, N. Y. Bayonet-socket.	Oct. 7, 1873	83	28	4	387
143, 614	Burton, B. and W. G., said B. Burton assignor to said W. G. Burton, Brooklyn, N. Y. Breech-loading and magazine gun.	Oct. 14, 1873	200	67, 68	4	405
135, 772	Burton, O. F., New York, N. Y. Apparatus for extinguishing fires.	Feb. 11, 1873	354	114	3	167
	Burton, R. (See De Castro and Burton.)					
6, 703	Burton, W. F., Chippewa Falls, Wis. Lath-machine bed.	June 17, 1873	.....	.....	3	663
	Burton, W. G. (See Burton, B., assignor.)					
	Same. (See Burton, B. and W. G.)					
135, 773	Burton, W. H., Selma, Ala. Pipe-wrench.	Feb. 11, 1873	355	114	3	167
143, 875	Buschmann, L., Newark, N. J., assignor to W. Quail, New York, N. Y. Composing-stick.	Oct. 21, 1873	455	152	4	435
145, 841	Buschmeier, F. G., Philadelphia, Pa. Quilting-guide for sewing-machines.	Dec. 23, 1873	726	238	4	680
145, 090	Buse, F., Fergus Falls, Minn. Track-clearer.	Dec. 2, 1873	49	15	4	589
136, 582	Bush, A. R., Chicago, Ill. Foot-warming attachment for sewing-machine treadles.	Mar. 11, 1873	223	74	3	272

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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5, 649	Bush, C. G., Boston, Mass., assignor to self and J. W. Hoard. Kaleidoscope... (Reissue).	Nov. 11, 1873	362	122	4	519
143, 271	Bush, C. G., Boston, Mass., assignor to self and J. W. Hoard, Providence, R. I. Object for kaleidoscopes.	Sept. 30, 1873	832	286	4	359
136, 966	Bush, C. T., Oneonta, N. Y. Iron fence.	Mar. 18, 1873	551	183	3	308
134, 071	Same. Iron-fence gate.	Apr. 22, 1873	738	233	3	451
137, 341	Bush, H. J., Westfield, Mass. Whip-lash.	Apr. 1, 1873	59	18	3	361
135, 885	Bush, I., assignor of one-half interest to C. McKay, Indianola, Iowa. Spring bed-bottom.	Feb. 18, 1873	472	152	3	190
135, 967	Bush, I. D., Detroit, Mich. Furnace for melting brass and other metals.	Feb. 18, 1873	536	177	3	195
142, 081	Bush, J. D., Elyton, Ala. Automatic-fan.	Aug. 26, 1873	636	209	4	213
143, 806	Same. Brick-machine.	Oct. 21, 1873	397	131	4	430
143, 805	Bush, J. P., Boston, Mass. Shutter-fastening.	Oct. 21, 1873	397	131	4	430
138, 129	Bush, S. H., Boistfort, Wash. Ter. Scrubbing-machine.	Apr. 22, 1873	781	250	3	454
145, 024	Same. Butter worker.	Dec. 16, 1873	531	174	4	632
144, 738	Bush, S. R., Bush's Mill, Ohio. Bag-fastener.	Nov. 18, 1873	491	166	4	541
5, 595	Bushfield, S. B., Baltimore, Md., assignor by mesne assignment to self, R. D. Morrison, J. H. Warner, and W. L. Stork. Treadle for sewing-machines... (Reissue).	Oct. 14, 1873	320	106	4	414
140, 677	Bushfield, S. B., assignor to self and R. D. Morrison and J. H. Warner, Baltimore, Md. Treadle for sewing-machines.	July 8, 1873	300	101	4	44
138, 852	Bushnell, A., Iona Island, N. Y. Fire-kindler.	May 13, 1873	354	110	3	536
137, 889	Bushnell, H., New Haven, Conn. Compressed-air motor.	Apr. 15, 1873	557	175	3	427
140, 466	Same. Compressed-air heating-apparatus.	July 1, 1873	104	35	4	17
144, 438	Bushnell, L., New Bedford, Mass. Wood-molding.	Nov. 11, 1873	234	78	4	509
134, 728	Bushnell, S. S., Horicon, Wis. Cultivator.	Jan. 14, 1873	226	72	3	39
135, 886	Bushnell, W., New York, N. Y. Manufacture of iron Governor for engines.	Feb. 18, 1873	473	152	3	190
140, 467	Buss, E., Buckau, Magdeburg, Prussia, assignor to A. Budenberg, Manchester, England. Governor for engines.	July 1, 1873	105	35, 36	4	17
144, 600	Russell, E. T., Indianapolis, Ind. Car-spring.	Nov. 18, 1873	376	127	4	532
5, 435	Bussey, E., assignor of three-fourths' interest to C. A. McLeod, Troy, N. Y. Reservoir cooking-stove... (Reissue).	June 3, 1873	183	59, 60	3	624
134, 729	Butler, J. G. (See Witovec, F. J., assignor.)	Jan. 14, 1873	226	72	3	39
138, 853	Butler, J. W., New Britain, Conn. Gage.	May 13, 1873	355	110	3	536
143, 326	Butler, W. A., New York, N. Y. Sectional core.	Sept. 30, 1873	880	301	4	362
143, 327	Same. Manufacture of water-traps.	Sept. 30, 1873	881	301	4	362
143, 665	Same. Mold for casting water-traps.	Oct. 14, 1873	244	82	4	409
144, 057	Same. Device for forming water-traps.	Oct. 28, 1873	633	209	4	460
145, 625	Butler, W. C., Baltimore, Md. Machine for breasting the heels of boots and shoes.	Dec. 16, 1873	532	174	4	652
141, 260	Butler, W. T., Chicago, Ill. Fire-proof floor and ceiling.	July 29, 1873	864	282	4	114
144, 439	Butt, R., Harrisburgh, Pa. Car-coupling.	Nov. 11, 1873	234	79	4	509
142, 898	Butterfield, J. C., Chicago, Ill. Eccentric.	Sept. 16, 1873	512	174	4	306
144, 058	Same. Power-hammer.	Oct. 28, 1873	634	209	4	460
144, 059	Same. same.	Oct. 28, 1873	636	209	4	460
	Butterfield, W., et al. (See Coy, F. W., assignor.)					
	Butterfield, W. (See Keniston, C., assignor.)					
	Butterworth, C. C. (See Butterworth, J., assignor.)					
139, 942	Butterworth, C. F., Troy, N. Y. Muff-lining.	June 17, 1873	470	147	3	670
138, 475	Butterworth, J., assignor to self and C. C. Butterworth, Philadelphia, Pa. Dryer.	May 6, 1873	9	3	3	498
144, 829	Büttgenbach, F., Heerdt, Düsseldorf, Germany. Blast-furnace.	Nov. 25, 1873	579	197	4	559
142, 768	Buttkereit, C. G., Toledo, Iowa. Bell-piano.	Sept. 16, 1873	407	137	4	297
137, 890	Buttles, C. A., Milwaukee, Wis. Tinners' stove for heating soldering-irons.	Apr. 15, 1873	558	175	3	427
	Büttner, A. (See Freimuth & Büttner.)					
	Button, C. (See Smith, J. & J., assignors.)					
6, 665	Button, C., Philadelphia, Pa. Stocking fabric... (Design).	May 27, 1873			3	585
6, 666	Same. same... (Design).	May 27, 1873			3	585
6, 667	Same. same... (Design).	May 27, 1873			3	585
6, 668	Same. same... (Design).	May 27, 1873			3	585
6, 669	Same. same... (Design).	May 27, 1873			3	585
6, 670	Same. same... (Design).	May 27, 1873			3	585
6, 671	Same. same... (Design).	May 27, 1873			3	585
6, 672	Same. same... (Design).	May 27, 1873			3	585
6, 673	Same. Scarf... (Design).	May 27, 1873			3	585
6, 674	Same. same... (Design).	May 27, 1873			3	585
6, 675	Same. same... (Design).	May 27, 1873			3	585
6, 676	Same. same... (Design).	May 27, 1873			3	586
	Button, L. (See Button, T. E., assignor.)					
137, 823	Button, T. E., assignor to self and L. Button, Waterford, N. Y. Hose and pipe coupling.	Apr. 15, 1873	503	157	3	422
	Buxton, L. W., Nashua, N. H. Bedstead-fastening... (Extension).	Apr. 5, 1873			3	325
5, 447	Same. same... (Reissue).	June 17, 1873	612	193	3	681
23, 525	Same. same... (Disclaimer filed).	Apr. 1, 1873			3	356
136, 487	Buynitzky, S. N., Washington, D. C. Cigar-shaped pipe.	Mar. 4, 1873	117	38	3	255
139, 865	Buzby, A. G., Philadelphia, Pa. Magic-lantern.	June 17, 1873	402	126	3	661
144, 314	Same. same.	Nov. 4, 1873	116	39	4	488
	Buzzell, J. G. & Co. (See Dunham, G. B., assignor.)					
143, 615	Byam, A. C., Hopkinton, Iowa. Uterine supporter.	Oct. 14, 1873	202	68	4	406
145, 842	Byam, E. C., Fort Dodge, Iowa. Window-blind slat operator.	Dec. 23, 1873	727	239	4	680
136, 131	Bye, W. C., assignor to self and J. B. Blazer, Colletto, Ind. Sulky-harrow.	Feb. 25, 1873	698	226	3	220
	Byerly, J. (See Fitzhugh, B. G., assignor.)					
140, 884	Byerly, J., Frederick, Md. Apparatus for loading carts.	July 15, 1873	481	162	4	67
135, 319	Byerley, N. H., Philadelphia, Pa. Shutter-fastener.	Jan. 28, 1873	769	248	3	109
141, 656	Byrne, R., assignor to self and J. J. Marrin, New York, N. Y. Paint-mill.	Nov. 18, 1873	426	143	4	536
140, 243	Byrne, W. F., Vicksburgh, Miss. Refrigerator for restaurants, &c.	June 24, 1873	745	235	3	700
138, 610	Byrnes, J., Chicago, Ill. Wardrobe-bedstead.	May 6, 1873	122	40	3	508
144, 739	Cabanes, H., Bordeaux, France. Bolting-machine.	Nov. 18, 1873	491	167	4	541
	Cable, A. D. (See Ford, J. C., assignor.)					
	Cable, G. W. (See Shepard, H. W., assignor.)					
137, 176	Cable, W., Boston, Mass. Thill-coupling.	Mar. 25, 1873	749	248	3	335
137, 416	Cadwallader, C. N., assignor to L. D. Cadwallader and T. Kelley, Philadelphia, Pa. Dry-goods rack.	Apr. 1, 1873	121	40	3	367
	Cadwallader, L. D., et al. (See Cadwallader, C. N., assignor.)					
134, 975	Cadwell, M., Lansing, Mich. Tug-strap.	Jan. 21, 1873	450	144	3	72
138, 992	Cady, F. P., assignor of one-half interest to S. M. Cady, Cleveland, Ohio. Balanced valve.	May 20, 1873	479	152	3	560
137, 760	Cady, J. N., South Hannibal, N. Y. Tobacco-plant cutter.	Apr. 15, 1873	451	140	3	418

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138, 002	Cady, S. M. (See Cady, F. P., assignor.) Cady, W. R., Lowell, assignor to J. W. Tufts, Medford, Mass. Beer-attachment for soda-water apparatus	Apr. 22, 1873	671	212	3	445
144, 504	Caffall, R. M., Alton, England. Gas-seal, &c Cahill, J. (See Blakeley & Cahill.)	Nov. 11, 1873	285	97	4	513
137, 051	Cahoon, C. W. (See Chase, L., assignor.) Caine, D., Battle Creek, Mich. Seeding-machine Cairns, W. (See Rayney & Cairns.)	Mar. 25, 1873	637	210	3	326
145, 786	Calais, W. J. (See Anderson, J., assignor.) Caldwell, D. A., Jacksonville, Ill. Grinding-mill Caldwell, D. B. (See McGowan & Caldwell.)	Dec. 23, 1873	682	223	4	677
138, 476	Caldwell, G. S., Auburn, New York. Machine for unloading flat cars	May 6, 1873	10	3	3	498
139, 113	Caldwell, J. K., Philadelphia, Pa. Machine for re-pressing bricks	May 20, 1873	588	184	3	568
141, 852	Caldwell, W. G., assignor to Three Rivers Manufacturing Company, Three Rivers, Mich. Machine for edging lumber	Aug. 19, 1873	410	134	4	186
138, 733	Calkins, A. H., Chesterton, Ind. Washing-machine	May 13, 1873	250	78	3	527
138, 734	Same	May 13, 1873	251	78	3	528
136, 132	Calkins, J. B., Pacific, Mo. Water-tank for railway stock-cars	Feb. 25, 1873	699	226	3	320
142, 677	Call, J., Richmond, Me. Center-board for vessels	Sept. 9, 1873	319	106	4	280
139, 943	Call, W., Jr., Haverstraw, N. Y. Seed-planter	June 17, 1873	471	148	3	670
135, 625	Callahan, C., assignor to E. E. Sibley, Chelsea, Mass. Weft-thread knitting-machine	Feb. 11, 1873	228	72	3	158
140, 609	Callahan, C., assignor to self and E. E. Sibley, Chelsea, Mass. Knitting-machine	July 15, 1873	416	141	4	61
138, 611	Callanan, T., Brooklyn, N. Y. Corner-piece for picture and other frames Callar, J. M., trustee. (See Enos, J. A., assignor.) Callin, G. O. (See Boardsley, C. T., assignor.)	May 6, 1873	123	41	3	508
137, 530	Calvin, D. M., East Fallowfield, Pa. Bee-hive	Apr. 8, 1873	238	73	3	388
145, 048	Same	Dec. 2, 1873	5	2	4	586
138, 316	Camacho, J. S., Havana, Cuba. Electro-magnetic induction-coil	Apr. 29, 1873	981	308	3	478
142, 435	Came, J. E., Boston, Mass. Billiard-table cushion	Sept. 2, 1873	92	32	4	250
141, 991	Cameron, D. C., Martinsburgh, Pa. Car-coupling Cameron, E. G. (See Crosby & Cameron.)	Aug. 19, 1873	532	176	4	195
135, 774	Cameron, E. G., assignor of one-half interest to L. M. Crosby, Ashtabula, Ohio. Bed-bottoms	Feb. 11, 1873	356	114	3	167
143, 058	Cammeyer, J. E., Brooklyn, New York. Cooler for water Camozzi, J. B. C. et al. (See Kayser, L., assignor.)	Sept. 23, 1873	657	225	4	328
143, 059	Camp, C., Mott Haven, N. Y. Refrigerator	Sept. 23, 1873	657	225	4	328
134, 784	Camp, H., Rouseville, Pa. Steam-boiler	Jan. 14, 1873	272	89	3	42
135, 076	Camp, H., Covington, Ga. Hoe Camp, H. B. (See Vaughn, Camp & Merrill.)	Jan. 21, 1873	539	175	3	79
134, 730	Camp, H. C., Saint Paul, Minn. Means for propelling vessels	Jan. 14, 1873	227	73	3	39
135, 320	Camp, O. S., Grand Rapids, Mich. Vent. Campbell & Clute. (See Paul, A., assignor.)	Jan. 28, 1873	769	249	3	110
143, 060	Campbell, A. M., Kline's Grove, Pa. Washing-machine	Sept. 23, 1873	658	225	4	328
141, 544	Campbell, C., New York, assignor to self and J. K. Davidson, New York, N. Y. Paint-compound	Aug. 5, 1873	118	.....	4	145
141, 204	Campbell, F. M., Saint Louis, Mo. Metallic window-sash	July 29, 1873	809	265	4	110
135, 204	Campbell, G. G., Oswego, N. Y. Articles of food	Jan. 28, 1873	667	.....	3	101
139, 453	Campbell, H. B., Racine, Wis. Ice-cream freezer Campbell, J., et al. (See Johnson, J. J., assignor.) (Reissue.) Campbell, J. K. (See Nolan, P. W., assignor.)	June 3, 1873	6	2	3	609
137, 417	Campbell, J. H., Willimantic, Conn. Guide for silk-winders Campbell, J. M., et al. (See Salyer, W. H., assignor.)	Apr. 1, 1873	122	40	3	367
144, 888	Campbell, J. O., Alpena, Mich. Fishing-stake	Nov. 25, 1873	630	214	4	563
141, 758	Campbell, J. S., Bridgeport, Conn. Dash-board Campbell, M. V. (See Shackford & Campbell.)	Aug. 12, 1873	317	104	4	169
136, 583	Campbell, O. C., Omaha, Nebr. Construction of houses	Mar. 11, 1873	223	74, 75	3	272
137, 287	Same	Apr. 1, 1873	7	3	3	357
6, 460	Campbell, Robert K., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	Mar. 4, 1873	.....	.....	3	245
6, 461	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 462	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 463	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 464	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 465	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 466	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 467	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 468	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 469	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 470	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 471	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 472	Same	(Design) Mar. 4, 1873	.....	.....	3	245
6, 558	Same	(Design) Apr. 8, 1873	.....	.....	3	386
6, 559	Same	(Design) Apr. 8, 1873	.....	.....	3	386
6, 560	Same	(Design) Apr. 8, 1873	.....	.....	3	386
6, 747	Same	(Design) July 8, 1873	.....	.....	4	36
6, 748	Same	(Design) July 8, 1873	.....	.....	4	36
6, 749	Same	(Design) July 8, 1873	.....	.....	4	36
6, 750	Same	(Design) July 8, 1873	.....	.....	4	36
6, 751	Same	(Design) July 8, 1873	.....	.....	4	36
6, 752	Same	(Design) July 8, 1873	.....	.....	4	36
6, 900	Same	(Design) Oct. 7, 1873	.....	.....	4	379
6, 901	Same	(Design) Oct. 7, 1873	.....	.....	4	379
6, 902	Same	(Design) Oct. 7, 1873	.....	.....	4	379
6, 903	Same	(Design) Oct. 7, 1873	.....	.....	4	379
6, 904	Same	(Design) Oct. 7, 1873	.....	.....	4	379
6, 905	Same	(Design) Oct. 7, 1873	.....	.....	4	379
6, 906	Same	(Design) Oct. 7, 1873	.....	.....	4	380
6, 907	Same	(Design) Oct. 7, 1873	.....	.....	4	380
6, 908	Same	(Design) Oct. 7, 1873	.....	.....	4	380
134, 639	Campbell, W. (See Stewart & Campbell.) Campbell, W., Candeu N. J. Medical compound for cure of fever and ague	Jan. 7, 1873	131	.....	3	17
134, 976	Campbell, W. A., Manistee, Mich. Circular-saw mill	Jan. 21, 1873	451	144	3	72
144, 505	Campbell, W. B., Selma, Ala. Automatic fan Campbell, W. H. W. (See Smith, G. A., assignor.)	Nov. 11, 1873	286	97	4	513

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
136, 584	Campbell, W. O., Montgomery Centre, Vt. Milk-cooler.....	Mar. 11, 1873	224	75	3	272
	Campfield, M. E. (See Gould & Campfield.)					
139, 114	Campion, W., Nottingham, and W. Campion, Sneaton, England. Knitting-machine.....	May 20, 1873	589	{ 185 186 }	3	569
	Canady, L. (See Steiner, J. H., assignor.)					
	Candee, F. C. (See Dopp, W. H., assignor.)					
	Candee, L. & Co. (See Watkinson, G., assignor.)					
	Same..... (Design.)					
137, 531	Caner, H. N., Freeport, Ill. Uterine supporter	Apr. 8, 1873	238	73	3	388
134, 640	Canfield, F. P., Boston, Mass. Brake for elevators	Jan. 7, 1873	131	42	3	17
	Canfield, J. H. (See Hyatt & Canfield.)					
136, 133	Canis, A., and F. Higgins, Manchester, N. H. Loom.....	Feb. 25, 1873	699	{ 226 227 }	3	220
	Same..... Lubrication of clutch-pulleys					
136, 699	Cannata, D., Jersey City, N. J. Button-fastening	Mar. 11, 1873	317	105	3	280
140, 008	Cannata, D., Jersey City, N. J. Button-fastening	June 17, 1873	519	165	3	674
136, 700	Canning, G. B., Brooklyn, N. Y. Apparatus for comminuting various substances	Mar. 11, 1873	317	105	3	280
	Cannington, E. (See Pocheron, A., assignor.)					
139, 293	Cannon, M., Salt Lake City, Utah. Musical instrument.....	May 27, 1873	771	244	3	591
	Canoll, J. W. H. (See Bayles, Canoll & Miner.)					
138, 854	Cantrell, R. B., Tenafly, assignor to W. D. Russell, Newark, N. J. Self-loading cart	May 13, 1873	356	110	3	537
5, 592	Capewell, G. J., Cheshire, Conn. Nail-extractor	July 29, 1873	1,010	328	4	125
143, 496	Capewell, G. J., Cheshire, Conn., assignor to E. Curtis, Watertown, D. F. Maltby, and L. J. Atwood, Waterbury, Conn. Nail-extractor	Oct. 7, 1872	83	28	4	387
144, 953	Capewell, G. J., Cheshire, Conn. Tack-hammer	Nov. 25, 1873	680	230	4	568
138, 072	Caple, C. S., assignor to self and W. Gates, Frankfort, N. Y. Work-stand	Apr. 22, 1873	738	234	3	451
141, 424	Capron, E. P. H., Hudson, N. Y. Clothes-wringer roller	Aug. 5, 1873	13	3	4	136
141, 759	Capron, E. P. H., assignor to the Capron Water-Wheel Co., Hudson, N. Y. Turbine water-wheel.....	Aug. 12, 1873	318	104	4	169
	Capron Water-Wheel Co. (See Capron, E. P. H., assignor.)					
	Carberry, J. J. (See Wood, J. S., assignor.)					
140, 009	Carbonel, M., assignor of one-half interest to J. B. Perez, Havana, Cuba. Apparatus for burning hydrocarbon	June 17, 1873	519	165	3	674
	Card, J. E. (See Nott, A. B., assignor.)					
141, 760	Card, S. W., assignor to self and J. Birkenhead, Mansfield, Mass. Machine for milling twist-drills.....	Aug. 12, 1873	319	104	4	169
	Cardell, C. E. (See Mahan, S. W., assignor.)					
	Carder, M. F. (See Henika & Carder.)					
142, 990	Carey, A. C., Malden, assignor to self and D. Peabody, Lynn, Mass. Machine for burnishing shanks of boots and shoes	Sept. 23, 1873	597	203	4	323
146, 043	Carey, A. C., Malden, assignor of two-thirds interest to G. F. Brood and D. Peabody, Lynn, Mass. Machinery for lasting boots and shoes	Dec. 30, 1873	924	300	4	707
5, 668	Carey, D. C., Chicago, Ill., assignor to W. G. Wilson, Cleveland, Ohio. Ruffling-attachment for sewing-machines..... (Reissue.)	Apr. 22, 1873	879	278	3	462
	Carey, H. G. (See Brown & Carey.)					
139, 766	Carey, J. D., Monica, Ill. End-gate for wagons	June 10, 1873	310	96	3	649
140, 244	Carey, J. W., Baltimore, Md. Piston-packing	June 24, 1873	746	235	3	701
137, 593	Carey, W. W., assignor to self and G. W. Harris, Lowell, Mass. Hanger for shafting.....	Apr. 8, 1873	290	90	3	392
134, 850	Carlan, B. A., New York, N. Y. Tip-chair	Jan. 14, 1873	330	105	3	46
139, 866	Carleton, M. G., Indianola, Iowa. Thrashing-machine	June 17, 1873	403	126	3	664
141, 545	Carlin, A. B., Camden, N. J. Machine for boring blind-stiles	Aug. 5, 1873	118	37	4	145
139, 767	Carlin, J. F., Alexandria, Va. Bolt.....	June 10, 1873	311	96	3	649
143, 666	Carlisle, G., Attleborough, Mass. Rotary brush.....	Oct. 14, 1873	244	82	4	409
134, 500	Carlisle, J. M., Sumter, S. C. Corn-husker	Jan. 7, 1873	86	27	3	14
138, 477	Carll, J. F., Pleasantville, Pa. Pump	May 6, 1873	11	4	3	498
143, 876	Carlock, W. B., Worsham, Va., assignor to self and J. Graham, New York, N. Y. Grain-bag.....	Oct. 21, 1873	456	152	4	435
138, 003	Carlton, H. A., Chelsea, Mass. Check-hook for harness	Apr. 22, 1873	672	213	3	445
6, 561	Carlton, R., Liverpool, England, assignor to W. & J. Sloane, New York, N. Y. Carpet. (Design.)	Apr. 8, 1873			3	386
135, 626	Carmichel, A., assignor to J. Dewa, Westerly, R. I. Spool	Feb. 11, 1873	230	72	3	158
	Carnell, D. R., et al. (See Bingham, J., assignor.)					
	Carnell, F. L., et al. (See Bingham, J., assignor.)					
140, 403	Carnes, A. C., Smithville, Tenn. Harrow..... (Reissue.)	July 1, 1873	55	19	4	12
5, 275	Caro, S., Washington, D. C. Bedstead..... (Reissue.)	Feb. 11, 1873	447	146	3	174
142, 611	Carothers, J. H., Lewisburgh, Pa. Pitman.....	Sept. 9, 1873	264	87	4	275
5, 659	Carothers, T. B., Oil City, Pa. Device for steaming oil-wells..... (Reissue.)	Nov. 18, 1873	562	191	4	547
139, 656	Same.....	June 10, 1873	199	65	3	641
143, 061	Carpenter, C., jr., Seekonk, Mass., assignor of one-half interest to J. B. Madell, Providence, R. I. Device for generating and burning hydrocarbon vapor	Sept. 23, 1873	659	226	4	328
145, 843	Carpenter, C., jr., Seekonk, Mass. Manufacture of iron and steel.....	Dec. 23, 1873	728	239	4	620
141, 112	Carpenter, C. C., New York, N. Y. Tape for hoop-skirts.....	July 22, 1873	708	237	4	94
	Carpenter, C. C., & Co. (See Lockwood & Carter, assignors.)					
140, 010	Carpenter, D. H., Hartford, Conn. Bridle-bit.....	June 17, 1873	520	165	3	674
140, 114	Carpenter, G. J., Adrian, Mich. Corn-planter.....	June 24, 1873	637	{ 200 201 }	3	692
135, 077	Carpenter, J. A., Waverly, N. Y. Medical compound for cure of catarrh	Jan. 21, 1873	540		3	79
141, 917	Carpenter, L. D., Buffalo Grove, Iowa. Grain-sieve	Aug. 19, 1873	474	156	4	190
137, 824	Carpenter, M. P., New York, N. Y. Button.....	Apr. 15, 1873	503	157	3	422
144, 189	Carpenter, S. D., Madison, Wis. Harvester	Nov. 4, 1873	14	4	4	479
	Carpenter, T. B. (See Beckwith, S. V., assignor.)					
135, 078	Carpenter, W., Lawrence, Kans. Tuck-creaser.....	Jan. 21, 1873	540	175	3	79
141, 918	Carpenter, W. B., West Topsham, Vt. Crib.....	Aug. 19, 1873	475	156	4	191
	Carr, A. (See Wilson, J. P., assignor.)					
143, 807	Carr, A., Paterson, N. J. Valve for steam-engines	Oct. 21, 1873	398	132	4	430
	Carr, C. W., et al. (See Hume, G. H., assignor.)					
135, 263	Carr, C. W., Paola, Kans. Mechanical movements	Jan. 28, 1873	724	231	3	106
	Carr, G. W. (See Kitson & Benner, assignors.)					
	Same..... (See Kitson, G. L., assignor.)					
	Same..... (See Murphy, J., assignor.)					
143, 667	Same..... Philadelphia, Pa. Corn-husker	Oct. 14, 1873	245	82	4	409
	Carr, M. W., et al. (See Shaw, A. B., assignor.)					
144, 830	Carr, T., Bristol, Great Britain. Machine for the manufacture of flour	Nov. 25, 1873	580	198	4	569
138, 612	Carr, W., Yellow Springs, Ohio. Straw-stacking attachment for thrashing-machine.....	May 6, 1873	124	41	3	508
141, 992	Carr, W., assignor to K. Brown, Logansport, Ind. Apparatus for shrinking metal bands.....	Aug. 19, 1873	533	176	4	196
5, 287	Carré, F. P. E., St. Pierre Les Nemours, assignor of part interest to J. B. J. Mignon and H. S. Ronart, Paris, France. Ice machine..... (Reissue.)	Feb. 18, 1873	682	220	3	206
5, 288	Same..... Manufacture of ice..... (Reissue.)	Feb. 18, 1873	683	230	3	206

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
134, 851	Carrington, E., West Meriden, Conn. Process for cutting and shaping pearl-shell.....	Jan. 14, 1873	330	105	3	47
	Carrington, W. B. (See Chamberlain, O. M., assignor.)					
144, 506	Carroll, F., New Orleans, La. Furnace for the manufacture of gas, and for other purposes.	Nov. 11, 1873	287	97	4	513
139, 768	Carroll, J. A. H., Baltimore, Md. Stop-mechanism for twisting and doubling machines.	June 10, 1873	312	96	3	649
139, 115	Carroll, T. B., Indianapolis, Ind. Fruit-jar.....	May 20, 1873	593	186	3	569
141, 761	Carroll, T. H., Erie, Pa. Sawing-machine.....	Aug. 12, 1873	320	104 } 105 }	4	169
144, 060	Carroll, T. M., Independence, Iowa. Water-heating apparatus.....	Oct. 28, 1873	637	209	4	460
	Carroll, W. T. (See Spaulding & Carroll.)					
144, 601	Carroll, W. T., assignor to S. E. Cook, Woonsocket, R. I. Spindle for spinning-machines.	Nov. 12, 1873	377	127	4	532
139, 367	Carrothers, J. and W., Newton, Iowa. Corn-harvester.....	May 27, 1873	825	264	3	595
	Carrothers, W. (See Carrothers, J. and W.)					
137, 825	Carroll, M. M., Helena, Ark. Cotton-stalk knocker.....	Apr. 15, 1873	504	157	3	422
144, 440	Carson, J., Buffalo, N. Y. Carriage-door.....	Nov. 11, 1873	236	79	4	509
137, 127	Carson, T., Brooklyn, assignor to self and T. F. Attix, New York, N. Y. Marbleized composition stone.	Mar. 25, 1873	706		3	331
	Carter, A. (See Lockwood & Carter.)					
142, 436	Carter, G. A., Princeton, Ill. Windmill.....	Sept. 2, 1873	99	33	4	250
	Carter, G. B. (See Marrs, D., assignor.)					
144, 889	Carter, H. C., New York, N. Y. Hasp for butter-tubs, &c.....	Nov. 25, 1873	630	214	4	563
155, 403	Carter, H. M., La Fayette, Ind. Corn-harvester.....	Feb. 4, 1873	7	3	1	128
	Carter, H. W. (See Blanchard, J., assignor.)					
136, 488	Carter, J., and A. C. Keith, assignors of one-half interest to J. L. Baldwin and L. Dedrick, Jersey City, N. J. Tanning.....	Mar. 4, 1873	118		3	255
6, 704	Carter, J. V. B., assignor to Detroit Stove Works, Detroit, Mich. Heating stove. (Design)	June 17, 1873			3	663
	Carter, L., Huntsville, Ala. Bale-tie.....	Dec. 2, 1873	50	15	4	589
145, 091	Carter, R., New York, N. Y. Fire-alarm telegraph.....	June 17, 1873	522	160	3	674
140, 011	Carter, S. C., Richmond, Ind. Electro-magnetic motor.....	May 13, 1873	358	111	3	537
138, 855	Carter, T. H., Bremen, Ky. Machine for shaving shingles.....	Oct. 21, 1873	457	153	4	435
143, 877	Carter, T. H., Bremen, Ky. Machine for shaving shingles.....	Oct. 21, 1873	457	153	4	435
140, 468	Carter, T. W., New Orleans, La. Chain propeller for vessels.....	July 1, 1873	106	36	4	17
143, 616	Carter, W. R., Brooklyn, N. Y. Copy-holder.....	Oct. 14, 1873	203	68	4	406
145, 534	Carter, Z., Line Creek, S. C. Cotton-seed planter.....	Dec. 16, 1873	475	155	4	648
143, 878	Carterson, J. H., Philadelphia, Pa. Card mount.....	Oct. 21, 1873	457	153	4	435
144, 441	Cartwright, A. D., Oakland, Cal. Office and counting-house stool.....	Nov. 11, 1873	236	79	4	509
144, 255	Cartwright, E., De Witt, Neb. Plow.....	Nov. 4, 1873	74	24	4	484
135, 464	Cartwright, H., Owatonna, Minn. Harrow.....	Feb. 4, 1873	67	21	3	133
140, 613	Carver, H. P., Binghamton, N. Y. Glove-fastening.....	July 8, 1873	249	84	4	40
141, 113	Carver, J., Lincolnville, assignor of one-half interest to J. P. Gilley, Rockland, Me. Port-stopper fastening.....	July 22, 1873	709	237	4	94
142, 437	Caryl, A. H., Groton, Mass. Machine for making horsehoe-nails.....	Sept. 2, 1873	100	33	4	250
142, 678	Caryl, A. H., Forge Village, Mass. Die for punching horsehoe nails from plates.....	Sept. 9, 1873	320	106	4	280
	Case, A. (See Terry, Case & Larkin.)					
137, 177	Case, H. H., Berea, Ohio. Washing-machine.....	Mar. 25, 1873	750	248	3	335
135, 627	Case, L., Des Moines, Iowa. Weather-strip.....	Feb. 11, 1873	231	73	3	158
145, 396	Case, J., Springfield, Ohio. Corn-planter.....	Dec. 9, 1873	320	106	4	623
134, 731	Case, J. T., Terryville, Conn., assignor to National Water-Wheel Company, Bristol, Conn. Water-wheel.....	Jan. 14, 1873	228	73	3	39
139, 541	Case, W., Troy, Ill. Coal-mining machine.....	June 3, 1873	81	28	3	615
	Case, W. B. (See Daykin & Case.)					
	Case, W. H. (See Marcell, M. R., assignor.)					
	Caselli, A. (See Ertola & Caselli.)					
138, 613	Casilear, G. W., Washington, D. C. Method of engraving bank-note plates.....	May 6, 1873	125	41	3	508
138, 614	Same.....	May 6, 1873	126	42	3	508
140, 573	Cass, C. N., Winchester, Ill. Barrel-stand and keg-holder.....	July 8, 1873	213	71	4	37
143, 808	Cass, F., New Orleans, La. Ferry-boat for trains of cars.....	Oct. 21, 1873	399	133	4	431
145, 334	Cass, J. F., L'Original, Canada. Milk-can.....	Dec. 9, 1873	270	91	4	619
140, 614	Cassiano, I. Z., San Antonio, Tex. Extension hat-brim.....	July 8, 1873	250	84	4	40
140, 615	Same.....	July 8, 1873	251	85	4	40
145, 092	Same..... Adjustable-hat.....	Dec. 2, 1873	50	16	4	589
137, 423	Castello, T. E., Brooklyn, N. Y. Painters' pot.....	Apr. 1, 1873	128	42	3	367
143, 272	Castle, B. S., Johustown, Ohio. Saw-set.....	Sept. 30, 1873	833	226	4	359
144, 190	Castle, H. A., Hion, N. Y. Breech-loading fire-arm.....	Nov. 4, 1873	16	5	4	479
141, 425	Caswell, E., assignor of one-half interest to A. H. Tower, Lyons, N. Y. Machine for boring hubs.....	Aug. 5, 1873	14	3	4	136
141, 993	Caswell, F., Moline, Ill. Hemmer for sewing-machines.....	Aug. 19, 1873	534	176	4	196
144, 061	Cate, E. G., Wheeling, West Va. Method of making footed glassbowls.....	Oct. 28, 1873	638	210	4	460
	Caten, J. D. (See Henning, R., assignor.)					
135, 404	Catheart, J. L., Washington, D. C. Steering-propeller.....	Feb. 4, 1873	8	3	3	128
5, 360	Catheart, R. S., assignor by mesne assignment to the Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer..... (Reissue.)	Apr. 22, 1873	866	274	3	461
134, 641	Catheart, R. S., assignor to Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer.....	Jan. 7, 1873	132	42	3	17
137, 418	Catheart, R. S., assignor of one-half interest to the Straub Mill Company, Cincinnati, Ohio. Mill-stone bush and spindle.....	Apr. 1, 1873	123	40	3	367
143, 879	Catheart, R. S., Cincinnati, Ohio. Shaft-coupling.....	Oct. 21, 1873	458	153 } 154 }	4	436
130, 867	Caton, C., Coshocton, Ohio. Miter-box.....	June 17, 1873	404	126	3	664
	Caton, J. D. (See Henning, R., assignor.)					
146, 044	Cattnach, D. D., Providence, R. I. Treating oils for paints, &c.....	Dec. 30, 1873	928		4	707
134, 785	Catudal, F., Webster, Mass. Pump.....	Jan. 14, 1873	272	89	3	42
	Caughy, S. S. (See Roy, D., assignor.)					
134, 732	Caughorn, I. N., Carthage, Ill. Cultivator.....	Jan. 14, 1873	228	73	3	39
	Cavert, L. A. (See White, J. E., assignor.)					
137, 288	Cavalli, A., assignor of half interest to V. Noly, San Francisco, Cal. Machine for inserting screw-pegs in boots and shoes.....	Apr. 1, 1873	8	3	3	358
144, 442	Caverly, A. W., New York, N. Y. Tilting-stand for carboys.....	Nov. 11, 1873	237	79	4	509
	Cavert, W. (See Orton & Cavert.)					
144, 740	Cavett, R. S., Bodias, Tex. Cultivator.....	Nov. 12, 1873	492	167	4	541
	Cawthorn, O. F. (See Toulmin, M., assignor.)					
140, 885	Caylor, J., Fairview, assignor of one-half interest to C. E. Jones, Redkey, Ind. Cultivator.....	July 15, 1873	482	163	4	67
141, 114	Cazier, R. H., Philadelphia, Pa. Culinary apparatus.....	July 22, 1873	710	217	4	94
141, 994	Chace, J. K., Brooklyn, N. Y., assignor to H. J. Johnson, New York, N. Y. Preserve-can.....	Aug. 19, 1873	534	177	4	196
	Chadborn, G. L. (See Coldwell & Chadborn.)					

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141, 995	Chadwick, E., Mortlake, England. Construction of roads	Aug. 19, 1873	535	177	4	196
143, 497	Chadwick, W., and S. Lownds, Brooklyn, N. Y. Cop-winding machine	Oct. 7, 1873	84	29	4	387
135, 079	Chaffee, C. S., assignor to R. N. Bassett, Birmingham, Conn. Corset-steels	Jan. 21, 1873	541	176	3	79
138, 856	Chaffee, J. C., Titusville, Pa. Paddle-wheel	May 13, 1873	359	111	3	537
140, 012	Chaffee, J. P., Washington, D. C. Braider for sewing-machines	June 17, 1873	523	166	3	674
143, 498	Chalender, G. F., Burlington, Iowa. Truss for coaches and cars	Oct. 7, 1873	85	29	4	387
	Chalk, B. R. (See Baughman & Chalk.)					
138, 735	Challinor, D., Pittsburgh, Pa. Lid for jelly-glasses	May 13, 1873	251	78	3	528
146, 045	Chambeaux, P. A., Paris, France. Apparatus or cock with safety-plug	Dec. 30, 1873	930	300	4	707
	Chamberlain, G. J., executor. (See Lewis, D. D.) (Extension.)					
136, 362	Chamberlain, O. M., assignor of one-half interest to W. B. Carrington, New York, N. Y. Box plaiting-machine	Mar. 4, 1873	7	3	3	246
137, 342	Same.....Plaiting-attachment for sewing-machines	Apr. 1, 1873	60	18, 19	3	361
137, 343	Same.....Box plaiting attachment for sewing-machines	Apr. 1, 1873	61	19	3	362
137, 344	Same.....Trimming	Apr. 1, 1873	62	19	3	362
139, 657	Chamberlain, O. M., assignor to self and W. B. Carrington, New York, N. Y. Plaiter for sewing-machines	June 10, 1873	199	65	3	641
142, 769	Chamberlin, C. A., Philadelphia, Pa. Anchor	Sept. 16, 1873	409	138	4	297
	Chamberlin, E., et al. (See Morehouse, C. B., assignor.) (Reissue.)					
5, 698	Chamberlin, E., Lansburgh, assignor by mesne assignment to self and J. O. Merriam, Troy, N. Y. Device for clamping whip-sockets to vehicles. (Reissue.)	Dec. 23, 1873	814	265	4	687
5, 699	Same.....Device for clamping whip-sockets to vehicles (Reissue.)	Dec. 23, 1873	814	265	4	687
5, 700	Same.....same (Reissue.)	Dec. 23, 1873	815	266	4	687
135, 405	Chamberlin, M. J., Springfield, Mass. Breech-loading fire-arm	Feb. 4, 1873	9	4	3	128
142, 144	Chamberlin, W. B., Westfield, N. J. Bake-pan	Aug. 26, 1873	691	227	4	218
140, 184	Chambers, A., Providence, R. I. Wadding and machine for its manufacture	June 24, 1873	699	220	3	680
141, 996	Chambers, B. C., Shady Plain, Pa. Sewing-machine motor	Aug. 19, 1873	536	177	4	196
	Chambers, C., jr., et al. (See Clark, C., assignor.)					
	Same.....(See Farrington, W., assignor.)					
	Same.....(See Overend, W., assignor.)					
	Same.....(See Williams, J., assignor.)					
	Chambers, C., jr., Philadelphia, Pa. Paper folding machine.....(Extension.)	Apr. 5, 1873			3	325
	Same.....Machine for folding paper.....(Extension.)	Nov. 15, 1873			4	504
5, 533	Same.....Paper-folding machine.....(Reissue.)	Aug. 12, 1873	402	131	4	175
23, 445	Same.....same.....(Disclaimer filed.)	Apr. 4, 1873			3	356
141, 486	Same.....Packing-box for paper-folding machines	Aug. 5, 1873	66	21	4	140
141, 487	Same.....Machine for folding, cutting, and trimming paper	Aug. 5, 1873	67	21	4	140
141, 488	Same.....Machine for folding, pasting, and inserting paper	Aug. 5, 1873	69	22	4	140
141, 489	Chambers, C., jr., and W. Mendham, assignors to E. and C. Chambers, jr., Philadelphia, Pa. Paper-folding machine	Aug. 5, 1873	71	22, 23	4	140
141, 490	Same.....same	Aug. 5, 1873	73	23	4	141
	Chambers, E. (See Chambers & Mendham, assignors.)					
	Chambers, E., et al. (See Clark, C., assignor.)					
	Same.....(See Farrington, W., assignor.)					
	Same.....(See Overend, W., assignor.)					
	Same.....(See Williams, J., assignor.)					
141, 321	Chambers, W. J. (See Lusby, C. C., assignor.)					
	Chamness, E., Greensburgh, and J. Vaughan, Chesterfield, assignors to selves and J. Raymond, Greensburgh, Ind. Polish for stoves	July 29, 1873	918		4	119
144, 062	Champlin, A. F., Westerly, R. I. Blind-slat fastener	Oct. 28, 1873	638	210	4	460
144, 954	Chandler, A. F., Fall River, Mass. Car-coupling	Nov. 25, 1873	681	231	4	568
142, 770	Chandler, B. B., jr., Boston, Mass. Treadle-mechanism	Sept. 16, 1873	409	138	4	297
	Chandler, C. H. (See Hale & Chandler) (Extension.)					
	Chandler, C. R. (See Bradley, G., assignor.)					
143, 328	Chandler, J. P. and W. V. Tainter, South Carthage, Mo. Wheel for vehicles	Sept. 30, 1873	882	301	4	363
139, 495	Chandler, J. W., East Corinth, Me. Machine for skiving leather	June 3, 1873	47	15	3	612
	Chandler, L. (See Sperry & Chandler)					
	Chandler, L. H. et al. (See Feed, T., assignor)					
145, 987	Chandler, M., East Corinth, Me. Water-wheel	Dec. 30, 1873	880	285	4	703
139, 368	Chandler, R., New York, N. Y. Sewing-machine	May 27, 1873	826	264	3	596
	Chandler, T. A. (See Pennock & Chandler.)					
135, 688	Chandless, J., New York, N. Y. Beer-cooler	Feb. 11, 1873	286	90	3	162
	Chaney, P. (See Clark & Chaney.)					
	Chapin, A. P. (See Bassett, E., assignor.)					
135, 522	Chapin, H. A., Bridgeport, Conn. Machine for doubling and twisting silk	Feb. 4, 1873	115	36, 37	3	137
138, 993	Same.....Electrical stops for spinning-machinery	May 20, 1873	480	152	3	560
144, 191	Same.....Spinning and twisting machine	Nov. 4, 1873	18	5	4	490
135, 689	Chapin, M., Erie, Pa. Hub and axle for vehicles	Feb. 11, 1873	287	90	3	162
	Chapin Machine Company. (See Coe, D. S., assignor.)					
135, 775	Chaplin, W. J., Kalamazoo, Mich. Car-coupling	Feb. 11, 1873	356	{ 114 115 }	{ 3 3 }	167
	Chapman, A. (See Wright, H. W., assignor.)					
137, 289	Chapman, A. G., assignor of half interest to H. E. Niles, East Hampton, Conn. Burial-casket handle	Apr. 1, 1873	10	3	3	358
141, 322	Chapman, C. P., Afton, Iowa. Wash-boiler attachment	July 29, 1873	919	300	4	119
136, 585	Chapman, C. W., Liverpool, England. Machine for rerolling metallic bands	Mar. 11, 1873	225	75	3	272
144, 192	Chapman, E. C., Lacon, assignor of one-half interest to J. M. Horton, Chicago, Ill. Stove-pipe damper	Nov. 4, 1873	19	5	4	480
142, 206	Chapman, G. A., assignor to Woonsocket Machine Company, Woonsocket, R. I. Lubricating journal	Aug. 26, 1873	742	244	4	222
145, 093	Chapman, H. L., Marcellus, Mich. Fly-trap	Dec. 2, 1873	51	16	4	529
	Chapman, J. F. et al. (See Baranger, H., assignor.)					
142, 082	Chapman, J. L., assignor of two-thirds interest to J. C. Stockton and J. Watson, Philadelphia, Pa. Telegraph-pole	Aug. 26, 1873	637	209	4	213
135, 406	Chapman, L., assignor to the Collins Company, Collinsville, Conn. Die for making wrench-heads	Feb. 4, 1873	13	4	3	129
137, 052	Same.....Die for forming wrench-heads	Mar. 25, 1873	638	211	3	326
137, 053	Same.....same	Mar. 25, 1873	638	211	3	326
137, 054	Chapman, L., assignor to self and W. J. Wood, Collinsville, Conn. Rotary pump	Mar. 25, 1873	639	211	3	326
137, 055	Same.....same	Mar. 25, 1873	640	212	3	327
137, 056	Same.....Rotary engine or pump	Mar. 25, 1873	640	{ 212 213 }	{ 3 3 }	327
137, 057	Chapman, L., assignor of one-half interest to W. J. Wood, Collinsville, Conn. Rotary pump	Mar. 25, 1873	641	213	3	327

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137, 058	Chapman, L., assignor of one-half interest to W. J. Wood, Collinsville, Conn. Rotary-pump	Mar. 25, 1873	642	213	3	327
135, 887	Chapman, L. J., Vallejo, Cal. Bolt-cutter	Feb. 18, 1873	474	153	3	190
136, 412	Chapman, M. C. (See Chapman, M. T. and M. C.)					
145, 335	Chapman, M. T. and M. C., Aurora, Ill. Adjustable valve for bored or driven wells	Mar. 4, 1873	52	18	3	249
138, 004	Same Windmill	Dec. 9, 1873	271	91	4	619
140, 013	Chapman, N., Hopedale, Mass. Loom temple	Apr. 22, 1873	672	213	3	445
144, 507	Same same	June 17, 1873	524	166	3	674
144, 657	Same same	Nov. 11, 1873	284	98	4	513
142, 438	Chapman, N. D., assignor to self and H. H. Warren, Rollingsford, N. H. Loom-shuttle	Nov. 18, 1873	426	144	4	536
144, 383	Chapman, S. J., Baltimore, Md. Strainer for ship's bilge-pumps	Sept. 2, 1873	102	33	4	250
136, 586	Chapman, T. M., Old Town, Me. Saw-sharpening machine	Nov. 11, 1873	187	64	4	505
139, 542	Chappell, B. F., assignor to self and N. Smith, Hartford, Conn. Lamp-burner	Mar. 11, 1873	226	76	3	272
141, 628	Chaput, L. G., New York, N. Y. Printer's chase	June 3, 1873	83	29	3	616
143, 880	Chaput, L. G., assignor to R. Howe & Co., New York, N. Y. Stopper for bottles contain- ing inflammable liquors, &c.	Aug. 12, 1873	208	66	4	160
144, 741	Chaput, L. G., New York, N. Y. Bronzing-pad	Oct. 21, 1873	459	154	4	436
145, 988	Chaput, L. G., W. and J. Braidwood, New York, N. Y. Bronzing-machine	Nov. 18, 1873	493	167	4	541
143, 181	Charl, S., Mianus, Conn. Sash-holder	Dec. 30, 1873	881	285	4	703
134, 852	Charles, B. (See Urso & Charles.)					
143, 181	Charles, I. et al. (See Jackson, R. A., assignor.)					
134, 852	Charters, D. M., Xenia, Ohio. Alarm-clock	Oct. 21, 1873	460	154	4	436
141, 997	Chase, C. M., Boston, assignor to E. L. Baker, New Bedford, Mass. Nail-distributing- machine	Jan. 14, 1873	331	106	3	47
144, 831	Chase, C. M., assignor to F. Curtis, Boston, Mass. Machinery for finishing the sole-edges } of boots and shoes	Aug. 19, 1873	537	{ 177 } { 173 }	{ 4 }	{ 196 }
138, 994	Chase, E. D. (See Chase, H. I., P. F., and E. D.)					
143, 221	Chase, F., Boston, assignor to self and G. S. Scammon, Malden, Mass. Valve actuating } mechanism for engines	Nov. 25, 1873	581	{ 198 } { 199 }	{ 4 }	{ 559 }
141, 762	Chase, H. I., P. F., and E. D., Peoria, Ill. Elevating, conveying, storing, and shipping } grain	May 20, 1873	461	152	3	560
143, 221	Chase, I. (See Jonson, J., assignor.)					
141, 762	Chase, J., Rochester, N. Y. Wood-turning lathe	Sept. 30, 1873	788	272	4	355
143, 329	Chase, L., assignor of one-half interest to C. W. Cahoon, Portland, Me. Air compressor } or blower	Aug. 12, 1873	321	105	4	169
143, 329	Chase, L., assignor to self and C. W. Cahoon, Portland, Me. Air compressor or blower	Sept. 30, 1873	882	{ 301 } { 302 }	{ 4 }	{ 363 }
143, 382	Chase, L., assignor of one-half interest to C. W. Cahoon, Portland, Me. Apparatus for } raising water	Oct. 21, 1873	461	{ 154 } { 155 }	{ 4 }	{ 436 }
141, 115	Chase, M. W., Buffalo, N. Y. Seat-hinge	July 22, 1873	710	237	4	94
137, 594	Chase, N. E., Boston, Mass. Portable stove	Apr. 8, 1873	290	90	3	392
134, 591	Chase, O., Rutland, Ohio. Pruning-shears	Jan. 7, 1873	87	27	3	14
143, 273	Chase, P. F. (See Chase, H. I., P. F., and E. D.)					
137, 290	Chase, R. D. (See French & Chase)					
138, 736	Chase, W. D., Marion, N. J. Machine for cutting and threading pipes, &c.	Sept. 30, 1873	833	287	4	359
143, 499	Chase, W. H., Washington, D. C. Apparatus for cleaning sewers	Apr. 1, 1873	10	3	3	358
136, 031	Chatard, F. E., jr., Baltimore, Md. Heat-governor or draft-regulator	May 13, 1873	252	78	3	528
133, 702	Chatillon, J. P., New York, N. Y. Scale-pan	Oct. 7, 1873	86	29	4	387
134, 977	Chaudron, J., Brussels, Belgium. Apparatus for lowering and sinking shaft and well } tubes	Feb. 18, 1873	591	194	3	200
136, 967	Chesman, J. L., New York, N. Y. Gas-purifier tray or grating	June 10, 1873	249	79	3	645
137, 290	Chesman, R. C. (See Reessler, B. W. S. and C. H., assignors.)					
134, 977	Chenette, C., Manchester, N. H. Sleigh-runner	Jan. 21, 1873	452	145	3	72
136, 967	Cheney, A. M., Charlotte, Mich. Machine for folding and measuring cloth	Mar. 18, 1873	552	183	3	308
136, 701	Cheney, D. (See Armstrong & Cheney.)					
137, 345	Cheney, J. W., Detroit, Mich. Sewing-machine table	Mar. 11, 1873	318	105	3	280
144, 602	Cheney, N., New York, N. Y. Fire-proof floor	Apr. 1, 1873	63	20	3	362
145, 626	Chenoweth, W. E., Baltimore County, Md. Fluid compound for embalming human } bodies	Nov. 12, 1873	378	.....	4	532
145, 626	Cherrington, W. P., Boston, assignor to self, W. B. Foster, Medford, and W. A. Morri- } son, Cambridge, Mass. Self-closing hatchway	Dec. 16, 1873	533	{ 174 } { 175 }	{ 4 }	{ 653 }
145, 720	Chertizza, J. (See Demartini & Chertizza.)					
139, 294	Chess, H. B. (See Hollis & Chess.)					
144, 955	Chess, H. B., Pittsburgh, Pa. Nail-separating device	Dec. 23, 1873	625	205	4	672
139, 294	Chessman, R. (See Coyne, J., assignor.)					
144, 955	Chester, C. T., Englewood, N. J. Apparatus for reproducing motion	May 27, 1873	771	245	3	591
139, 295	Chevalier, J. F., Lyons, France. Varnish or polish for wood, metals, &c.	Nov. 25, 1873	682	.....	4	568
139, 295	Chevors, T. R. L., Hoboken, N. J. Combined umbrella and cane	May 27, 1873	772	245	3	591
5, 683	Chicago Shot-Tower Company. (See Bradford, J., assignor.)					
135, 465	Chicago Waste-Cleansing Company. (See Sagar, G., assignor.)					
138, 073	Chichester, C. F. (See Chichester, L. S., assignor.)					
141, 032	Chichester, F., Milwaukee, Wis., assignor to self and L. A. Chichester, Phenicia, N. Y. } Cradle (Reissue)	Dec. 16, 1873	609	199	4	659
141, 032	Chichester, F., Milwaukee, Wis. Sewing-machine chair	Feb. 4, 1873	68	21	3	133
141, 032	Same Adjustable sewing machine chair	Apr. 22, 1873	739	234	3	451
142, 145	Same Spring-cradle	July 22, 1873	637	214	4	88
142, 145	Same Cradle	July 22, 1873	637	214	4	88
142, 145	Same Spring rocking-chair	Aug. 26, 1873	692	227	4	218
5, 496	Chichester, L. A. (See Chichester, F., assignor.)					
134, 513	Chichester, L. A., Poughkeepsie, N. Y. Cradle (Reissue)	July 22, 1873	788	258	4	100
136, 302	Chichester, L. S., assignor to C. F. Chichester, Brooklyn, N. Y. Machine for preparing } flour	Jan. 7, 1873	11	4	3	8
136, 302	Same Food compound	Feb. 25, 1873	842	.....	3	231
136, 303	Same same	Feb. 25, 1873	843	.....	3	231
136, 304	Same same	Feb. 25, 1873	843	.....	3	231
136, 305	Same Article of food from cereals	Feb. 25, 1873	844	.....	3	231
136, 306	Same Preparing corn-meal for shipment	Feb. 25, 1873	844	.....	3	231
144, 508	Same Food for infants from cereals	Nov. 11, 1873	289	.....	4	513
136, 702	Chicken, W., assignor to A. L. Wood, trustee, Boston, Mass. Clamp for button-hole } sewing-machines	Mar. 11, 1873	319	105	3	280
141, 693	Chickering, A. E., and H. B. Tuttle, Albany, N. Y. Channeling-machine for boots and } shoes	Aug. 12, 1873	263	85	4	164
143, 883	Child, J., Brooklyn, N. Y. Valve for the waste-pipe of sinks	Oct. 21, 1873	462	155	4	436
144, 742	Child, C. C. (See Montague, C., assignor.)					
144, 742	Child, C. C., Boston, Mass. Rotary printing-press	Nov. 18, 1873	494	168	4	541
	Childs, E. D. (See Harris & Childs.)					

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134, 514	Childs, H. J., New York, N. Y. Coffee-pot.....	Jan. 7, 1873	12	4	3	8
134, 515	Same.....same.....	Jan. 7, 1873	12	5	3	8
136, 703	Same.....same.....	Mar. 11, 1873	320	106	3	280
139, 543	Childs, J. M. (See Jackson, and J. M. & O. J. Childs.) Childs, J. W., Kansas City, Mo. School-desk.....	June 3, 1873	84	29	3	616
140, 346	Childs, O. J. (See Jackson, and J. M. & O. J. Childs.) Chillingworth, J. G., London England. Cap, or cover for bottles.....	July 1, 1873	12	4	4	9
139, 236	Chilson, G., Boston, Mass. Cooking-range.....(Extension).....	Jan. 4, 1873	.....	.....	2	729
135, 080	Chilson, H. Ware, Mass. Friction-mechanism for yarn-beams.....	May 27, 1873	719	226	3	587
138, 787	Chinn, R. H., Washington, D. C. Writing-pen.....	Jan. 21, 1873	542	176	3	79
139, 868	Chinnoek, G. H., Brooklyn, assignor to J. H. Haggood, New York, N. Y. Paint-brush.....	May 13, 1873	296	91	3	531
139, 869	Chinnoek, G. H., Brooklyn, N. Y. Metal can for paint, &c.....	June 17, 1873	404	126	3	604
139, 870	Same.....Paper bag.....	June 17, 1873	405	127	3	604
142, 612	Chinnoek, G. H., assignor to L. Richardson, Brooklyn, N. Y. Can for holding paint, &c.....	June 17, 1873	406	127	3	605
142, 613	Chinnoek, G. H., assignor of one-half interest to L. Richardson, Brooklyn, N. Y. Can for oil, &c.....	Sept. 9, 1873	264	87	4	275
145, 844	Chipman, A., et al. (See Petco, F. W., assignor.) Chiple, L. M., Saint Louis, Mo. Fire-escape.....	Dec. 23, 1873	729	239	4	681
136, 413	Chisholm, H., Cleveland, Ohio. Furnace for reheating metals, &c.....	Mar. 4, 1873	52	18, 19	3	250
135, 205	Chisholm, J., and I. C. Mayer, Toronto, Canada. Truck.....	Jan. 28, 1873	167	215	3	101
142, 083	Chisholm, W. (See Bidwell & Chisholm) Choat, D. T., and H. Rich, Cedar Falls, Iowa. Flour-bolt.....	Aug. 26, 1873	638	209	4	213
139, 871	Choate, B. B., Springfield, Vt. Shoe-lacing fastening.....	June 17, 1873	407	127	3	665
136, 704	Chollar, B. E., and J. G. Johannes, Leavenworth, Kans. Lamp-chimney cleaner.....	Mar. 11, 1873	321	106	3	280
140, 014	Chomel, I. A., New York, N. Y. Oscillating berth for ships.....	June 17, 1873	525	166	3	674
134, 642	Chormann, E. G., Philadelphia, Pa. Gearing.....	Jan. 7, 1873	134	43	3	17
145, 277	Chrimes, T., Jackson, Mich. Artificial stone.....	Dec. 9, 1873	218	.....	4	615
138, 788	Christian, J. B., Hamburg, Iowa. Means for operating earth-augers.....	May 13, 1873	297	91	3	532
137, 656	Christmas, E. B., Mansfield, Ohio. Picture-mounting machine.....	Apr. 8, 1873	343	106	3	396
6, 473	Christie, J. M., Brooklyn, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 474	Same.....same.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 475	Same.....same.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 476	Same.....same.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 477	Same.....same.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 478	Same.....same.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 479	Same.....same.....(Design).....	Mar. 4, 1873	.....	.....	3	245
6, 562	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 563	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 564	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 565	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 566	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 567	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 568	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	386
6, 569	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	387
6, 570	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	387
6, 571	Same.....same.....(Design).....	Apr. 8, 1873	.....	.....	3	387
6, 753	Same.....same.....(Design).....	July 8, 1873	.....	.....	4	36
6, 754	Same.....same.....(Design).....	July 8, 1873	.....	.....	4	36
6, 755	Same.....same.....(Design).....	July 8, 1873	.....	.....	4	36
6, 756	Same.....same.....(Design).....	July 8, 1873	.....	.....	4	36
137, 896	Christoffel, J. B. (See Sexauer, L., assignor.) Christoffel, J. B., Williamsburgh, N. Y. Boiler tube scraper.....	Apr. 15, 1873	504	158	3	422
138, 317	Same.....Coiled-wire brush.....	Apr. 29, 1873	982	308	3	478
136, 414	Christy, J., Cincinnati, Ohio. Means of operating steamboat-chimneys.....	Mar. 4, 1873	53	19	3	250
143, 962	Christy, J., Clyde, Ohio. Pruning-hook.....	Oct. 28, 1873	548	182	4	453
141, 763	Christy, F., Mansfield Valley, Pa. Lamp.....	Aug. 12, 1873	322	105	4	169
137, 059	Christy, T., jr. (See Liebe, Gorman & Christy.) Christy, T., jr., and A. Bobrownicki, London, England. Process for treating sewage and ammoniacal waters for the production of fertilizers, &c.....	Mar. 25, 1873	642	.....	3	327
138, 074	Chubb, J. J., assignor to self and S. C. Bollman, Decatur, Ill. Oiling millstone-spindles.....	Apr. 22, 1873	740	234	3	451
145, 049	Chubbuck, A. F., Casnovia, Mich. Extension-table.....	Dec. 2, 1873	6	2	4	586
138, 789	Church, D. M., assignor to T. Merrick, Holyoke, Mass. Machine for pointing the journals of bobbins.....	May 13, 1873	297	91	3	532
139, 043	Church, J., Saint Louis, Mo. Machine for entering blind-slats.....	May 20, 1873	521	165	3	563
143, 062	Same.....Faucet-attachment.....	Sept. 23, 1873	661	226	4	328
140, 469	Church, P. M., assignor to P. S. Church, Sault de Ste. Marie, Mich. Apparatus for leaching and concentrating bark-extracts.....	July 1, 1873	107	36	4	17
144, 016	Church, P. S. (See Church, P. M., assignor.) Churchill, E., Saint Thomas, Canada. Felt roofing.....	Oct. 28, 1873	600	.....	4	457
143, 274	Churchill, H. L., and J. D. Robinson, Taunton, Mass. Eyelet-making machine.....	Sept. 30, 1873	834	287	4	359
141, 919	Churchill, J. (See Thissell, E. A., assignor.) Churchill, J. H., Cross River, N. Y. Hoisting-jack.....	Aug. 19, 1873	475	156	4	191
135, 690	Churchill, J. L., Nokomis, Ill. Reversible magnet.....	Feb. 11, 1873	287	91	3	162
140, 115	Churchill, W., Saint Louis, Mo. Safety-valve.....	June 24, 1873	638	201	3	692
145, 278	Churchman, N., Pioche, Nev. Ingot-mold.....	Dec. 9, 1873	219	75	4	615
142, 614	Cilik, M., Chicago, Ill. Powder-flask.....	Sept. 9, 1873	267	87	4	275
140, 886	Cilley, J. J., et al. (See Thayer, W. H., assignor.) Cilley, J. P. (See Carver, J., assignor.) Cinquini, P. (See Evarts & Cinquini.) Claffin, G., Miller's Corners, N. Y. Potato-screen.....	July 15, 1873	482	163	4	67
134, 978	Clapp, E. D. (See Van Patten, F., assignor.) Clapp, H. W., Concord, N. H. Grating for sewer-inlets.....	Jan. 21, 1873	453	145	3	72
140, 470	Clapp, J. B. (See Goldthorp & Hield, assignors.) Clapper, M. J., Holland, Mich. Wash-boiler.....	July 1, 1873	109	37	4	17
137, 595	Claridge, D. (See Abraham, G. F., assignor.) Clark, A. (See Stimens & Martin, assignors.) Clark, A., London, England. Corrugated metallic rolling shutter.....	Apr. 8, 1873	291	90	3	392
137, 827	Same.....Manufacture of corrugated-metal shutters.....	Apr. 15, 1873	505	158	3	422
136, 212	Clark, A. T. (See Duvall, L., assignor.) Clark, B. H. (See Corpman, E., assignor.) Clark, C., Unadilla Forks, N. Y. Hoisting-apparatus.....	Feb. 25, 1873	762	246	3	225
141, 491	Clark, C., New York, N. Y., assignor to C., jr., & E. Chambers, Philadelphia, Pa. Packing device for paper-folding machines.....	Aug. 5, 1873	75	23	4	141

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 887	Clark, C. B., Buffalo, N. Y. Sash-cord guide.....	July 15, 1873	483	163	4	67
141, 323	Same..... Lock-hinge.....	July 29, 1873	919	301	4	119
145, 397	Same..... Mop-head.....	Dec. 9, 1873	322	109	4	624
135, 524	Clark, C. D. (See Clark, C. P. and C. D.)					
	Clark, C. H., assignor to self, C. H. Longley, and N. A. Durham, Hartford, Conn. Auto- matic fan.....	Feb. 4, 1873	118	37	3	137
145, 627	Clark, C. M., Seward, Neb. Plow.....	Dec. 16, 1873	534	175	4	653
138, 378	Clark, C. P. and C. D., Beaver Dam, Wis. Machine for cutting splints.....	Apr. 29, 1873	1,030	325	3	482
	Clark, C. S. (See Barker, E. W., assignor.)					
141, 998	Clark, E. A., Jackson, Tenn. Borer for sampling cotton.....	Aug. 19, 1873	540	178	4	196
145, 721	Clark, E. B., assignor of one-half interest to M. Andrae, Cohoes, N. Y. Apparatus for transferring power.....	Dec. 23, 1873	696	205	4	672
143, 963	Clark, E. H., Appleton, Wis. Earth-auger.....	Oct. 28, 1873	549	182	4	453
142, 615	Clark, E. R., Marshfield, Ill. Sewing-machine caster.....	Sept. 9, 1873	268	88	4	275
138, 228	Clark, E. Y., Brooklyn, and W. A. Lilliendahl, New York, assignors to said Clark, E. M. Lilliendahl, New York, and J. H. Beardsley, Brooklyn, N. Y. Sign for moving vehicles.....	Apr. 29, 1873	894	282	3	472
	Clark, F. L. (See Clark, J. M., assignor.)					
	Clark, G. H. (See Crowell, A. F., assignor.)					
142, 140	Clark, G. H., Brooklyn, N. Y. Grate-bar.....	Aug. 26, 1873	692	228	4	218
	Clark, G. M. (See Clark, T. J. and G. M.)					
5, 258	Clark, G. W., Council Bluffs, Iowa. Governor for steam-engines..... (Reissue).	Jan. 28, 1873	844	272	3	115
137, 178	Clark, H. A., Boston, Mass. Spring butt-hinge.....	Mar. 25, 1873	750	249	3	335
141, 116	Same..... Process for the manufacture of artificial leather.....	July 22, 1873	711		4	94
141, 117	Same..... Artificial leather.....	July 22, 1873	711		4	94
141, 118	Same..... Preparing cloth and paper and like fabrics to imitate leather.....	July 22, 1873	712		4	94
142, 439	Same..... Manufacture of carpets.....	Sept. 2, 1873	102	34	4	251
143, 122	Same..... Fabric prepared to imitate leather.....	Sept. 23, 1873	705		4	332
	Clark, H. E. (See Haldeman, J. S., assignor.)					
	Clark, H. M. (See Almy, G. F., assignor.)					
	Clark, J. (See Edson, J., assignor.)					
	Clark, J., jr., et al. (See Bristol, H. C., assignor.)					
136, 813	Clark, J., Pontiac, Mich. Car for carrying petroleum.....	Mar. 18, 1873	427	141	3	298
141, 629	Clark, J., Haverstraw, N. Y. Machine for punching metal.....	Aug. 12, 1873	209	66	4	160
	Clark, J. B. (See Ransom, G. B., assignor.)					
	Clark, J. H. (See Tibbetts, L., assignor.)					
140, 764	Clark, J. M., assignor to F. L. Clark, Lancaster, Pa. Lamp.....	July 15, 1873	377	{ 129 130 }	4	58
145, 150	Clark, J. M., assignor of one-half interest to T. C. Coleman, Louisville, Ky. Furnace- door.....	Dec. 2, 1873	103	34	4	593
143, 668	Clark, J. W., Pittsburgh, Pa. Rein-holder.....	Oct. 14, 1873	245	83	4	409
	Clark, L., Brooklyn, N. Y. Hem-folder..... (Extension).	Oct. 18, 1873			4	400
137, 891	Clark, M. C., Manchester, N. H. Horseshoe.....	Apr. 15, 1873	559	175	3	427
135, 407	Clark, M. S., assignor to C. Harrison, New York, N. Y. Self-closing faucet.....	Feb. 4, 1873	14	4	3	129
141, 630	Same..... Self-closing cock.....	Aug. 12, 1873	210	66	4	160
143, 275	Clark, P. E., Hartford, Conn. Machine for gumming shoe-uppers.....	Sept. 30, 1873	836	288	4	359
	Clark, P. J. (See Klutz, J., assignor.)					
141, 694	Clark, R. A., Petrolia City, Pa. Drill-rod coupling.....	Aug. 12, 1873	264	85	4	164
136, 643	Clark, R. B., Lyle, Minn. Grain measurer and register.....	Mar. 11, 1873	272	91	3	276
140, 015	Clark, S. W., and W. R. Sykes, said Sykes assignor to said Clark, London, England. Sig- nal-lantern.....	June 17, 1873	526	167	3	674
137, 060	Clark, T. J. and G. M., Higganum, Conn. Plow.....	Mar. 25, 1873	645	214	3	327
140, 574	Same..... Railway-frog.....	July 8, 1873	214	71	4	37
141, 999	Same..... Hay-tedder.....	Aug. 19, 1873	541	178	4	196
	Clark, W. A., et al. (See Andrews, E., assignor.)					
5, 393	Clark, W. A., New Haven, Conn. Hollow auger..... (Reissue).	May 6, 1873	237	74	3	517
139, 769	Same..... Ice-auger.....	June 10, 1873	312	97	3	650
141, 324	Same..... Expansive bit.....	July 29, 1873	920	301	4	119
142, 556	Same..... Axle-box for vehicles.....	Sept. 9, 1873	218	71	4	271
142, 837	Clark, W. H., and P. Chaney, jr., Oregon, assignors to selves and J. H. White, Hale, Ill. Railway-switch.....	Sept. 16, 1873	463	157	4	302
	Clark, W. J. (See Hitchcock, C., assignor.)					
138, 615	Clark, W. P., Medford, Mass. Draught-cock for soda-fountains.....	May 6, 1873	127	42	3	508
136, 307	Clark, W. R., Thellertown, Pa. Railway-rail joint.....	Feb. 25, 1873	845	273	3	231
136, 587	Clarke, A., Philadelphia, Pa. Hat and parcel holder.....	Mar. 11, 1873	227	76	3	273
	Clarke, C. J., et al. (See Culmer, J. W., assignor.)					
135, 888	Clarke, G. B., Leonardsville, N. Y. Sky-light.....	Feb. 18, 1873	475	153	3	190
134, 643	Clarke, G. E., Kenosha, Wis. Fanning-mill.....	Jan. 7, 1873	135	{ 43 44 }	3	17
5, 497	Clarke, H., Baltimore, Md., assignor by mesne assignment to The Clarke Lock Company, Louisville, Ky. Combination lock..... (Reissue).	July 22, 1873	789	258	4	100
135, 523	Clarke, H., Baltimore, Md. Combination lock.....	Feb. 4, 1873	117	37	3	137
6, 572	Clarke, J. B., Brooklyn, N. Y. Trimming..... (Design).	Apr. 8, 1873			3	387
	Clarke Lock Company. (See Clarke, H., assignor.)..... (Reissue).					
136, 032	Clarke, N., Boston, Mass. Hat-rack.....	Feb. 18, 1873	592	195	3	200
	Clarke, Reeves & Co. (See Bonzano, A., assignor.)					
	Clarke, Reeves & Co. (See Clarke, Bonzano & Griffen, assignors.)					
	Clarke, T. A. W. (See Donisthorpe & Clarke.)					
135, 776	Clarke, T. C., Philadelphia, Pa., A. Bonzano, and J. Griffen, Phoenixville, Pa., assignors to Clarke, Reeves & Co., Philadelphia, Pa. Pivot-bridge.....	Feb. 11, 1873	357	115	3	168
140, 471	Same..... Truss-bridge.....	July 1, 1873	109	37	4	17
140, 888	Clarke, T. C., Philadelphia, assignor to self, D. Reeves, A. Bonzano, and J. Griffen, Phoen- ixville, Pa. Constructing bridges.....	July 15, 1873	484	163	4	67
135, 081	Clarke, T. M., Winsted, Conn. Calk for horseshoes.....	Jan. 21, 1873	542	176	3	79
144, 017	Clarke, W. A., Milwaukee, Wis., assignor of one-half interest to E. P. Allis & Co. Mid- dlings-purifier.....	Oct. 28, 1873	600	{ 198 199 }	4	457
	Clarke, W. E. (See Rhoades, L., assignor.)					
138, 229	Clarkson, F. E., Highland, Kans., assignor of two-thirds interest to J. J. Strader, Jersey- ville, and G. F. Nelson, Chicago, Ill. Rotary churn.....	Apr. 29, 1873	896	293	3	472
136, 968	Clarkson, W. H., Bridgeville, Del. Fruit-crate.....	Mar. 18, 1873	553	183	3	308
	Clarridge, J. (See Wood, W. D., assignor.)					
138, 857	Class, G. C. A., Philadelphia, Pa. Piano pedal-attachment.....	May 13, 1873	359	111	3	537
136, 415	Class, W. F., assignor of one-fourth interest to T. D. Cottrell and W. L. B. Hughes, Cleve- land, Ohio. Bung.....	Mar. 4, 1873	51	19	3	250

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145, 722	Classon, N. A., Windham, Conn. Preparing cocoa-nut for use in pies, cakes, &c.	Dec. 23, 1873	627	4	672	
136, 363	Cloughton, H. O., et al. (See McClure, W. B., assignor.)	Mar. 4, 1873	8	3, 4	3	246	
136, 416	Clausolles, E. E. P., Barcelona, Spain. Water-meter	Mar. 4, 1873	54	19	3	250	
140, 765	Claussen, F. W., Mars Bluff, S. C. Barrel-support	July 15, 1873	379	130	4	58	
143, 617	Clay, R. J., New York. Toy automaton	Oct. 14, 1873	203	69	4	406	
140, 889	Clayton, H. M. (See Hunter & Clayton.)	July 15, 1873	484	164	4	67	
144, 053	Clayton, W., jr., Bristol, Conn. Carpet-rag looper	Oct. 28, 1873	639	210	4	460	
137, 761	Cleary, D. M., assignor of one-half interest to J. F. Broadbent, Baltimore, Md. Device for opening oysters	Apr. 15, 1873	451	110	3	418	
143, 964	Cleaveland, E. R., Boston, Mass. Supporter for men's drawers	Oct. 28, 1873	549	182	4	453	
142, 616	Cleaveland, G. D., assignor of two-thirds interest to H. E. Davis and L. W. Hall, Flint, Ind. Hold-back	Sept. 9, 1873	269	88	4	275	
135, 082	Cleaveland, R., Covington, Pa. Mode of connecting pitmen with shafts	Jan. 21, 1873	543	176	3	79	
140, 245	Cleenerwerck, B., et al. (See Alegeo, R. J., assignor.)	June 24, 1873	746	235	3	701	
137, 892	Clem, J. M. Opelika, Ala. Railway-rail joint	Apr. 15, 1873	560	176	3	427	
135, 777	Clemen, A., et al. (See Simmons, T., assignor.)	Feb. 11, 1873	358	115	3	168	
139, 770	Clemen, C. T., et al. (See Simmons, T., assignor.)	June 10, 1873	313	97	3	650	
139, 544	Clemens, S. L., Hartford, Conn. Scrap-book	June 3, 1873	84	29	3	616	
135, 408	Clements, C. J., and E. P. Fowler, New York, N. Y. Pigeon-hole	Feb. 4, 1873	15	4	3	129	
135, 628	Cleminshaw, B. F., Troy, N. Y. Lubricator	Feb. 11, 1873	232	73	3	158	
145, 628	Cleminshaw, S., Troy, N. Y. Button-hole sewing-machine	Dec. 16, 1873	535	175	4	653	
141, 695	Cleminson, G. W. (See Corell, J., assignor.)	Aug. 12, 1873	264	85	4	164	
136, 134	Clemmens, S. W., Cleveland, Ohio. Method of adjusting circular-saws	Feb. 25, 1873	702	227	3	220	
143, 330	Clemmons, A. J. (See Westbrooks & Clemmons.)	Sept. 30, 1873	893	302	4	363	
134, 853	Clemson, W., Middletown, N. Y. Buck-saw frame	Jan. 14, 1873	332	106	3	47	
144, 064	Same. Handle for saws	Oct. 28, 1873	640	210	4	460	
143, 063	Same. Saw-handle	Sept. 23, 1873	661	226	4	328	
143, 331	Cleveland Non-Explosive Lamp Company. (See House, M. W., assignor.)	Sept. 30, 1873	884	302	4	363	
141, 695	Clevenger, S., Vibbard, Mo. Harvester rake	Clift, C. W. (See Robinson & Clift.)					
136, 134	Clews, W., Iliou, N. Y. Cartridge retractor for revolving fire-arms	Clift, L. D. (See Stevens, C. A., assignor.) (Reissue.)					
143, 330	Click, B. F., Newark, Ind. Wood-sawing machine	Climax Mower and Reaper Company. (See Seibel, J. F., assignor.)					
134, 853	Cliff, E., South Saint Louis, Mo. Spring for vehicles	Clime, J. C., assignor of one-half interest to A. Middleton, jr., Philadelphia, Pa. Device for transmitting power	Feb. 4, 1873	69	22	3	133
144, 064	Cliff, H. T., and J. E. Martin, assignors to G. H. Smith, T. Nourse, and N. D. Lapham, Detroit, Mich. Paper-ruling machine	Apr. 8, 1873	292	91	3	392	
143, 063	Clifford, M. A., Boston, Mass. Broom-hanger	Nov. 11, 1873	198	64	4	505	
143, 331	Clifford, W. P., West Jersey, assignor of one-half interest to L. and J. Garrison, Elmore, Ill. Grain separator and scourer	Dec. 2, 1873	7	2, 3	4	586	
135, 466	Clift, C. W. (See Robinson & Clift.)	Apr. 22, 1873	782	250	3	454	
137, 596	Clinton, C. M., and E. J. Morgan, Ithaca, N. Y. Invalid-bedstead	Dec. 2, 1873	208	71	4	602	
144, 384	Clinton, C. M., and L. Mood, Ithaca, N. Y. Calendar-clock	May 20, 1873	522	165	3	563	
145, 050	Clinton, E. H., Iowa City, Iowa. Harvester	Aug. 19, 1873	541	178	4	196	
138, 130	Clisbee, G., Marlborough, Mass. Embossing-press	Sept. 2, 1873	5	2	4	242	
5, 672	Clogston, L. B., assignor of one-half interest to C. H. Sheldon, West Rutland, Vt. Gate for gang for marble-saws	Dec. 2, 1873	208	71	4	602	
139, 044	Closs, J., Decatur, Ind. Sample-holder for displaying boots, &c	Dec. 2, 1873	208	71	4	602	
142, 000	Closse, E. L., Cleveland, Ohio. Men's drawers	May 20, 1873	522	165	3	563	
142, 326	Cloud, C. M., Grinnell, Iowa. Agricultural boiler	Aug. 19, 1873	541	178	4	196	
137, 179	Cloud, E. W. (See McNamee, J., assignor.)	Sept. 2, 1873	5	2	4	242	
138, 858	Clough, C. F. (See Lincoln & Clough.)	Mar. 25, 1873	571	249	3	325	
138, 859	Clough, C. F., and J. B. Lincoln, Providence, said Clough assignor to W. V. Phillips, Greene, R. I. Treadle for sewing-machines	May 13, 1873	360	111	3	537	
145, 276	Clough, T., assignor to self, A. T. Welch, H. Iden, and L. P. Hawes, New York, N. Y. Argand gas-burner	May 13, 1873	361	112	3	537	
136, 135	Clouser, S. F., Salt Lake City, Utah. Operating steam or air brakes	Dec. 9, 1873	218	74	4	615	
142, 679	Cloutman, J. F. (See Hall, A. J., assignor.)	Feb. 25, 1873	894	287	3	235	
139, 658	Clow, L. E., Saint Louis, Mo. Cooking-stove	Aug. 12, 1873	323	107	4	280	
144, 018	Clubb, G. (See Hall, G., assignor.)	May 27, 1873	826	265	3	596	
145, 398	Clucas, T., jr., Saint Louis, Mo. Washing-machine	Apr. 22, 1873	783	250	3	454	
141, 764	Clute, P. R. (See Foley, W. F., assignor.)	Nov. 11, 1873	289	98	4	513	
139, 369	Coan, G. P., Wyandotte, Mich. Reciprocating churn	July 8, 1873	215	72	4	37	
138, 131	Same. Lock-hinge for blinds	Nov. 11, 1873	289	98	4	513	
144, 509	Same. Grain-basket	July 8, 1873	215	72	4	37	
140, 575	Coapman, E., assignor of one-half interest to B. H. Clark, Rochester, N. Y. Machine for bending hoops	Nov. 11, 1873	289	98	4	513	
144, 385	Coates, F. J., Cincinnati, Ohio. Footstool for barbers' chairs. (Design)	Nov. 11, 1873	289	98	4	513	
138, 075	Coates, L., and J. T. Criswell, Collamer, Pa. Butter-print press	Nov. 11, 1873	289	98	4	513	
142, 839	Coatsworth, J. (See Rogers, S., assignor.)	Nov. 11, 1873	289	98	4	513	
144, 956	Cobaugh, D., administrator. (See Ball, E.)	Nov. 11, 1873	289	98	4	513	
144, 658	Cobb, B. F., assignor to E. Prescott, West Troy, N. Y. Riveting tool. (Reissue.)	Nov. 11, 1873	289	98	4	513	
136, 136	Cobb, C., Charlestown, Mass. Coating canvas to form tarpaulins	Nov. 11, 1873	289	98	4	513	
136, 213	Cobb, J. G., Shoe Heel, N. C. Turpentine tool	Nov. 11, 1873	289	98	4	513	
139, 370	Cobb, J. M., Jackson, Tenn. Plow	Nov. 11, 1873	289	98	4	513	
142, 374	Cockcroft, W., and R. Ackroyd, assignors to selves and J. Massey, Chester, Pa. Stopping-mechanism for doubling and twisting machines	Nov. 11, 1873	289	98	4	513	

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138, 230	Codd, H., Grove Lane, Camberwell, assignor of one-half interest to R. Barrett, London, England. Bottle for effervescing liquids.	Apr. 29, 1873	896	283	3	472
	Codding, A. E., et al. (See Sweet, F. M., assignor.)					
	Codding, D. D., et al. (See Sweet, F. M., assignor.)					
145, 051	Codman, J. T., Boston, Mass. Dental plugger	Dec. 2, 1873	9	3	4	586
144, 256	Cody, H., New York, N. Y. Door-spring	Nov. 4, 1873	74	24	4	484
144, 443	Coe, B. W., Des Moines, Iowa. Wagon-brake	Nov. 11, 1873	237	60	4	509
141, 853	Coe, C. C., Hartford, Conn. Drying and disintegrating animal matter	Aug. 19, 1873	411		4	186
140, 404	Coe, D. S., assignor to Chapin Machine Company, New Hartford, Conn. Vice	July 1, 1873	55	20	4	13
	Coe, J., administrator. (See Coc & Sniffin.)					
	Same					
23, 826	Coe, J. H., deceased, and W. Sniffin, by J. Coc, administrator, Stratford, Conn. Skate-fastening	Apr. 30, 1873			4	471
	Same					
	Coe, J. H., deceased, by J. Coc, administrator, and W. B. Sniffin, Stratford, Conn. Skate-fastening	May 3, 1873			3	470
140, 116	Coe, J. H., Brighton, Mich. Device for elevating building-material	June 24, 1873	640	201	3	692
	Coe, J. P. (See Masten, J., assignor.)					
136, 417	Coe, J. W., and D. Merritt, Williamsburgh, N. Y. Whip-socket	Mar. 4, 1873	55	20	3	250
	Coe, S. S., et al. (See Shipperd & Curtis, assignors.)					
	Coe, S. S., et al. (See Shipperd, W. C., assignor.)					
145, 845	Coe, W., New Haven, Conn. Hoop-skirt	Dec. 23, 1873	731	239	4	681
142, 771	Coes, L., Worcester, Mass. Manufacture of wrench-heads	Sept. 16, 1873	410	138	4	297
144, 832	Same	Nov. 25, 1873	583	199	4	539
137, 657	Coffee, G., and W. M. Bernard, Dixon, Cal. Vehicle	Apr. 8, 1873	345	107	3	396
138, 616	Coffee, R. W., Big Spring, Va. Spoke-machine	May 6, 1873	129	42	3	508
139, 771	Coffin, B. C. (See Kellogg & Coffin.)					
	Coffin, C. H., assignor of one-third interest to J. W. Morrison, Boston, Mass. Indicator for railway-cars	June 10, 1873	315	98	3	650
134, 516	Coffin, D. N. B., jr., Boston, Mass. Steering-apparatus	Jan. 7, 1873	13	5	3	8
134, 517	Same	Jan. 7, 1873	15	5	3	8
139, 872	Same	June 17, 1873	408	127 128	3	665
139, 454	Coffin, T. E., Boston, assignor of one half interest to W. R. Hoyt, Chelsea, Mass. Parlor-bedstead	June 3, 1873	8	3		
	Coffin, G. S. (See Coffin, J. H. & G. S.)					
136, 033	Coffin, G. W., Pittsburgh, Pa. Car-coupling	Feb. 18, 1873	593	195	3	200
138, 005	Coffin, J. H. & G. S., Danielsville, Pa. Machine for finishing slate-frames	Apr. 22, 1873	673	213	3	446
6, 684	Coffin, J. M., Danielsville, Pa. Slate-frame	May 27, 1873			3	5-6
136, 814	Cogan, A. J., Bon Homme, Dak. Wagon-seat	Mar. 18, 1873	428	141	3	298
141, 631	Cogswell, E. R., New York, N. Y. Life-preserving garments	Aug. 12, 1873	211	66	4	160
144, 957	Cogswell, T., Boston, Mass. Strap-coupling	Nov. 25, 1873	683	231	4	568
137, 346	Cohen, L., and J. C. Waller, San Francisco, Cal. Presser-block for pants	Apr. 1, 1873	63	30	3	362
141, 119	Cohen, R. L., Philadelphia, Pa. Manufacture of vapor-gas	July 22, 1873	713		4	95
139, 496	Cohic, J. K., and D. H. Shartzler, West Hempfield Township, Pa. Measuring-funnel	June 3, 1873	48	15	3	612
	Cohn, M. (See Gahren & Langlotz, assignors.)					
	Cohn, M. (See Gahren, C., assignor.)					
137, 893	Cohn, M., New York, N. Y. Corset	Apr. 15, 1873	561	176	3	427
140, 994	Coin, T. P., Boonesborough, Iowa. Sash-fastener	July 22, 1873	603	204	4	86
143, 222	Cokly, B., Washington, D. C. Apparatus for loading and unloading wagons	Sept. 30, 1873	791	273	4	355
140, 890	Colahan, C., Cleveland, Ohio. Mowing-machine	July 15, 1873	485	164	4	67
145, 399	Colbert, I. C., Marysville, Ohio. Ratchet-wrench	Dec. 9, 1873	324	109	4	694
142, 207	Colbrunn, T. E., Cleveland, Ohio. Gauged butter cutter and lifter	Aug. 26, 1873	743	244	4	222
	Colburn, A. (See Hart, W. H., assignor.)					
5, 572	Colburn, G. F. J., Newark, N. J., assignor to W. M. Welling. Composition for dental plates, &c.	Sept. 16, 1873	582		4	312
5, 596	Same	Oct. 14, 1873	321		4	414
	Colby, A. H. (See Lombard, E., assignor.)					
	Colby, C. (See Ingham & Colby.)					
135, 629	Colby, E. B., Franklin, N. H. Ice-creper	Feb. 11, 1873	232	73	3	158
143, 809	Colby, F. W., Streator, Ill. Building-block	Oct. 21, 1873	400	133	4	431
138, 379	Colby, G. J., Reading, Mich. Washing-machine	Apr. 29, 1873	1,031	325	3	482
139, 944	Colby, J. L., and L. B. Thomson, Saxonville, Mass. Medicine-spoon	June 17, 1873	471	148	3	670
141, 854	Colby, J. S., New York, N. Y. Panier	Aug. 19, 1873	411	134	4	186
136, 969	Caldwell, T., and G. L. Chadborn, Newburgh, N. Y. Lawn-mower	Mar. 18, 1873	553	184	3	308
141, 120	Cole, A., and E. Davis, Saratoga Springs, N. Y. Sash-fastener	July 22, 1873	713	238	4	95
	Cole, A. D. (See Abell & Cole.)					
136, 970	Cole, C., Meriden, N. H. Washing-machine	Mar. 18, 1873	555	184	3	308
144, 065	Cole, C., Chatfield, Minn. Potato-bug exterminator	Oct. 28, 1873	641	211	4	461
135, 968	Cole, C. G., Bennington, Vt. Hat and coat hook	Feb. 18, 1873	536	177	3	195
139, 545	Cole, D. M., Elgin, Ill. Clothes-wringer	June 3, 1873	85	29	3	616
137, 419	Cole, E. C., Pawling, N. Y. Wagon-seat	Apr. 1, 1873	124	41	3	367
136, 214	Cole, E. R., Pawtucket, R. I. Steam-boiler	Feb. 25, 1873	764	247	3	225
138, 076	Cole, H. C., Wallingford, Vt. Snow-shovel	Apr. 22, 1873	741	235	3	451
140, 185	Cole, H. C., and E. D. Sabin, Wallingford, Vt. Sap-protector	June 24, 1873	700	220	3	696
138, 380	Cole, I., Brooklyn, N. Y., assignor to C. C. Beggs & Co., Pittsburgh, Pa. Candle-mold tip	Apr. 29, 1873	1,032	325	3	483
	Cole, J. R. (See Lundgren, J., assignor.)					
141, 920	Cole, J. R., Morrisania, N. Y. Can for oil, &c.	Aug. 19, 1873	476	156	4	191
145, 400	Cole, J. R., New York, N. Y. Can for paints, &c.	Dec. 9, 1873	324	109	4	624
139, 772	Cole, J. W., Brooklyn, N. Y., assignor to the Tanite Company, Stroudsburg, Pa. Process of grinding journal boxes or bearings	June 10, 1873	315	98	3	650
139, 773	Same	June 10, 1873	316	98	3	650
139, 774	Same	June 10, 1873	317	98	3	650
139, 775	Same	June 10, 1873	318	99	3	650
145, 151	Cole, S. L., Brooklyn, N. Y. Production of turpentine from sawdust	Dec. 2, 1873	104		4	594
141, 853	Cole, W., Milan, Tenn. Brick-machine	Aug. 19, 1873	413	134	4	186
144, 510	Same	Nov. 11, 1873	290	92	4	514
138, 231	Coleman, F. E., Kirkwood, N. Y. Tire-bending machine	Apr. 29, 1873	897	283	3	472
140, 016	Coleman, H. T., Williamsburgh, N. Y. Pump	June 17, 1873	527	167	3	674
	Coleman, I. (See Mattfeld, H., assignor.)					
141, 034	Coleman, J. A., Providence, R. I. System of supplying steam, &c., to buildings for extinguishing fires	July 22, 1873	637	215	4	88
140, 186	Coleman, J. W., Bridgeville, Mich. Hand corn-planter	June 24, 1873	700	220	3	697
136, 705	Coleman, M., Ionia, Mich. Extension-table	Mar. 11, 1873	321	106	3	280
	Coleman, T. C. (See Clark, J. M., assignor.)					
	Same					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 435	Coleman, T. C. (See Kelly, W., assignor) (Reissue.)	Oct. 7, 1873	34	12	4	383
140, 576	Coleman, T. F., Allegheny City, Pa. Axle for vehicles	July 8, 1873	216	72	4	37
138, 381	Coles, A. D., Newark, N. J. Stove-foot shoe	Apr. 29, 1873	1,033	325	3	484
143, 884	Coles, D. H., New York, N. Y. Sewing-machine	Oct. 21, 1873	463	155	4	436
	Collamer, T. (See Barbour, J. W., assignor.)					
5, 241	Collender, H. W., New York, N. Y. Billiard-table cushion (Reissue.)	Jan. 21, 1873	634	207	3	86
143, 500	Same..... Billiard-table ball-holder	Oct. 7, 1873	87	30	4	387
143, 885	Same..... Chalk-holder for billiard-tables	Oct. 21, 1873	463	156	4	436
145, 787	Same..... Billiard table	Dec. 23, 1873	683	224	4	677
	Collett, J. F. (See Gentry & Collett.)					
138, 478	Collier, J. W., New York, N. Y. Cooler for liquids	May 6, 1873	12	4	3	498
134, 786	Collier, W. C., Salford, England. Steam-drying cylinder	Jan. 14, 1873	273	89	3	42
139, 776	Collignon, A., C. O., and N., Closter, N. J. Folding-chair	June 10, 1873	318	99	3	650
	Collignon, C. O. (See Collignon, A., C. O., and N.)					
	Collignon, N. (See Collignon, A., C. O., and N.)					
135, 889	Collingbourne, J. J., New York, N. Y. Hand-truck	Feb. 18, 1873	476	153	3	191
	Collinge, R. (See Meyenberg & Collinge) (Design.)					
143, 064	Collings, W. H., Raytown, Mo. Pruning-instrument	Sept. 23, 1873	661	226	4	328
	Collins, B. (See Copeland, R. A., assignor.)					
	Collins, B. F., et al. (See Wright, H., assignor.)					
	Collins Company. (See Chapman, L., assignor.)					
	Same..... (See Jordan & Smith, assignors) (Reissue.)					
136, 588	Collins, C. S. (See Fleeharty, J. T., assignor.)					
	Collins, C. S., assignor of one-half interest to J. T. Fleeharty, Baltimore, Md. Vessel for steaming oysters	Mar. 11, 1873	227	76	3	273
139, 902	Same..... Ash-sifter	Mar. 18, 1873	499	165	3	303
139, 455	Collins, D., Newark, N. J. Manufacturing picks	June 3, 1873	9	3	3	609
134, 733	Collins, E., New York, N. Y. Foot-rest for chairs	Jan. 14, 1873	229	73	3	39
141, 121	Same..... Reclining-chair	July 22, 1873	714	238	4	95
145, 629	Collins, E. S., Trenton, Tenn. Cotton and hay press	Dec. 16, 1873	535	175	4	653
134, 518	Collins, F., Portland, Me. Thread-cutter for sewing-machines	Jan. 7, 1873	15	5	3	8
134, 734	Collins, G. G., and J. A. Morrison, assignors of one-third interest to O. Wood, Philo, Ill. Earth-anger	Jan. 14, 1873	230	74	3	39
142, 208	Collins, G. W., West Lebanon, Pa. Apple-butter stirrer	Aug. 26, 1873	744	245	4	222
	Collins, H. H., et al. (See Wright, H., assignor.)					
135, 691	Collins, J., Guelph, Canada. Harvester-rake	Feb. 11, 1873	288	91	3	162
145, 401	Collins, J., Hohokus Township, N. J., assignor to H. P. Sims & Dickinson Manufacturing Company. Door-key	Dec. 9, 1873	325	110	4	624
145, 630	Same..... Rail for sliding-doors	Dec. 16, 1873	536	176	4	653
	Collins, J. P., Norwich, Conn. Water-wheel (Extension.)	Dec. 6, 1873				585
5, 407	Same..... same (Reissue.)	May 13, 1873	459	145	3	545
6, 803	Collins, L. M., Lebanon, N. H. Band-saw frame (Design.)	Aug. 19, 1873				185
136, 971	Collins, M. H., Chelsea, Mass. Glass mold for forming lamp-chimneys	Mar. 18, 1873	555	184	3	308
145, 474	Collins, O. N., and P. B. Stiles, Cedar Rapids, Iowa. Draught-equalizer	Dec. 9, 1873	390	128	4	629
145, 723	Collins, W. A., Bloomfield, N. J. Dredging-machine	Dec. 23, 1873	628	206	4	672
140, 472	Collins, W. H., and C. E. Longden, Prospect, Conn. Manufacture of India-rubber rings	July 1, 1873	110	37	4	17
135, 890	Collins, W. T., Winchester, Ill. Car-coupling	Feb. 18, 1873	477	153	3	191
140, 473	Collyer, C. W., assignor to self and C. Tucker, Marblehead, Mass. Elevator	July 1, 1873	111	37	4	17
135, 891	Colman, N. J., Railroad Flat, Cal. Water-wheel	Feb. 18, 1873	477	154	3	191
	Colsten, H. V. (See Booth, E., assignor.)					
134, 979	Colton, J. H., et al. (See Stanton, J. W., assignor.)					
135, 409	Colton, S. B., Bloomfield, Conn. Medicated candy	Jan. 21, 1873	453		3	72
	Colton, W. R., Syracuse, N. Y. Driving-belt	Feb. 4, 1873	15	5	3	129
	Colt's Patent Fire-arm Manufacturing Company. (See Gaskell, J., assignor.)					
135, 264	Colver, A. B., and J. Priest, Albany, Oreg. Cultivator	Jan. 28, 1873	724	232	3	106
144, 890	Colvin, P., Pecatonica, Ill. Farmers' boiler	Nov. 25, 1873	631	214	4	563
138, 132	Colvin, R. J., Lancaster, Pa. Combined rake and tedder	Apr. 22, 1873	784	250	3	454
143, 123	Colvin, T., and R. M. Patchen, Meriden, Conn. Washing-machine	Sept. 23, 1873	705	242	4	332
	Colvin, W. S., et al. (See Burney, F., assignor.)					
137, 420	Colyar, E., Clayton, Iowa. Stump-extractor	Apr. 1, 1873	124	41	3	367
145, 555	Combes, F. A., Cleveland, Ohio. Ruler	Dec. 16, 1873	475	155	4	648
136, 035	Combes, W. M., Auburn, N. Y. Churn-dasher	Feb. 18, 1873	595	195	3	200
136, 034	Combs, A., Philadelphia, Pa. Wick-raiser for lamps	Feb. 18, 1873	594	195	3	200
144, 444	Combs, E. J., Pratsburgh, assignor of one-half interest to L. O. Dunning, Penn Yan, N. Y. Polishing compound	Nov. 11, 1873	238		4	509
143, 669	Combs, J. H., Stamford, Conn. Carriage-top joint	Oct. 14, 1873	246	83	4	409
	Comer, H. B., Worcester, Mass. Machine for rolling iron (Extension.)	Mar. 29, 1873				
137, 421	Comly, J., Philadelphia, Pa. Dummy engine	Apr. 1, 1873	126	41	3	367
143, 559	Compton, I. B., Seward, Nebr. Churn-dasher	Oct. 14, 1873	154	52	4	401
	Comstock, Castle & Co. (See Huntley, H. H., assignor.)					
135, 083	Comstock, L. R., Baltimore, Md. Oyster-packing can	Jan. 21, 1873	543	177	3	79
139, 873	Same..... Manufacture of funnels	June 17, 1873	411	128	3	665
140, 577	Comstock, L. R., Philadelphia, Pa. Means for draining basins	July 8, 1873	216	72	4	37
141, 765	Comstock, L. R., Baltimore, Md. Heating-stove	Aug. 12, 1873	323	106	4	169
138, 737	Comstock, M., Chicago, Ill. Motor	May 13, 1873	253	79	3	528
145, 152	Conant, C. B., Lewiston, Me. Burnisher for photographs	Dec. 2, 1873	105	34, 35	4	584
	Conant, H., Lincoln, R. I. Machine for winding thread on spool (Extension.)	June 22, 1873				662
	Conaway, J., et al. (See Wilson, A., assignor.)					
	Condict, N. W., Jr., et al. (See Stevens, W. J., assignor.)					
	Condit, I. D. (See Atwood, A., assignor.)					
140, 891	Condon, J. W., Logansport, Ind. Egg and cake beater	July 15, 1873	486	164	4	67
134, 644	Condon, S. E., Brooklyn, N. Y. Refrigerator	Jan. 7, 1873	137	44	3	17
	Condron, H. (See Lapham, R., assignor.)					
140, 465	Cone, D. D., and P. Polder, Panama, N. Y. Bolt and rivet cutter	July 1, 1873	56	20	4	13
6, 780	Cone, E. G., East Hampton, Conn. Hand-bell (Design.)	July 22, 1873				85
146, 046	Congdon, I. H., and J. E. House, Omaha, Nebr. Wire-stretcher	Dec. 30, 1873	931	300	4	707
136, 364	Conger, W. M., assignor to self and J. and J. Noon, Newark, N. J. Water-filter	Mar. 4, 1873	10	4	3	246
136, 589	Conger, W. M., Newark, N. J. Stove-platform	Mar. 11, 1873	228	76	3	273
137, 291	Same..... Stove-support	Apr. 1, 1873	11	4	3	358
137, 292	Same..... same	Apr. 1, 1873	12	4	3	358
138, 860	Conger, W. R., Newark, N. J. Sofa	May 13, 1873	361	112	3	537
140, 187	Conklin, E. E., New York, N. Y. Ice-elevator	June 24, 1873	701	220	3	697

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145, 279	Conklin, T. F., Fond du Lac, Wis. Smoke-stack	Dec. 9, 1873	219	75	4	615
137, 180	Connable, R., Jackson, Mich. Kiln	Mar. 25, 1873	752	249	3	335
143, 670	Same..... Machine for making curved earthen pipes	Oct. 14, 1873	247	83	4	409
143, 671	Same..... Process of making curved earthen pipes	Oct. 14, 1873	248	.....	4	409
140, 810	Connel J M Newark, Ohio. Machine for grinding harvester-knives.....	July 15, 1873	421	142	4	62
140, 811	Same..... same.....	July 15, 1873	422	{ 142 143 }	{ 4 4 }	62
139, 116	Connell, J., jr., assignor to self and W. Connell, Collingwood, Canada. Preserving and packing compounds for eggs, wool, &c.....	May 20, 1873	593	.....	3	569
	Connell, J. P. (See Fogelstrand, O. F., assignor)..... (Design.)					
	Same..... (See Fenfield, C. W., assignor.)					
	Connell, W. (See Connell, J., jr., assignor)					
135, 265	Connelly, B., Williamsburgh, N. Y. Device for feeding stoves	Jan. 28, 1873	725	232	3	106
136, 418	Same..... Device for emptying stoves	Mar. 4, 1873	56	20	3	250
	Conner, E. F. (See Hamilton & Conner.)					
136, 365	Conner, J., assignor to self and L. P. Wendell, Philadelphia, Pa. Pipe-coupling	Mar. 4, 1873	11	4	3	246
6, 573	Conner, J. M., New York, N. Y. Printing type	Apr. 8, 1873	.....	.....	3	387
6, 574	Same..... Printing-type	Apr. 8, 1873	.....	.....	3	387
7, 080	Conner, J. M., Greenville, N. J. Printing-type	Dec. 30, 1873	.....	.....	4	698
144, 066	Same..... Type-casting machine	Oct. 25, 1873	641	211	4	461
	Conner, R. (See Wolford & Conner.)					
141, 035	Conner, W. M., assignor to A. G. Winston, Burlington, and A. V. Winston, Covington, Ky. Baling press	July 22, 1873	639	215	4	89
142, 091	Conner, W. Z., Shelbyville, Ind. Weighing-scales	Sept. 23, 1873	598	203	4	323
	Conners, J. D., et al. (See Platt, A. L., assignor.)					
	Conners, T. K., et al. (See Platt, A. L., assignor.)					
143, 672	Connolly, J. D., Lincoln, Nebr., assignor of one-half interest to R. Doyle, Peoria, Ill. Striker for paper-ruling machines	Oct. 14, 1873	248	83	4	409
138, 232	Connor, J. P., and M. T. Hynes, Boston, Mass. Lantern	Apr. 29, 1873	898	283	3	472
139, 117	Connor, S. P., Conshohocken, and P. D. Pfaterer, Philadelphia, Pa. Shaft for vehicles	May 30, 1873	594	187	3	569
5, 361	Conover, S. B., New York, N. Y., assignor to J. A. Mount. Fruit-basket	Apr. 22, 1873	867	275	3	461
135, 778	Conrad, E. E., assignor of one-half interest to M. Meir, Philadelphia, Pa. Lamp-shade holder	Feb. 11, 1873	359	115	3	168
145, 153	Conrad, S. A., Centralia, Ill. Hand-cultivator	Dec. 2, 1873	106	35	4	594
6, 456	Conrad, C. J., assignor to G. S. Griffith & Co., Baltimore, Md. Ottoman	Feb. 25, 1873	.....	.....	3	218
141, 812	Couroy, J. W., Terry, Miss. Washing-machine	July 15, 1873	423	143	4	62
142, 899	Conroy, L., New York, N. Y. Screen for postal cards	Sept. 16, 1873	513	175	4	306
145, 154	Same..... Breech-loading fire arm	Dec. 2, 1873	106	35	4	594
	Consolidated Wax-Thread Sewing-Machine Co. (See Bean, E. E. and F., assignors.)					
133, 296	Constable, N., Carrollton, Ill. Fire-proof safe	May 27, 1873	773	245	3	591
136, 815	Converse, A. C., Boston, Mass. Apparatus for casting type	Mar. 18, 1873	428	142	3	298
144, 386	Converse, C. C., Erie, Pa. Car-coupling	Nov. 11, 1873	190	65	4	505
135, 969	Converse, G. C., Spencer, Mass., assignor to A. Wheelock, Charlton, Mass. Machine for pricking leather	Feb. 18, 1873	537	178	3	195
139, 045	Conzelman, J., Saint Louis, Mo. Medical compound	May 20, 1873	522	.....	3	563
138, 133	Coogan, O., Pittsfield, Mass. Leather boarding-machine	Apr. 22, 1873	785	251	3	454
135, 525	Cook, B. C., Richmond, Va. Broom-head	Feb. 4, 1873	120	38	3	137
	Cook, C. H. (See Grant & Cook.)					
145, 989	Cook, E. F., Omaha, Nebr. Damper for stoves	Dec. 30, 1873	881	225	4	703
	Cook, F. (See McClean, J., assignor.)					
	Cook, F. (See McMurtry, J., assignor)..... (Reissue.)					
135, 526	Cook, F., New Orleans, La. Bale-tie	Feb. 4, 1873	120	38	3	137
138, 479	Same..... same.....	May 6, 1873	13	4	3	498
138, 480	Same..... same.....	May 6, 1873	13	4	3	498
138, 481	Same..... Cotton-bale tie	May 6, 1873	14	5	3	498
138, 482	Same..... same.....	May 6, 1873	14	5	3	499
138, 483	Same..... same.....	May 6, 1873	15	5	3	499
138, 484	Same..... same.....	May 6, 1873	15	5	3	499
139, 777	Same..... same.....	June 10, 1873	319	99	3	650
140, 246	Same..... same.....	June 24, 1873	747	236	3	701
140, 766	Same..... same.....	July 15, 1873	379	130	4	58
142, 001	Same..... same.....	Aug. 19, 1873	542	179	4	196
142, 772	Same..... Bale-tie	Sept. 16, 1873	411	138	4	287
143, 223	Same..... same.....	Sept. 30, 1873	792	273	4	355
145, 247	Same..... same.....	Dec. 23, 1873	733	240	4	681
	Cook, F. G., et al. (See Knowlton, C. H., assignor.)					
	Cook, G., and H. I. Kimball, New Haven, Conn. Top-prop for carriages..... (Extension) ..	Dec. 27, 1873	.....	.....	4	670
6, 798	Cook, G. K., New York, N. Y. Stamp pad and rack	Aug. 12, 1873	.....	.....	4	159
136, 972	Cook, G. W., assignor of one-half interest to H. T. Weeks, Chicago, Ill. Devices to prevent retrograde motion of balance-wheels on sewing-machines	Mar. 18, 1873	556	185	3	308
141, 766	Cook, H. O., assignor to Marine Variometer Company, New York, N. Y. Solar compasses	Aug. 12, 1873	325	106	4	169
	Cook, I. (See Parker & Cook)..... (Reissue.)					
141, 325	Cook, I., Saint Louis, Mo. Rotary meter	July 29, 1873	921	301	4	119
	Cook, J. F., Baltimore, Md. Try-cock for steam-boilers	Sept. 20, 1873	.....	.....	4	296
	Cook, L. A., et al. (See Winsor, J. S., assignor)..... (Reissue.)					
145, 846	Cook, O. F., Grand Island, Cal. Process of preparing grain for manufacture into flour ..	Dec. 23, 1873	732	240	4	681
145, 724	Cook, R. F., West Potadam, N. Y. Saw-set	Dec. 23, 1873	629	206	4	672
5, 276	Cook, S., Magnolia, Iowa, assignor by mesne assignment to the Automatic Boiler-Feeder Company. Automatic boiler-feeder	Feb. 11, 1873	448	146	3	174
141, 036	Cook, S., Alpena, Mich. Saw	July 22, 1873	641	216	4	89
	Cook, S. E. (See Carroll, W. T., assignor.)					
	Cook, S. S. (See Whitaker & Cook.)					
	Cook, S. S. (See Whitaker, J., assignor.)					
145, 290	Cook, S. S., Woonsocket, R. I. Carriage-axle	Dec. 9, 1873	220	75	4	616
6, 987	Cook, T. G., Philadelphia, Pa. Drinking-glass, &c..... (Design) ..	Nov. 11, 1873	.....	.....	4	504
	Cook, W. A. (See Burritt, H. H., assignor.)					
	Cooke, A. A. (See Weatherhead, O. E., assignor)..... (Reissue.)					
139, 546	Cooke, A., and D. W. Cross et al., Brooklandville, Md. Corn-row marker	June 3, 1873	86	30	3	616
138, 006	Cooke, G. K., New York, N. Y. Making rubber stereotypes	Apr. 22, 1873	674	213	3	446
	Cooke, G. L., et al. (See Weatherhead, O. E., assignor.)..... (Reissue.)					
141, 632	Cooke, H. E., Cleveland, Ohio. Lawn or garden sprinkler	Aug. 12, 1873	212	67	4	160
5, 383	Cooke, J. T., Brooklyn, N. Y. Compound for coating roasted coffee	Apr. 29, 1873	1, 115	.....	3	486
143, 501	Cooke, O. H., and F. Kenfield, Morristown, Vt. Toilet-rack	Oct. 7, 1873	88	30	4	387

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5, 642	Cooke, R., New Hartford, N. Y., and T. Hanford, Norwich, Conn. Mechanism for shearing caps. (Reissue)	Nov. 4, 1873	176	59, 60	4	493
145, 052	Cooke, R., New Hartford, N. Y. Machine for shearing hats	Dec. 2, 1873	10	3	4	586
144, 833	Cooke, R. F., Brooklyn, N. Y. Horseshoe	Nov. 25, 1873	583	199	4	559
141, 921	Cooke, S. W., et al. (See Weatherhead, O. E., assignor) (Reissue)	Aug. 19, 1873	447	157	4	191
135, 892	Cooke, W. Z., Hartford, Conn. Spring bed and frame	Feb. 18, 1873	478	154	3	191
143, 896	Cooley, A. G., Hillsborough, Ohio. Wagon-jack	Oct. 21, 1873	465	156	4	436
145, 930	Cooley, J., Albany, N. Y. Seat for school-desks	Dec. 30, 1873	828	270	4	699
139, 547	Cooley, L. C., New York, N. Y., assignor to A. T. Jones, Clinton, Wis. Apparatus for preserving fruit	June 3, 1873	88	30	3	616
140, 247	Cooley, L. C., Albany, N. Y. Apparatus for exhausting the air from fruit-cans and other vessels	June 24, 1873	747	236	3	701
143, 276	Cooley, W. T. (See Reed, A., assignor.) Cooley, W. T., assignor of one-half interest to D. H. Wells, Chicago, Ill. Earth-anger	Sept. 30, 1873	836	288	4	359
	Coollidge, F. S. (See French, E. S., assignor.) Coombs, N. (See Hawkins, L. P., assignor.) Coombs, W. (See Hood & Coombs.) Coombs, W. F., et al. (See Brown, W. F., assignor.)					
143, 436	Coon, P. J., Nunica, Mich. Siding-hook	Oct. 7, 1873	35	12	4	383
134, 134	Cooney, W., assignor to Hockensmith & Cooney, Bridgeport, Conn. Shuttle for sewing-machines	Apr. 22, 1873	726	251	3	455
145, 848	Cooper, A., assignor of one-half interest to M. E. Updegraf, Macomb, Ill. Cultivator	Dec. 23, 1873	734	240	4	681
143, 560	Cooper, A. F., Cambridge, Mass. Car-wheel	Oct. 14, 1873	154	52	4	401
144, 315	Same. Medicated pad or belt	Nov. 4, 1873	117	40	4	488
140, 680	Cooper, C. E., Philadelphia, Pa. Cutting-boards for shoemakers, &c	July 8, 1873	302	101	4	44
143, 502	Cooper, C. P., New York, N. Y. Bolster, pillow, &c	Oct. 7, 1873	88	30	4	388
139, 703	Cooper, D. A., Worcester, England. Glove-fastening	June 10, 1873	250	79	3	645
135, 084	Cooper, E. A., Lancaster, N. Y. Wrench	Jan. 21, 1873	544	177	3	79
137, 181	Same. Indicator-lock	Mar. 25, 1873	753	249	3	335
144, 511	Same. Nut-lock	Nov. 11, 1873	291	98	4	514
135, 085	Cooper, G. B. F. (See Stephens & Cooper.) Cooper, G. S., Baraboo, Wis. Feeding-screen for bran-dusters	Jan. 21, 1873	545	177	3	79
138, 861	Same. Umbrella-support	May, 13, 1873	362	112	3	537
145, 094	Cooper, J. F., Frankton, Ind. Carpet-rag looper	Dec. 2, 1873	51	16	4	589
140, 892	Cooper, J. H., and A. D. Emery, Philadelphia, Pa. Compound steam-engine	July 15, 1873	487	164	4	67
136, 816	Cooper, J. W., Hubbard, Ohio, assignor to A. E. Rogers, La Grande, Oreg., and C. Rouse, Newcastle, Pa., trustees. Rolls for rolling railway-rail	Mar. 18, 1873	430	142	3	298
136, 817	Same. Means for buoying and stopping holes in vessels	Mar. 18, 1873	430	142	3	298
145, 556	Cooper, M. J., New York, N. Y. Button-holder	Dec. 16, 1873	476	156	4	648
135, 779	Cooper, N. B. (See Hood, H. P., assignor.) Cooper, N. B., Liberty, Ind. Wagon-body	Feb. 11, 1873	359	116	3	162
143, 437	Cooper, R. B., Monticello, N. Y. Feather-renovator	Oct. 7, 1873	36	13	4	383
141, 492	Cooper, S., et al. (See Rohrer, J. B., assignor) (Design.) Cooper, S. L., assignor of two-thirds interest to J. Lock and R. N. Williams, Lewistown, Pa. Passenger-registers	Aug. 5, 1873	76	24	4	141
138, 233	Cooper, T., Philadelphia, Pa. Car-starter	Apr. 29, 1873	899	284	3	472
138, 558	Cooper, T., Warwick, R. I. Lubricating-cup	May 6, 1873	82	26	3	504
135, 970	Cooper, W. B., Albany, N. Y. Iron bridge	Feb. 18, 1873	538	178	3	196
142, 557	Cooper, W. H., Lowell, Mass. Try-square	Sept. 9, 1873	219	71	4	271
140, 248	Cooper, W. S., Philadelphia, Pa. Stop-cock	June 24, 1873	740	236	3	701
144, 257	Co-operative Manufacturing Company, (See Ellis, J. A. H., assignor.) Covert, W. R., London, Pa. Car-coupling	Nov. 4, 1873	75	24	4	484
145, 631	Cope, J. (See Mullooney, Cope & Brooks.) Copeland, R. A., Brooklyn, assignor to B. Collins, New York, N. Y. Plug or ferrule for stopping leaks in the tubes of steam-boilers	Dec. 16, 1873	537	176	4	653
144, 258	Copley, P. (See Gillott & Copley.) Copping, G. H., Toronto, Canada. Lozenge-cutting machine	Nov. 4, 1873	76	24, 25	4	484
137, 532	Copple, J. F., West Newton, assignor to J. D. Vinnedge, Indianapolis, Ind. Burglar-alarm	Apr. 8, 1873	239	73	3	389
6, 618	Coppuck, M. M., assignor to C. Noble & Co., Philadelphia, Pa. Cooking-stove. (Design.)	Apr. 29, 1873			3	471
134, 854	Corban, A., et al. (See Hubbell, N. C., assignor.) Corbel, J., Lind, Wis. Potato-bug collector	Jan. 14, 1873	332	106	3	47
141, 326	Same. Car-starter	July 29, 1873	923	301	4	119
140, 249	Corbin, E. A., and H. Albrecht, Philadelphia, Pa. Clothes-wringer	Jan. 24, 1873	749	237	3	701
138, 862	Corbin, F., assignor to P. and F. Corbin, New Britain, Conn. Handle-plate for door-latches	May 13, 1873	363	112	3	537
	Corbin, J. S. (See Litchfield & Corbin.) Corbin, P. and F. (See Arnold, S. D., assignor.) Same. (See Corbin, F., assignor.) Same. (See Munger, W. T., assignor.) Same. (See White, G. W., assignor) (Design.) Same. (See Widmayer, L., assignor) (Design.)					
135, 467	Corby, A. B., Binghamton, N. Y. Machine for pointing pickets	Feb. 4, 1873	69	22	3	133
138, 007	Cordley, J. (See Thomson & Cordley.) Corell, J., New York, assignor of one-half interest to G. W. Clemison, Brooklyn, N. Y. Soluble chocolate	Apr. 22, 1873	675		3	446
142, 084	Coreth, R., West Belleville, Ill. Gang-plow	Aug. 26, 1873	639	210	4	213
137, 422	Corey, J. H., New York, N. Y. Electrical indicator for elevators	Apr. 1, 1873	127	41	3	367
143, 673	Same. Culinary-boiler	Oct. 14, 1873	249	84	4	409
144, 834	Same. Water-tank for hotels	Nov. 25, 1873	584	199, 200	4	559
136, 137	Corey, T., et al. (See Springer, W. A., assignor.) Corfield, W., Chicago, Ill. Distilling together spirits of turpentine and alcoholic liquids	Feb. 25, 1873	706		3	220
144, 387	Corliss, G. F., Mansfield, Ohio. Clothes-line reel	Nov. 11, 1873	191	65	4	505
145, 725	Corliss, J. H., Reno, Nev. Combined tank and liquid measure	Dec. 23, 1873	629	206	4	672
137, 061	Corliss, W., Providence, R. I. Burglar-proof safe	Mar. 25, 1873	646	214	3	327
145, 053	Cornelius, C. E., Philadelphia, Pa. Drop-light for chandeliers	Dec. 2, 1873	11	4	4	586
140, 347	Cornelius, R., Philadelphia, Pa. Drop-light for chandeliers	July 1, 1873	13	4	4	9
140, 348	Same. same	July 1, 1873	14	4	4	9
139, 945	Cornell, J. B., New York, N. Y. Fire-proof roof	June 17, 1873	472	148	3	670
141, 696	Same. Fire-proof shutter	Aug. 12, 1873	265	86	4	164
141, 259	Same. Metallic cornice and gutter	Nov. 4, 1873	77	25	4	464

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 630	Cornell, L. R., Brooklyn, N. Y. Evaporating pan for salt, sugar, &c.	Feb. 11, 1873	233	73	3	158
142, 440	Same. Steam-superheater for evaporating salt, and for other purposes.	Sept. 2, 1873	103	34	4	251
137, 658	Cornell, S. (See Hough, W. S., assignor.)					
137, 658	Cornell, S. V., New Haven, Conn. Folding table.	Apr. 8, 1873	346	107	3	397
134, 735	Cornell, T. L., et al. (See Harrington, I., assignor.)					
134, 735	Cornell, T. L., Derby, Conn. Bracelet.	Jan. 14, 1873	230	74	3	39
135, 086	Corning, C. N. (See Ladd & Corning.)					
135, 086	Cornwall, G., Brooklyn, N. Y. Spring attachment to car-window.	Jan. 21, 1873	545	177	3	79
136, 138	Corr, C. W., Carlinville, Ill. Hollow auger.	Feb. 25, 1873	706	228	3	230
135, 692	Corre, A. G., et al. (See Williams, H. B., assignor.)					
135, 692	Correa, J. A., Green Bay, Wis. Scissors.	Feb. 11, 1873	290	91	3	162
141, 697	Corrigan, P., New York, N. Y. Screw-valve.	Aug. 12, 1873	266	86	4	164
	Corse, A. (See Parker, W., assignor.)					
135, 631	Corser, G. A., assignor to self, A. Hankey, and J. E. Jones, Leicester, Mass. Bed-plate for rag or paper engines.	Feb. 11, 1873	231	74	3	158
	Corvin, J. (See Grimm & Corvin.)					
135, 693	Cory, I., Dalton, Ind. Boring-machine.	Feb. 11, 1873	290	92	3	162
135, 780	Cory, J., Chicago, Ill. Beater-press.	Feb. 11, 1873	360	116	3	168
137, 828	Cosby, O. G., Richmond, Va. Invalid-bedstead.	Apr. 15, 1873	506	158	3	422
145, 557	Costello, A. B., Jersey City, N. J. Photographic background.	Dec. 16, 1873	477	156	4	648
	Coston, B. F., deceased, by M. J. Coston, administratrix, Washington, D. C. Pyrotechnic night-signal. (Extension.)	Apr. 5, 1873				3 325
145, 849	Coston, J., Bowdon, Ga. Cotton-chopper.	Dec. 23, 1873	734	240	4	681
	Coston, M. J., administratrix. (See Coston, B. F.)					
135, 694	Coté, L., Salut Hyacinthe, Canada. Machine for trimming and burnishing the soles of boots and shoes.	Feb. 11, 1873	291	92	3	162
137, 293	Same. Apparatus for trimming the heels of boots and shoes.	Apr. 1, 1873	13	4	3	358
	Cotner, J. (See Fagaine, G. W., assignor.)					
137, 894	Cotten, M. J. (See Cotton, T. L., assignor.)					
137, 894	Cotten, T. L., assignor to M. J. Cotton, Water Valley, Miss. Plow.	Apr. 15, 1873	562	176	3	427
137, 597	Cotter, P. A., Boston, Mass. Fan-fly attachment for cylinder presses.	Apr. 8, 1873	294	91	3	392
	Cotterell, C. B. (See Walther, J., assignor.)					
144, 743	Cottingham, G. W., assignor to self and J. P. Cottingham, Saint Mary's, Tex. Ironing-machine.	Nov. 18, 1873	496	{ 168 } { 169 }	4	541
	Cottingham, J. P. (See Cottingham, G. W., assignor.)					
135, 632	Cottle, H. W., Lynn, Mass. Bleaching buffed sole-leather.	Feb. 11, 1873	235		3	158
135, 087	Cottle, S., New York, N. Y. Manufacture of jewelry bases.	Jan. 21, 1873	546	178	3	79
135, 088	Same. same.	Jan. 21, 1873	546	178	3	79
140, 616	Same. Device for manufacturing jewelry bases.	July 8, 1873	252	85	4	40
145, 788	Same. Bracelet-fastening.	Dec. 23, 1873	681	224	4	677
	Cotton, F. B. (See Peaney & Cotton.)					
127, 347	Cottrell, C. B., Westerly, R. I. Rotary printing-press.	Apr. 1, 1873	64	20	3	362
140, 813	Same. Printing-press.	July 15, 1873	424	143	4	62
144, 316	Cottrell, H., Newark, N. J. Machine for cutting and working stone.	Nov. 4, 1873	118	40	4	488
144, 317	Same. Stone-sawing machine.	Nov. 4, 1873	120	40	4	488
144, 318	Same. Stone-cutting tool.	Nov. 4, 1873	121	40	4	488
144, 744	Cottrell, H., Newark, N. J., assignor to Cottrell Stone Machinery Company, New York, N. Y. Polishing-tool.	Nov. 18, 1873	497	169	4	542
144, 745	Same. Carving-machine.	Nov. 18, 1873	497	169	4	542
142, 147	Cottrell, I. B., Bridgeville, Del. Fruit-drier.	Aug. 26, 1873	693	228	4	218
	Cottrell Stone Machinery Company. (See Cottrell, H., assignor.)					
	Cottrell, T. D., et al. (See Class, W. F., assignor.)					
145, 095	Coughlin, D., Fall River, Mass. Heater for steam-boilers.	Dec. 2, 1873	52	16	4	589
145, 990	Courtney, J. P., Brooklyn, N. Y. Pin for jewelry ornaments.	Dec. 30, 1873	882	286	4	703
143, 065	Couse, F. P., Westfield, Mass. Whip.	Sept. 23, 1873	662	227	4	328
142, 617	Coutant, F. J., New York, N. Y. Fountain hand-stamp.	Sept. 9, 1873	269	88	4	275
	Covel, E. H., Brooklyn, N. Y. Gas-regulator. (Extension.)	May 31, 1873				3 585
	Same. Hydrocarbon-vapor apparatus. (Extension.)	May 31, 1873				3 585
5, 465	Same. Apparatus for charging air or gas with hydrocarbon vapors. (Reissue.)	June 24, 1873	639	266	3	708
139, 237	Covell, A. C., New York, N. Y. Device for teaching drawing.	May 27, 1873	720	227	3	587
	Covell, E. T. (See Munger, A. S., assignor.)					
140, 474	Covert, E., Farmer Village, N. Y. Harness-fastening.	July 1, 1873	112	38	4	17
140, 475	Same. Harness-fastening.	July 1, 1873	112	38	4	17
141, 698	Same. Harness.	Aug. 12, 1873	266	86	4	164
143, 332	Covert, J. C., Farmer Village, N. Y. Snap-hook.	Sept. 30, 1873	885	333	4	363
138, 234	Covert, L. B., Detroit, Mich. Extension step-ladder.	Apr. 29, 1873	900	284	3	472
138, 738	Covey, S., and O. A. Slaughter, McHenry, Ill. Wash-boiler.	May 13, 1873	254	79	3	528
134, 855	Cowan, R., Bloomfield, Ill. Combined corn-planter and seeder.	Jan. 14, 1873	333	{ 106 } { 107 }	3	47
6, 512	Cowell, A., Kidderminster, England. Carpet. (Design.)	Mar. 25, 1873				3 325
136, 366	Cowell, J. J., Newark, N. J. Sash-balance.	Mar. 4, 1873	12	4	3	246
141, 327	Cowell, R. A., Cleveland, Ohio. Car-mover.	July 29, 1873	923	302	4	119
147, 810	Cowell, W. G., Wallingford, Conn. Oil-can.	Oct. 21, 1873	400	133	4	431
141, 699	Cowell, W. H., Columbus, Ohio. Axle-box and sleeve for vertical wheels.	Aug. 12, 1873	267	86	4	164
	Cowl, A. E. (See Barrett, J. C., assignor.)					
5, 481	Cowles, C., & Co. (See Hine, M., assignor.)					
	Cowles, E., Cleveland, Ohio, assignor by mesne assignment to E. Holmes, New York, N. Y. Mechanical movement for sewing-machines, &c. (Reissue.)	July 8, 1873	368	{ 124 } { 125 }	4	49
134, 980	Cowles, G. B., Bridgeport, Conn. Curtain-fixture.	Jan. 21, 1873	453	145	3	72
138, 790	Same. Plumb-bob.	May 13, 1873	300	92	3	532
137, 762	Cowles, H. D., Montreal, Canada, assignor to self and J. Terry, Terryville, Conn. Manufacture of horseshoe-nails.	Apr. 15, 1873	452	141	3	418
	Same. Manufacture of nails.	Dec. 9, 1873	272	91	4	620
145, 336	Cowles, R., Cleveland, Ohio. Watchmaker's lathe.	Jan. 14, 1873	274	89	3	42
134, 787	Cowles, S. F., Coventry, Vt. Milk-cooler.	Feb. 25, 1873	763	247	3	225
136, 215	Cox, A. M. (See Oliver, B. A., assignor.)					
139, 297	Cox, C., Covington, Ga. Soldering compound.	May 27, 1873	774		3	541
137, 895	Cox, C. A., Jeffersonville, assignor of two-thirds interest to E. M. Gardner, Bedford, Ind. Fire-extinguisher.	Apr. 15, 1873	563	176	3	427
	Cox, C. E., executrix. (See Sabin, H. W.) (Reissue.)					
134, 520	Cox, G., Pierrepont, N. Y. Water-wheel.	Jan. 7, 1873	17	6	3	6
439, 704	Cox, H., Peterborough, Canada. Friction-attachment for securing pulleys to shafts, &c.	June 10, 1873	251	79	3	645

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 438	Cox, J. B., San Francisco, Cal. Burial-case.....	Oct. 7, 1873	36	13	4	384
135, 089	Cox, S., and W. W. Fanning, Richmond, Ind. School-desk.....	Jan. 21, 1873	547	178	3	79
135, 321	Cox, S. E. (See Bell, F. G., assignor.)					
	Cox, T., and W. Holland, Birmingham, England. Manufacture of runners and top-notches for umbrellas.....	Jan. 22, 1873	770	249	3	110
	Cox, T. A. (See Irvin & Cox.)					
134, 519	Cox, V., New Vienna, Ohio. Mode of attaching pitmen to sickle-bars.....	Jan. 7, 1873	16	6	3	9
141, 328	Cox, W. J., and W. T. Smith, Lilesville, N. C. Cotton-planter.....	July 29, 1873	924	302	4	119
145, 931	Cox, W. M., Blanket Hill, Pa. Device for converting motion.....	Dec. 30, 1873	829	270	4	699
	Cox, W. P. (See Peace & Cox.)					
136, 706	Coy, F. W., East Cambridge, assignor to W. Butterfield, Boston, and C. Keniston, Somerville, Mass. Machine for pressing soles.....	Mar. 11, 1873	322	107	3	280
138, 863	Coykendall, J., Farmington, Ill. Shoe-fastener.....	May 13, 1873	363	113	3	537
	Coyle, H. B. (See Colburn, J. J., assignor.)					
	Coyle, J. (See Gallagher & Coyle.)					
139, 548	Coynes, J., Pittsburgh, Pa., assignor to self and R. Chessman, Borough of Etna, Pa. Apparatus for assorting nails.....	June 3, 1873	89	30	3	616
141, 329	Cozzena, W. F., and W. H. Wiggin, Saint Louis, Mo. Machine for bending sheet-metal.....	July 29, 1873	925	302	4	119
6, 352	Crabtree, B., jr., Philadelphia, Pa. Carpet..... (Design)	Jan. 21, 1873			3	70
6, 353	Same..... same..... (Design)	Jan. 21, 1873			3	70
6, 865	Crabtree, J., assignor to Leedom, Shaw & Stewart, Philadelphia, Pa. Carpet..... (Design)	Sept. 2, 1873			4	241
6, 866	Same..... same..... (Design)	Sept. 2, 1873			4	241
142, 327	Craft, J. C., Baltimore, Md. Hammock-lounge.....	Sept. 2, 1873	5	2	4	242
	Craft, M., Bellaire, Ohio. Paper-file..... (Reissue)	Nov. 11, 1873	292	99	4	514
144, 512	Craig, J. (See Allenwood, J. M., assignor.)					
144, 445	Craig, J. B., Perryville, Pa. Foot-warmer.....	Nov. 11, 1873	238	80	4	509
144, 446	Same..... Artificial stem for cut-flowers.....	Nov. 11, 1873	239	80	4	509
136, 419	Craig, J. B., and M. Haughey, Saint Louis, Mo. Police-nippers.....	Mar. 4, 1873	56	20	3	250
	Craig, R. (See Siddons, W. P., assignor.)					
135, 090	Craig, R. E. (See Allenwood, J. M., assignor.)..... (Reissue.)					
	Craig, R. S., Cincinnati, Ohio. Handle for brushes.....	Jan. 21, 1873	548	178	3	79
142, 773	Craig, S. H., et al. (See Smith, A. C., assignor.)					
	Craig, W., Newark, N. J., and H. L. Brevoort, Kings County, N. Y. Pressure-regulating valve.....	Sept. 16, 1873	412	139	4	297
135, 806	Craigie, H. H., New York, N. Y. Waste-trap for wash-basins.....	Jan. 28, 1873	669	215	3	101
143, 887	Craik, R., Money Creek, Minn. Feeding-device for middlings-purifiers.....	Oct. 21, 1873	465	156	4	436
138, 995	Crain, E. T., Kansas City, Mo. Hair-curling.....	May 20, 1873	483		3	560
142, 558	Crairie, G., and J. W. Bloss, Fairfield, Iowa. Elevated oven-attachment for stoves.....	Sept. 9, 1873	220	71	4	272
135, 091	Cram, A. W., Litchfield, Ill. Steam water-elevator and injector.....	Jan. 21, 1873	548	179	3	79
135, 527	Same..... Railway-switch.....	Feb. 4, 1873	121	38	3	137
139, 118	Cram, A. W., Saint Louis, Mo. Lock for sliding doors.....	May 20, 1873	595	187	3	569
139, 659	Cram, A. W., Litchfield, Ill. Spark-arrester.....	June 10, 1873	201	66	3	641
140, 017	Same..... Elevator.....	June 17, 1873	528	167	3	674
138, 864	Cram, W., New York, N. Y. Rotary steam-engine.....	May 13, 1873	364	113	3	537
140, 117	Cramer, A., assignor to self and F. Huettmann, Detroit, Mich. Cigar-trimmer.....	June 24, 1873	641	201	3	692
138, 739	Cramer, J., Monaca, Ill. Wash-boiler.....	May 13, 1873	255	79	3	528
144, 319	Cramer, P., Jersey City, N. J. Centrifugal machine for draining sugar.....	Nov. 4, 1873	122	41	4	488
	Cramer, W. H. (See Bogart, Cramer & Lewis.)					
136, 590	Crandall, E. H., Chicago, Ill. Pencil-sharpener.....	Mar. 11, 1873	228	77	3	273
136, 707	Crandall, B. P., jr., and W. Twiddy, Williamsburgh, N. Y. Combined rocking-horse and swing.....	Mar. 11, 1873	323	107	3	280
134, 856	Crandall, J. A., Brooklyn, N. Y. Child's carriage.....	Jan. 14, 1873	334	107	3	47
137, 896	Same..... Hobby-horse.....	Apr. 15, 1873	563	177	3	427
139, 371	Same..... Hobby-horse swing.....	May 27, 1873	828	265	3	596
143, 333	Crandall, J. W., assignor to self and W. Holmes, Homer, N. Y. Corner-fastening for wagon-boxes.....	Sept. 30, 1873	886	303	4	363
141, 700	Crandall, N., Wooster, Ohio. Wagon-jack.....	Aug. 12, 1873	267	87	4	165
134, 521	Crandall, W. J. C., Steele's, Ind. Corn-planter.....	Jan. 7, 1873	17	6	3	9
139, 660	Crandell, W., Westfield, N. Y. Railway-rail joint.....	June 10, 1873	202	66	3	641
135, 781	Crane, A. J., Waterbury, Vt. Meat-crusher.....	Feb. 11, 1873	361	116	3	168
144, 635	Crane, A. J., and D. J. Hadley, Cambridge, Vt. Milk-cooler.....	Nov. 25, 1873	586	200	4	559
136, 818	Crane, C. S., and W. H. Lavinia, Chicago, Ill. Screw-cutting machine.....	Mar. 18, 1873	431	143	3	298
142, 148	Crane, D., assignor to self and C. A. Lee, Saginaw, Mich. Fruit-crate.....	Aug. 26, 1873	694	228	4	218
	Crane, E. B. (See Babcock, Leonard & Crane.)					
137, 598	Crane, E. W., Roselle, N. J. Heating-furnace..... (Reissue.)	Apr. 8, 1873	295	91	3	392
	Crane, F. (See Aikin & Stone, assignors.)					
143, 789	Crane, G. R., Painesville, Ohio. Valve.....	Dec. 23, 1873	685	224	4	677
	Crane, J. S., et al. (See Young, C. H., assignor.)					
	Crane, L., et al. (See Crowell, L. C., assignor.)					
141, 767	Crane, M. G., Newton, Mass. Wrench.....	Aug. 12, 1873	325	106	4	169
143, 748	Crane, W. S., Rome, Ga. Fastening for coffins.....	Oct. 21, 1873	346	115	4	426
138, 791	Crane, W. W., Auburn, N. Y. Sectional steam-generator.....	May 13, 1873	300	92	3	532
138, 792	Same..... same.....	May 13, 1873	301	92	3	532
138, 793	Same..... Device for applying steam power to street railway-cars.....	May 13, 1873	302	93	3	532
138, 794	Same..... Car-axle box.....	May 13, 1873	303	93	3	532
139, 549	Same..... Compound steam-engine.....	June 3, 1873	89	31	3	616
140, 814	Craner, G. W., Darby, Pa. Waste-removing device for carding-machines.....	July 15, 1873	424	144	4	62
	Cranmer, W. C., et al. (See Fewkes, J. T., assignor.)					
144, 813	Crannell, D., Amsterdam, N. Y. Paper-box fastening.....	Nov. 11, 1873	293	99	4	514
134, 857	Cranston, J. H., Norwich, Conn. Slotting and key-seat machine.....	Jan. 14, 1873	335	107	3	47
144, 019	Same..... Blind-stop.....	Oct. 28, 1873	602	199	4	457
145, 402	Cranston, J. H., Norwich, Conn., assignor to C. Potter, jr., New York, N. Y. Mechanical movement.....	Dec. 9, 1873	326	110	4	624
143, 404	Cratar, C. H., North Kingsville, Ohio. Coupling for vehicles.....	Oct. 7, 1873	6	2	4	381
140, 893	Craven, J. J., Jersey City, N. J. Device for securing man-hole covers.....	July 15, 1873	488	165	4	67
5, 229	Craven, T. C., Northampton, Mass., assignor to B. H. Jenks, Philadelphia, Pa. Cotton-gin saw..... (Reissue.)	Jan. 14, 1873	427	137	3	54
135, 528	Craven, T. C., Hudson, N. Y. Machine for making cotton-laps.....	Feb. 4, 1873	122	38, 39	3	137
136, 036	Craven, W. D., Jersey City, N. J. Preparing blood for purifiers.....	Feb. 18, 1873	595		3	200
144, 659	Crawford, R. R., Wytheville, Va. Game-table.....	Nov. 18, 1873	427	144	4	536
141, 426	Cregier, D. C., Chicago, Ill. Stop-gate in water-mains.....	Aug. 5, 1873	15	4	4	136
5, 580	Creighton, J. R., Boston, Mass., assignor of one-half interest to O. B. Hall, 2d. Speaking-tube..... (Reissue.)	Sept. 30, 1873	946	320	4	367
138, 865	Crenshaw, W. T., Burton, Tex. Revolving cotton-lint room..... (Reissue.)	May 13, 1873	364	113	3	537

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 617	Crippen, H. M., Bartlett, assignor of one-half interest to J. C. Wilson, Plymouth, Ohio. Swaging-machine	May 6, 1873	130	42	3	508
142, 680	Crippen, I. A., assignor of one-half interest to S. Lowder, Philadelphia, Pa. Lifting-jack	Sept. 9, 1873	321	107	4	270
142, 559	Crisp, J. E., Charlestown, Mass. Rotary engine	Sept. 9, 1873	220	72	4	272
142, 209	Crist, J., Tiffin, Ohio. Car-coupling	Aug. 26, 1873	744	245	4	222
142, 002	Criswell, J. A., Mifflintown, Pa. Legislative voting-apparatus	Aug. 19, 1873	542	179	4	196
136, 037	Critchlow, T., Baldwin, Pa. Manner of punching bolt-holes in steel railway-rails	Feb. 18, 1873	596	196	3	200
136, 489	Same. Hydraulic valve	Mar. 4, 1873	119	39	3	255
141, 330	Crites, W. F. (See Blaisse & Crites.) Crittenden, J. H., Fall River, Mass. Method of coating and ornamenting walls and ceilings	July 29, 1873	927		4	119
141, 493	Crittenden, L. C., et al. (See Hume, G. H., assignor.)					
139, 456	Crocker, G. D., San Francisco, Cal. Stamp for crushing ores	Aug. 5, 1873	77	24	4	141
144, 067	Crocker, J. D., Norwich, Conn. Friction-clutch pulley	June 3, 1873	10	3	3	609
135, 266	Crocker, L. C., Hopedale, Mass. Spindle	Oct. 28, 1873	642	211	4	461
137, 829	Crocker, R., Marshalltown, Iowa. Leather-cutting machine	Jan. 28, 1873	726	232	3	106
137, 294	Crocker, S., Port Allen, Iowa. Cloth-measuring register	Apr. 15, 1873	507	158	3	422
139, 874	Crockett, E., Macon, Ga. Horse-power	Apr. 1, 1873	13	4	3	358
5, 673	Crockett, S. J., Boston, Mass. Reed-organ	June 17, 1873	411	128	3	665
142, 560	Croft, E., Waterbury, Conn. Machine for threading screw-blanks (Reissue)	Dec. 2, 1873	208	71	4	602
145, 337	Croft, S., executor. (See Liebrich, C.) (Reissue)	Sept. 9, 1873	223	72, 73	4	272
137, 062	Croft, G. A., New York, N. Y. Eye and lung protector	Dec. 9, 1873	273	91	4	620
140, 681	Croghan, J., Chicago, Ill. Combined chair, table, and lounge	Mar. 25, 1873	647	215	3	327
143, 124	Croghan, P., Cockeysville, Md. Method of splitting stone	July 8, 1873	303	102	4	44
140, 476	Croissant, E. (See Bertonnaire, L. M. F., assignor.) Cromer, F., Galveston, Tex. Cotton-bale tie	Sept. 23, 1873	706	242	4	332
140, 894	Crompton, G., Worcester, Mass. Loom-shedding mechanism	July 1, 1873	113	38	4	17
141, 768	Same. Loom	July 15, 1873	489	165	4	67
142, 441	Same. Loom-shedding mechanism	Aug. 19, 1873	326	107	4	170
141, 494	Same. Shuttle-box mechanism	Sept. 2, 1873	105	34	4	251
139, 550	Crompton, W., et al. (See Brubaker, A. M., assignor.)					
144, 958	Crone, W., Galveston, Tex. Cotton-bale tie	Aug. 5, 1873	77	24	4	141
5, 428	Cronin, M., Washington, D. C. Compound hose-pipe	June 3, 1873	91	31	3	616
5, 429	Same. Fireman's ladder	Nov. 25, 1873	684	231	4	569
142, 774	Crook, C., New Hope, Pa., assignor to M. G. Hubbard. Harvester (Reissue)	May 27, 1873	909	293	3	602
136, 038	Same. same	May 27, 1873	910	293	3	602
141, 022	Crooke, J. J., Southfield, and L. Crooke, New York, N. Y. Machine for forging solid-belted hinge-pivots	Sept. 16, 1873	413	139	4	298
141, 427	Crooke, L. (See Crooke, J. J. & L.) Crooker, H. D., Chester, Pa. Clothes-washer	Feb. 18, 1873	597	196	3	200
137, 182	Crookes, J., assignor of one-half interest to J. H. Branch, Saint Louis, Mo. Saw	July 22, 1873	716	238	4	93
5, 448	Same. Removable saw-teeth		10	4	4	136
140, 018	Crooley, A. (See Van Wert & Crooley.) Cropper, T. E., Suffolk, Va. Measuring-funnel	Mar. 25, 1873	735	250	3	335
145, 736	Crosby, C. O., and H. Kellogg, Milford, assignors to Elm City Company, New Haven, Conn. Machine for producing folded trimmings (Reissue)	June 17, 1873	613	193, 194	3	62
145, 155	Crosby, G. H., East Somerville, Mass. Registering steam-gauge	June 17, 1873	529	168	3	675
144, 959	Same. Pressure-gauge	Dec. 23, 1873	630	206, 207	4	672
140, 477	Crosby, J. E., New York, N. Y. Mucilage-cup	Dec. 2, 1873	108	35	4	591
140, 478	Crosby, L. M. (See Cameron, E. G., assignor.) Crosby, L. M., and E. G. Cameron, said Cameron assignor to said Crosby, Ashtabula, Ohio. Bed-bottom	Nov. 25, 1873	686	232	4	568
142, 992	Cross, A. T., Providence, R. I. Pencil-case	July 1, 1873	114	39	4	17
139, 661	Same. Pen-holder	July 1, 1873	114	39	4	17
141, 037	Cross, C. G., Chicago, Ill. Drill for boring artesian wells	Sept. 23, 1873	599	203	4	323
141, 856	Cross, D. (See Westcott, N., assignor.) Cross, D. W. (See Cooke & Cross.) Cross, G. J., Greenwich, England. Wheel for vehicles	June 10, 1873	203	66	3	641
5, 377	Cross, J. E., assignor to Illinois Manufacturing Company, Adrian, Mich. Deck-sash or ventilator-opener for railway-cars	July 22, 1873	642	216	4	89
136, 819	Cross, J. E., Adrian, Mich. Car-lamp	Aug. 19, 1873	413	134, 135	4	186
142, 993	Cross, J. R., New York, N. Y., assignor to self and A. J. Bastine. Process of transferring the grain-marks of wood (Reissue)	Apr. 29, 1873	1,110	351	3	488
6, 368	Cross, L. D., Phelps, N. Y. Gauge for setting carriage axle-trees	Mar. 18, 1873	432	143	3	298
142, 149	Cross, T. H., East Boston, Mass. Car-coupling	Sept. 23, 1873	600	204	4	323
139, 705	Cross, W. T., Kewanee, Ill. Monument (Design)	Jan. 22, 1873			3	100
139, 706	Crossland, H. S., Dresden, Tex. Weeding-hoe	Aug. 26, 1873	694	228	4	218
141, 038	Crossley, T., Bridgeport, Conn. Printing and dyeing fabrics	June 10, 1873	251		3	645
134, 522	Same. Printed pile carpets	June 10, 1873	252		3	645
5, 692	Same. Cleaning wool of burrs, &c	July 22, 1873	642		4	29
136, 039	Crossman, C. P., assignor of half-interest to F. Bemis, West Warren, Mass. Fire-proof paint	Jan. 7, 1873	19		3	9
145, 281	Crossman, E. (See Lalor, T., assignor.) Crossman, M., and P. A. Spicer, Marshall, Mich. Windmill (Reissue)	Dec. 23, 1873	803	263	4	626
142, 085	Crowthait, G. D., Murfreesborough, Tenn. Car-coupling	Feb. 18, 1873	598	196	3	200
140, 682	Crouch, F. J., San José, Cal. Steam and air engine	Dec. 9, 1873	222	75	4	616
140, 349	Croughton, G., Worcester, Mass. Loom-shedding mechanism	July 8, 1873	304	102	4	44
143, 224	Croughwell, E., A. Tillman, and E. L. Vanderburg, San Francisco, Cal. Harness-attachments	Aug. 26, 1873	630	210	4	214
139, 875	Crow, J. R. (See Martindale, H., assignor.) Crowe, G. W., Cincinnati, Ohio. Railway-car brake	July 1, 1873	15	4	4	9
144, 320	Crowell, A. F., Hyannis, Mass., assignor to G. H. Clarke, Brooklyn, N. Y. Grate-bar	Sept. 30, 1873	792	273	4	355
142, 085	Crowell, C. L., and R. Smith, deceased, by W. Loucks, executor, Peoria, Ill. Machine for upsetting tires (Extension)	May 17, 1873			3	27
142, 085	Crowell, J. H., assignor by mesne assignment to J. & J. H. Kendrick, and J. H. Crowell, Providence, R. I. Handle-eye opener	June 17, 1873	412	129	3	665
142, 085	Crowell, J. H., assignor to self and J. & J. H. Kendrick, Providence, R. I. Machine for making weavers' harness	Nov. 4, 1873	123	41	4	488

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 282	Crowell, J. H., assignor to the Kendrick Loom-Harness Company, Providence, R. I. Machine for making weavers' harness	Dec. 9, 1873	223	76	4	616
134, 736	Crowell, L. C., Boston, Mass., assignor of three-fourths interest to E. and N. Dillingham. Heel-stiffener	Jan. 14, 1873	231	74	3	39
137, 533	Crowell, L. C., assignor to J. Smith, Boston, and L. Crane, Cambridge, Mass. Method of constructing paper bags	Apr. 8, 1873	239	73	3	388
139, 238	Crowell, L. C., Boston, Mass. Heel-stiffener	May 27, 1873	721	227	3	587
143, 674	Same..... Paper-bag machine	Oct. 14, 1873	250	84	4	409
141, 428	Crowley, J., assignor of one-half interest to W. C. Leyburn, Sparta, Wis. Thrashing-machine	Aug. 5, 1873	17	4	4	136
135, 971	Crowley, J. J., Whistler, Ala. Car-ventilator	Feb. 18, 1873	539	178	3	196
135, 410	Crowley, T. L., Parker Township, Pa. Reversing link-motion engine	Feb. 4, 1873	16	5	3	129
140, 350	Crowthier, W. B., Philadelphia, Pa. Funnel	July 1, 1873	15	5	4	9
144, 260	Crozler, A. H., New York, N. Y. Car-starter	Nov. 4, 1873	78	25	4	484
140, 479	Crum, G. C., Barr's Store, Ill. Automatic gate	July 1, 1873	115	39	4	17
	Crum, J. S. (See Hulac & Crum.)					
139, 119	Crum, J. S., Palmyra, Ill. Pruning-knife	May 20, 1873	596	187	3	569
134, 858	Crumb, W. R., Buffalo, N. Y. Inhaler	Jan. 14, 1873	336	107	3	47
142, 003	Crumbie, A., Brooklyn, N. Y. Reel for ovens	Aug. 19, 1873	544	180	4	196
143, 439	Crumlish, H., Buffalo, N. Y. Mode of operating bellows of furnaces	Oct. 7, 1873	37	13	4	384
6, 649	Crump, C. H., Boston, Mass. Bolster for knives or forks (Design)	May 13, 1873			3	527
6, 962	Crump, C. H., assignor to W. E. Baker, Boston, Mass. Grape-arbor (Design)	Oct. 21, 1873			4	425
146, 049	Crump, E., Waterloo, Wis. Windmill	Dec. 30, 1873	934	301	4	707
146, 047	Crump, J., Philadelphia, Pa. Safe and vault	Dec. 30, 1873	931	301	4	707
146, 048	Same..... same	Dec. 30, 1873	933	301	4	707
141, 331	Crump, S. H., Reading, Pa. Corpse-cooler	July 29, 1873	927	302	4	119
138, 382	Crumpton, J. C., Allegheny City, Pa. Composition for kindling fires	Apr. 29, 1873	1,034		3	483
143, 066	Same..... Fire-kindler	Sept. 23, 1873	682	227	4	328
143, 277	Same..... same	Sept. 30, 1873	837	286	4	359
144, 321	Crutcher, S., Little Mount, Ky. Cultivator	Nov. 4, 1873	124	41	4	488
	Crystal Glass Company. (See Bennett, Krebs & Haley, assignors.)					
136, 139	Cubberley, G. B., Milwaukee, Wis. Blacksmith's hammer	Feb. 25, 1873	707	228	3	220
142, 150	Cubberley, H. S., and D. Mann, Bloomington, Ill. Railway water-crane	Aug. 26, 1873	695	229	4	218
136, 490	Cuddy, J., assignor to self and E. A. Kitzmiller, Pittsburgh, and J. J. McDermott, Allegheny, Pa. Process of treating and drying cigars	Mar. 4, 1873	120		3	255
135, 695	Cuff, J., Emery, Ohio. Land-marker	Feb. 11, 1873	292	92	3	162
142, 004	Culbertson, W. C., Girard, Pa. Pump-piston	Aug. 19, 1873	545	180	4	196
139, 046	Cullen, J., Oxford, Miss. Railway-switch signal	May 20, 1873	522	165	3	563
137, 830	Cullen, T., Blackstone, Mass. Dovetailing-machine	Apr. 15, 1873	508	159	3	422
	Cullings, P. V. W. (See Zeh, Livingston & Cullings.)					
134, 645	Culmer, J. W., assignor of three-fourths interest to G. B. Edwards and A. Howard, Pittsburgh, Pa. Railway-car spring	Jan. 7, 1873	138	44	3	17
134, 646	Same..... same	Jan. 7, 1873	138	44	3	17
135, 468	Culp, J. D., Gilroy, Cal. Curing tobacco	Feb. 4, 1873	70		3	133
6, 972	Culter, R. A., and D. C. Proctor, Peoria, Ill. Stove (Design)	Nov. 4, 1873			4	478
	Culver, C. P., et al. (See Teed, T., assignor.)					
135, 207	Culver, J. C., assignor of one-fourth interest to J. G. Pettie, Cleveland, Ohio. Rotary engine	Jan. 28, 1873	609	216	3	102
	Culver, J. D. (See Detrick & Culver.)					
145, 558	Culver, O. E., and L. E. Moseley, Eagle Bridge, N. Y. Wash-boiler	Dec. 16, 1873	477	156	4	648
	Cumberland, J. (See McClintock & Cumberland) (Reissue.)					
135, 267	Cummings, D. M., Newburyport, Mass. Bottle-stopper	Jan. 28, 1873	727	232	3	106
144, 891	Cummings, D., jr., Jersey City, N. J. Device for wetting grindstones	Nov. 25, 1873	631	215	4	563
143, 405	Cummings, G. B., Cambridge, Mass. Railway time-signal	Oct. 7, 1873	6	2, 3	4	381
138, 135	Cummings, G. W., Franklin, Pa. Fire-place back	Apr. 22, 1873	787	251	3	455
141, 261	Cummings, G. W., assignor of one-half interest to D. W. Hazeltine, Conneaut, Ohio. Rotary engine	July 29, 1873	864	282	4	114
140, 118	Cummings, J., West Charleston, Vt. Mill-pick	June 24, 1873	642	202	3	692
137, 123	Cummings, P. D., Portland, Me., assignor to The Shoe Machinery Manufacturing Company, Conn. Machine for skiving and splitting leather	Mar. 25, 1873	756	250	3	335
145, 488	Cummings, P. D., Portland, Me. Grinding-machine	Dec. 16, 1873	408	134	4	642
139, 457	Cummings, P. D., M. Smith, and J. C. Jordan, said Cummings assignor to said Smith & Jordan, Portland, Me. Machine for cutting matches	June 3, 1873	11	3, 4	3	610
144, 328	Cummings, P. M., Lyons, Iowa. Head-block	Nov. 11, 1873	191	65	4	506
	Cunningham, J. (See Tester, A., assignor)					
137, 659	Cunningham, D., Dundee, Scotland. Construction of breakwaters	Apr. 8, 1873	346	107	3	397
138, 008	Cunningham, J., Rochester, N. Y. Carriage-door	Apr. 22, 1873	675	214	3	446
	Cunningham, J. L. (See Walton & Cunningham)					
139, 707	Cunningham, J. M., Mount Morris, Ill. Medical compound for liver diseases	June 10, 1873	253		3	645
139, 946	Cunningham, R., Chicago, Ill. Device for making water-traps	June 17, 1873	472	148	3	670
138, 445	Curless, J. M., Cedar Rapids, Iowa. Excavator	May 6, 1873	16	6	3	499
141, 205	Same..... Baggage-check	July 29, 1873	810	265	4	110
	Curran, E., et al. (See Scott & Hiltz, assignors.)					
146, 050	Curran, J. H., Rochester, N. Y., assignor of one-half interest to T. B. Johnson, Seneca Falls, N. Y. Sharpening-machine	Dec. 30, 1873	935	301	4	707
	Curran, P., et al. (See Scott & Hiltz, assignors)					
136, 216	Current, H. A., Clarksville, Tenn. Sawing-machine	Feb. 25, 1873	765	247	3	225
137, 534	Currie, C. S., assignor of one-half interest to J. Dilley, Caldwell, Ohio. Railway-gate	Apr. 8, 1873	241	74	3	388
	Currier, J. A. (See Rockwell, L. A., assignor.)					
5, 677	Curtis, A., Bastrop, La. Mode of constructing wells	Dec. 9, 1873	390	128	4	629
139, 947	Same..... same	June 17, 1873	473	149	3	670
138, 318	Curtis, C. M., Philadelphia, Pa. Dental engine	Apr. 29, 1873	983	309	3	478
5, 250	Curtis, D., Sun Prairie, Wis. Lining for wooden horse-collars, &c	Jan. 21, 1873	646	210	3	87
5, 251	Curtis, D., Sun Prairie, Wis., assignor of one-half interest to H. Gilman and G. H. Richards. Lining for horse-collar cap and harness	Jan. 21, 1873	647	210	3	87
5, 443	Same..... same	June 10, 1873	382	119	3	655
138, 383	Curtis, D., Sun Prairie, Wis. Horse-collar lining	Apr. 29, 1873	1,034	326	3	485
142, 151	Curtis, E. T., Calumet, Mich. Arithmetical frame	Aug. 26, 1873	695	229	4	218
	Curtis, F. (See Bingham, A., assignor.)					
	Same..... (See Chase, C. M., assignor.)					
	Same..... (See Smith, S. C., assignor.)					
	Same..... (See Truesdell & Curtis.)					
144, 261	Curtis, G., Ogdensburgh, N. Y. Water-wheel	Nov. 4, 1873	78	25	4	484
	Curtis, H. G. (See Taylor, A., assignor.)					
	Curtis, J. (See Ash, A. D., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 514	Curtia, J., Cincinnati, Ohio. Carriage-spring	Nov. 11, 1873	293	99	4	514
136, 308	Curtia, M. A., San Francisco, Cal. Medical compound or ointment	Feb. 25, 1873	845	3	231
	Curtia, S. (See Zimmer, J., assignor.)					
143, 334	Curtia, S., New York, N. Y. Caeter	Sept. 30, 1873	886	303	4	363
	Curtiss, E., et al. (See Capewell, G. J., assignor.)					
	Curtiss, E. P. (See Shipperd & Curtiss.)					
143, 749	Curtiss, G. G., Rochester, N. Y. Washing-machine	Oct. 21, 1873	347	116	4	426
	Curtiss, J. S. (See Curtiss, T. A. & J. S.)					
140, 480	Curtiss, M. S., Bradford, Ill. Gang-plow	July 1, 1873	115	39	4	18
145, 096	Curtiss, T. A., Springfield, Mass., and J. S. Curtiss, Hartford, Conn. Liquid-meter	Dec. 2, 1873	52	17	4	589
	Curtiss, T. M., et al. (See Briggs, L. W., assignor.)					
146, 051	Curtner, I., assignor to C. A. Gump and E. S. Forgy, Dayton, Ohio. Stone-tool	Dec. 30, 1873	936	302	4	708
140, 250	Cusenbary, J. D., and J. A. Mars, San Francisco, Cal. Ore-stamp feeder	June 24, 1873	750	237	3	701
144, 660	Cushing, C. H., Tidioute, Pa. Apparatus for burning hydrocarbons	Nov. 18, 1873	428	144	4	536
138, 077	Cushing, E. G., Oswego, N. Y. Combined stop-cock, check-valve, and blow-off	Apr. 22, 1873	742	235	3	451
	Cushman, A. H. (See Wageoner, G. W., assignor.)					
141, 332	Cushman, C. S., assignor to N. D. Stoops, Philadelphia, Pa. Sewing-machine	July 29, 1873	928	303	4	120
142, 442	Same	Sept. 2, 1873	108	35	4	251
	Cushman, H. S. (See Wells & Cushman.)					
138, 618	Custer, G., Monroe, Mich. Horseshoe-calk	May 6, 1873	131	43	3	508
	Cutcheon, S. M., et al. (See McCoy, E., assignor.)					
143, 335	Cutcliffe, E., East Bethany, N. Y. Subsoil-attachment for plows	Sept. 30, 1873	887	303	4	363
	Cuthbert, J. O., et al. (See Bisbing & McCune, assignors.)					
136, 903	Cuthbert, W. M., Oil City, Pa. Sewing-machine table	Mar. 18, 1873	499	165	3	303
136, 974	Cutler, S., assignor to self and H. McConnell, Cincinnati, Ohio. Door-spring	Mar. 18, 1873	557	185	3	308
143, 336	Cutler, T. O., Jersey City, N. J. Quartz-mill	Sept. 30, 1873	888	304	4	363
5, 449	Cutler, W. H., Buffalo, N. Y. Inhaler	June 17, 1873	617	194	3	682
135, 411	Same	Feb. 4, 1873	17	5	3	129
136, 973	Same	Mar. 19, 1873	557	185	3	308
144, 661	Cutter, E., Woburn, Mass. Hypodermic syringe	Nov. 18, 1873	429	145	4	536
135, 782	Cutter, J. D., Brooklyn, N. Y. Case for exhibiting spools	Feb. 11, 1873	362	117	3	168
136, 367	Cutting, L., San Francisco, Cal. Soldering-tool	Mar. 4, 1873	12	5	3	246
145, 156	Same	Dec. 2, 1873	108	36	4	594
139, 372	Cyrani, A., and C. Reinhardt, Brooklyn, N. Y. Druggist's scales	May 27, 1873	828	265	3	596
140, 119	Czarniecki, E., Allegheny, Pa. Nut-lock	June 24, 1873	643	202	3	692
139, 876	Daboll, A. P., New London, Conn. Bit-stock	June 17, 1873	413	129	3	665
143, 396	Daddow, S. H., Saint Clair, Pa. Squib for blasting	Sept. 30, 1873	945	390	4	367
143, 406	Daffin, T., assignor to self and W. Baldwin, Philadelphia, Pa. Die for forging hammers	Oct. 7, 1873	9	3	4	381
140, 683	Daguir, J., Cincinnati, Ohio. Mechanical movement	July 8, 1873	305	103	4	44
144, 960	Dahl, A. K., Fox Lake, Wis. Plow	Nov. 25, 1873	687	232	4	568
139, 497	Dahmer, P. G., New York, N. Y. Washing-machine	June 3, 1873	49	15	3	613
	Dainty, A. J., administratrix. (See Howard & Dainty.)					
	Dainty, J. (See Howard & Dainty.)					
134, 788	Dake, D. W., Chicago, Ill. Butter-worker	Jan. 14, 1873	275	90	3	42
144, 662	Dake, D. W., Beloit, Wis. Butter-worker	Nov. 18, 1873	429	145	4	536
145, 338	Same	Dec. 9, 1873	274	92	4	620
136, 217	Dake, H. M., Nunda, N. Y. Portable fence	Feb. 25, 1873	766	247	3	225
135, 686	Dakin, A. C., Clinton, Mass. Flower-stand	Feb. 11, 1873	293	92	3	163
	Dale, H. (See Stein, H., assignor.)					
139, 120	Dale, J. P., Battle Creek, assignor to self and D. E. Doane, Ann Arbor, Mich. Milk-safe	May 20, 1873	596	187	3	569
5, 684	Dale, W., New York, N. Y., assignor of two-thirds interest to W. S. O'Brien. Illuminating vault-cover	Dec. 16, 1873	609	199	4	659
136, 708	Dale, W. P., Agricultural College, Pa. Cultivator	Mar. 11, 1873	324	107	3	280
146, 052	Dallemagne, A. J., and L. Triboulet, Paris, France. Photographic monocular glasses	Dec. 30, 1873	937	302	4	708
	Dalton, P. W. (See McNeil & Dalton.)					
136, 420	Dalton, P. W., Jersey City, N. J. Apparatus for rendering tallow, &c	Mar. 4, 1873	57	20	3	250
140, 481	Daly, W. F., assignor of one-half interest to E. D. Olin, Peru, Ind. Device for locking a series of drawers	July 1, 1873	116	40	4	18
140, 210	Same	Aug. 26, 1873	745	245	4	222
139, 877	Dame, A. A., Titusville, Pa. Flange-unions	June 17, 1873	414	129	3	665
139, 878	Same	June 17, 1873	415	129	3	665
135, 697	Dame, L., Newburyport, Mass. Device for converting circular into reciprocating motion	Feb. 11, 1873	293	93	3	163
	Damon, Thomas and Lewis. (See Hall, I., assignor.)					
139, 298	Danforth, D. A., and F. M. Winchester, Elkhart, Ind. Card-rack	May 27, 1873	774	245	3	591
	Danforth, H. S. (See Murphy, T. G., assignor.)					
139, 047	Danforth, J. I., Newburyport, Mass. Stove-polish	May 20, 1873	523	.....	3	563
139, 879	Same	June 17, 1873	416	.....	3	665
144, 322	Same	Nov. 4, 1873	124	41	4	488
141, 123	Daniels, D., Park's Corners, Ill. Last-bloom holder	July 22, 1873	716	238	4	95
137, 295	Daniels, D. G., Pittsburgh, Pa. Car-spring	Apr. 1, 1873	14	5	3	358
	Daniels, J. (See Lathrop, B. L., assignor.)					
141, 206	Daniels, J. F., Boston, Mass., and J. H. Hubbard, Stanstead, Canada. Wood-grinder	July 29, 1873	810	265	4	110
135, 633	Daniels, L. S., Foxborough, Mass. Steam-radiator	Feb. 11, 1873	235	74	3	158
136, 904	Daniels, P., Jackson City, Mich. Artificial stone	Mar. 18, 1873	500	.....	3	303
	Daniels, R., Woodstock, Vt. Straw-cutter	June 1, 1873	.....	.....	3	662
137, 763	Daniels, W. H., Bryan, Ohio. Scythe-rittle	Apr. 15, 1873	452	141	3	418
138, 136	Same	Apr. 22, 1873	787	251	3	455
141, 207	Danks, F., Cincinnati, Ohio. Puddlers' ball-squeezer	July 29, 1873	811	266	4	110
136, 421	Danks, S., Cincinnati, Ohio. Lining rotary puddling-furnaces	Mar. 4, 1873	58	.....	3	250
142, 152	Same	Aug. 26, 1873	696	229 230	4	218
	Danner, J., Canton, Ohio. Sleeping-car	Oct. 18, 1873	.....	.....	4	400
136, 905	Same	Mar. 18, 1873	501	166	3	304
143, 898	Same	Oct. 21, 1873	466	156	4	436
140, 251	Darby, H. C., Wyandotte, Kans. Locomotive fire-box crown	June 24, 1873	750	237	3	701
141, 633	Darby, T., Duncan, Ill. Hog-trap	Aug. 12, 1873	212	67	4	160
134, 737	Darby, J. F., Nebraska City, Nebr. Scaffold	Jan. 14, 1873	232	74	3	39
	Darling, A. B. (See Massey & Darling.)					
	Same	(See Massey, G. B., assignor.)				
	Darling, E. N. (See Reigart, J. F., assignor.)					
137, 599	Darling, F. A., Fayetteville, N. Y. Addressing-machine	Apr. 8, 1873	296	91	3	392
144, 389	Darling, J., Whistler, Ala. Railway-car truck	Nov. 11, 1873	192	66	4	506
145, 727	Darling, J., Cincinnati, Ohio. Holsting-machine	Dec. 23, 1873	632	207	4	673

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138, 009	Darling, S., Providence, R. I. Window.....	Apr. 22, 1873	676	214	3	446
139, 551	Darnstaedt, C., Meriden, Conn. Towel-rack and boot-jack combined.....	June 3, 1873	92	31	3	616
134, 523	Darozir, L., assignor to self and J. Morissette, Worcester, Mass. Match-safe.....	Jan. 7, 1873	19	6	3	9
136, 040	Darragh, C., et al. (See Pritchard, T., assignor.) Darrrell, A. M., assignor of one-half interest to T. Norfleet, Washington, D. C. Trunk-hinge.....					
138, 010	Darrow, F. E., and O. E. Wait, Rockford, Mass. Heel-stiffening for boots and shoes.....	Apr. 22, 1873	599	197	3	200
135, 732	Da Silva, E. A. C., New York, N. Y. Animal-trap.....	Apr. 22, 1873	677	214	3	446
142, 840	Datchy, J. P. F., Brooklyn, N. Y. Apparatus for cleaning cess-pools, sinks, &c.....	Feb. 11, 1873	321	102	3	165
139, 552	Daugherty, I., Rocky Station, Va. Fly-protector.....	Sept. 16, 1873	466	158	4	302
142, 153	Davenport, F. S., Jerseyville, Ill. Diamond mill-stone dressing-machine.....	June 3, 1873	12	31	3	616
143, 965	Davenport, F. S., and J. Ward, Albany, N. Y. Pavement.....	Aug. 26, 1873	698	230	4	218
	Davenport, W. R. (See Elliott, Harrington & Davenport.) Davidson, J. H. (See Campbell, C., assignor.) Davidson, M. T., Brooklyn, N. Y. Sectional steam-generator.....	Oct. 28, 1873	550	182	4	453
138, 866	Davidson, M. T., Brooklyn, N. Y. Sectional steam-generator.....	May 13, 1873	365	113	3	537
145, 157	Same..... Trap for steam-pipes.....	Dec. 2, 1873	109	36	4	594
138, 137	Davidson, T. L., and H. Wingham, Charleston, S. C. Saw-sharpening machine.....	Dec. 2, 1873	109	36	4	594
137, 751	Davidson, T. P., and A. Parvis, Liberty, Ind. Hay-loader.....	Apr. 22, 1873	788	252	3	455
145, 158	Davis, J. P., Galveston County, and A. Morgan, Cedar Bayou, Tex. Windmill.....	Apr. 8, 1873	436	134	3	404
141, 701	Davis, E. H., Pittsburgh, Pa. Rolling-mill for sheet-metal.....	Dec. 2, 1873	110	26	4	594
	Davis, H. (See Mears & Davies.) Davies, H., Newport, Ky. Safety-valve.....	Aug. 12, 1873	262	87	4	165
135, 698	Davies, H., Newport, Ky. Safety-valve.....	Feb. 11, 1873	294	93	3	163
6, 963	Davies, H. J., Brooklyn, N. Y. Clock-pendulum..... (Design).....	Oct. 21, 1873			4	425
137, 184	Davies, H. J., assignor to J. G. Bennett and A. H. Smith, Brooklyn, N. Y. Machine for printing and embossing skirts.....	Mar. 25, 1873	757	250	3	335
143, 811	Davies, J., Knoxville, Tenn. Apparatus for puddling iron.....	Oct. 21, 1873	401	133	4	431
135, 783	Davies, T. A., New York, N. Y. Signal-lantern.....	Feb. 11, 1873	363	117	3	168
136, 218	Same..... Lantern.....	Feb. 25, 1873	767	248	3	225
136, 709	Davies, T. A., New York, N. Y. Railway snow-plow.....	Mar. 11, 1873	325	107	3	280
135, 784	Davies, W. B., New York, N. Y. Life-raft.....	Feb. 11, 1873	363	117	3	168
139, 299	Davis, A., Lowell, Mass. Dovetailing-machine.....	May 27, 1873	775	246	3	591
	Davis, A. B., Philadelphia, Pa. Car-spring..... (Extension).....	Feb. 15, 1873			3	156
22, 941	Same..... same..... (Disclaimer filed).....	Feb. 10, 1873			3	156
22, 941	Same..... same..... same.....	Feb. 15, 1873			3	156
	Davis, A. D. (See Eaton, I. F., assignor.) Davis, A. J., Hartford, Mich. Fly-trap.....	Aug. 5, 1873	78	24	4	141
141, 495	Davis, B. C., Binghamton, N. Y. Hand-machine for wiring blind-rods..... (Extension).....	Oct. 11, 1873			4	379
143, 125	Davis, B. F., Hearne, Tex. Bridge.....	Sept. 23, 1873	706	242	4	332
136, 906	Davis, B. W., Fort Madison, Iowa. Nut-lock.....	Mar. 15, 1873	502	166	3	304
	Davis, C. E., et al. (See Bucklin, E., jr., assignor.) Davis, D. P., Jersey City, N. J., assignor of one-half interest to G. J. Hunter. Recording steam-gauge..... (Reissue).....	Jan. 21, 1873	648	210	3	87
5, 252	Davis, E. (See Cole & Davis.) Same..... (See Porter & Davis.) Davis, E., Millerton, N. Y. Blast-furnace alarm-apparatus.....	May 27, 1873	776	246	3	591
139, 300	Davis, E., Millerton, N. Y. Blast-furnace alarm-apparatus.....	May 27, 1873	776	246	3	591
141, 429	Davis, E., assignor of half interest to J. P. Arnott, Hanover, Ind. Wash-boiler attachment.....	Aug. 5, 1873	18	5	4	136
5, 347	Davis, E. K., deceased, by S. C. Davis, administratrix, New York, N. Y. Loom for weaving pile-fabrics..... (Reissue).....	Apr. 8, 1873	436	{ 134 } { 135 }	3	404
	Davis, F. A. (See Davis, V., assignor.) Davis, F. M., La Cygne, Kans. Sash-holder.....	Sept. 23, 1873	601	204	4	323
142, 994	Davis, G. G., et al. (See Davis, H. D., assignor.) Same..... (See McGovern, P., assignor.) Same..... (See Stone, J. M., assignor.)					
143, 967	Davis, G. H., Boston, Mass. Upright piano-forte.....	Oct. 28, 1873	552	183	4	453
	Davis, G. L., et al. (See Davis, H. D., assignor.) Same..... (See McGovern, P., assignor.) Same..... (See Stone, J. M., assignor.)					
136, 219	Davis, G. R., Nobleville, Ohio. Washing-machine.....	Feb. 25, 1873	767	258	3	225
142, 211	Davis, G. R., Kingston, Mich. Thill-coupling.....	Aug. 26, 1873	746	245	4	222
143, 966	Davis, H., Berlin, Wis. Spring-equalizer.....	Oct. 28, 1873	551	183	4	453
141, 262	Davis, H. D., assignor to G. L. Davis, J. A. Wiley, J. M. Stone, G. G. Davis, J. H. Stone, and J. H. Davis, North Andover, Mass. Looms.....	July 29, 1873	865	{ 283 } { 284 }	4	114
	Davis, H. E., et al. (See Cleveland, G. D., assignor.) Davis, H. S., Camden, N. J. Interfering-attachment for horseshoes.....	Apr. 8, 1873	349	108	3	397
137, 660	Davis, J. (See Evered, J., assignor.) Davis, J., Florida, Mass. Wash-boiler..... (Reissue).....	Apr. 15, 1873	648	204	3	434
5, 350	Same..... Steam washer.....	Apr. 1, 1873	15	5	3	358
137, 296	Davis, J., Saint Paul, Minn. Pipe-stem.....	June 17, 1873	417	130	3	665
139, 880	Davis, J., Chicago, Ill. Mop-head.....	Sept. 2, 1873	6	2	4	242
142, 328	Davis, J., and J. Armstrong, Pittston, Pa. Process for tanning.....	Apr. 23, 1873	789		3	455
138, 138	Davis, J. A., Brattleborough, Vt. Sewing-machine.....	May 20, 1873	484	153	3	560
138, 996	Davis, J. H., et al. (See Davis, H. D., assignor.) Same..... (See McGovern, P., assignor.) Davis, J. H. (See Snow & Davis.) Davis, J. H., et al. (See Stone, J. M., assignor.) Davis, J. H. (See Wingo, B. W., assignor.)					
141, 857	Davis, J. H., Livingston County, Mo. Screw-driver.....	Aug. 19, 1873	414	135	4	186
139, 122	Davis, J. S., Toledo, Ohio. Harvester.....	May 20, 1873	597	188	3	569
145, 728	Davis, J. S., Ithaca, N. Y. Corn-planter.....	Dec. 23, 1873	633	207	4	673
	Davis, J. W. (See Lee & Davis.) Davis, J. W., Reno, Nev., assignor to self and L. Strauss & Co., San Francisco, Cal. Fastening pocket-openings.....	May 20, 1873	597	188	3	569
139, 121	Davis, J. W., Reno, Nev., assignor to self and L. Strauss & Co., San Francisco, Cal. Fastening pocket-openings.....	May 20, 1873	597	188	3	569
143, 225	Davis, L. H., West Chester, Pa. Washing-machine.....	Sept. 30, 1873	793	273	4	355
	Davis, N. (See Lantis & Davis.) Same..... (See Paquette, N., assignor.) Davis, N. N. (See Windle, G., assignor.) Davis, R. (See Lansdowne, S., assignor.)					
141, 496	Davis, R., assignor to self and P. C. Kirk, Lawrence, Mass. Loom-picking stick-check..... (Reissue).....	Aug. 5, 1873	78	25	4	141
	Davis, S. C., administratrix. (See Davis, E. K.) Davis Sewing-Machine Company. (See Wise, J., assignor.)					
137, 831	Davis, S. T., Millersville, Pa. Bee-hive.....	Apr. 15, 1873	510	159	3	423
135, 699	Davis, V., assignor to self and F. A. Davis, of Stoneham, Mass. Scraping instrument.....	Feb. 11, 1873	295	93	3	163
136, 975	Davis, W., Five Corners, N. Y. Railway snow-plow.....	Mar. 18, 1873	558	{ 185 } { 186 }	3	308

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142, 841	Davis, W. F., North Attleborough, Mass., assignor to J. T. Bacon & Co. Ornamental chain	Sept. 16, 1873	467	158	4	302
142, 329	Davis, W. H., assignor to J. Harlan, Lexington, Ind. Fruit and lard press	Sept. 2, 1873	7	3	4	242
136, 041	Davis, W. H., and R. V. De Guinon, said De Guinon assignor to said Davis, Jersey City, N. J. Steam-boller	Feb. 18, 1873	599	197	3	200
142, 995	Davis, W. P. (See Mendham, W., assignor.) Davis, W. R., Union City, Pa. Cooper's croze and howel	Sept. 23, 1873	602	204	4	324
143, 675	Davison, D., New York, N. Y. Gas-retort	Oct. 14, 1873	253	85	4	409
143, 750	Davol, W. C., jr., Fall River, Mass. Steam fire-engine	Oct. 21, 1873	347	116	4	427
144, 068	Same..... Horse-stall for steam fire-engine-house	Oct. 28, 1873	643	211	4	461
144, 836	Daw, S., Corvallis, Oreg. Grain-separator	Nov. 25, 1873	586	200	4	559
136, 220	Dawdy, L. J., Hamburg, Iowa. Hand cultivator	Feb. 25, 1873	768	248	3	225
139, 048	Dawes, A., Hudson, assignor to H. E. Townsend, Boston, Mass. Eyeletting-machine	May 20, 1873	524	{ 165 166 }	3	563
140, 995	Dawson, A. & H. T., Chiswick, England, assignors to G. W. Petter and T. D. Galpin, London, England. Method of etching plates for electrotyping	July 22, 1873	604		4	86
140, 895	Dawson, G. F., Washington, D. C. Revolving seat	July 15, 1873	491	166	4	67
134, 524	Dawson, H. T. (See Dawson, A. & H. T.) Dawson, J., Staunton, Va. Apparatus for the production of spirits and the prevention of fraud upon the revenue	Jan. 7, 1873	20	7	3	9
140, 684	Dawson, R. H., Rockville, Conn. Flock-cleaning machine	July 8, 1873	305	103	4	44
135, 893	Day, A., Detroit, Mich. Button-hole cutter	Feb. 18, 1873	479	154	3	191
5, 230	Day, A. G., New York, N. Y. Process of manufacturing hard rubber (Reissue)	Jan. 14, 1873	428	137	3	54
5, 231	Same..... Manufacture of hard flexible rubber (Reissue)	Jan. 14, 1873	430	137	3	54
5, 232	Same..... Hard rubber (Reissue)	Jan. 14, 1873	432	137	3	54
136, 309	Day, E. A., Oberlin, Ohio. Hose nozzle	Feb. 25, 1873	846	273	3	231
140, 120	Day, G. W., Haverhill, Mass. Corner-support for blind	June 24, 1873	644	202	3	692
145, 489	Same..... Hot-air furnace	Dec. 16, 1873	409	134	4	642
144, 390	Day, H. B. (See Reed & Day.) Day, H. H., New York, N. Y. Air-compressor	Nov. 11, 1873	193	66	4	506
134, 525	Day, J., New York, N. Y. Shoe and leather polisher	Jan. 7, 1873	20	7	3	9
140, 252	Day, J., Holley, N. Y. Supplemental attachment for cooking-stove	June 24, 1873	751	237	3	701
142, 443	Same..... Car-propeller	Sept. 2, 1873	109	35	4	251
143, 126	Same..... Soldering-furnace	Sept. 23, 1873	707	242	4	332
144, 961	Day, M., Charlestown, Mass. Cement sewer-bottom	Nov. 25, 1873	688	232	4	568
143, 868	Day, S. W. (See Moore & Day.) Daykin, J., and W. B. Case, Cleveland, Ohio. Chain-machine	Oct. 28, 1873	552	{ 183 184 }	4	453
137, 832	Dayton, G. E., Baltimore, Md. Metallic sky-light	Apr. 15, 1873	511	160	3	423
141, 546	Dayton, H. G., Maysville, Ky. Disinfecting-powder	Aug. 5, 1873	119		4	145
138, 011	Dayton, M. E., Syracuse, assignor of part interest to H. B. Tompkins and W. H. Wieting, New York, N. Y., and H. H. Branch, Hillsdale, Mich. Anti-friction journal Dayton Malleable-Iron Company. (See Loeb, P., assignor.)	Apr. 22, 1873	678	{ 214 215 }	3	446
141, 922	Dayton, W. H., assignor to Excelsior Needle Company, Wolcottville, Conn. Machine for feeding wire to hammer-dies	Aug. 19, 1873	477	157	4	191
139, 239	Deacon, H., Widnes, England. Manufacture of bleaching-liquors	May 27, 1873	721		3	587
141, 333	Deacon, H., Lancaster County, England. Manufacture of chlorine Deacon, J. (See Deacon, S. and J.)	July 29, 1873	929		4	190
145, 159	Deacon, S. and J., Lawrence, Mass. Paper-pulp washing-machine	Dec. 2, 1873	112	37	4	594
136, 043	Dean, A. B., and T. C. Coleman, Louisville, Ky. Railway-rail	Feb. 18, 1873	601	198	3	200
144, 892	Dean, A. H., Bridgeport, Conn. Automatic-toy	Nov. 25, 1873	632	215	4	563
136, 042	Dean, E. K., Bangor, Me. Stove-pipe damper	Feb. 18, 1873	600	197	3	200
134, 647	Dean, G. W., New York, N. Y. Ash-sifting shovel	Jan. 7, 1873	140	45	3	18
143, 444	Dean, G. W., Stamford, Conn. Concrete pavement	Sept. 2, 1873	110	35	4	251
139, 553	Dean, J., New Baltimore, N. Y. Flour-mill	June 3, 1873	93	32	3	616
145, 490	Dean, L. H., Tecumseh, Mich. Motor	Dec. 16, 1873	410	135	4	642
5, 490	Dean, N. C., assignor of one-half interest to S. S. Bliss, Union Springs, N. Y. Clip-plate for carriage-springs (Reissue)	July 15, 1873	593	199	4	76
134, 859	Same..... Clip-plate for carriage-springs	Jan. 14, 1873	336	108	3	47
141, 702	Dean, O. A., Bethel, Vt. Circular-saw guard	Aug. 12, 1873	269	87	4	165
139, 374	Dean, Smith, & Co., et al. (See Hoyt, F. A., assignor.) Deane, C. W., Philadelphia, Pa. Tube-expander	May 27, 1873	830	266	3	596
139, 373	Deane, E. L. (See Munger, F. M., assignor.) Deane, W. P., Canton, Mass. Shears for cutting paper	May 27, 1873	829	266	3	596
144, 069	Dearborn, C. A., New Bedford, Mass. Carriage top	Oct. 28, 1873	644	212	4	461
145, 054	Deardorff, L. N., Canal Dover, Ohio. Stove for smoke-houses	Dec. 2, 1873	12	4	4	587
135, 894	Dearing, O. A., San Francisco, Cal. Printer's lead-rack	Feb. 18, 1873	479	155	3	191
144, 447	Deasey, J., Fall River, Mass. Beer and ale faucet	Nov. 11, 1873	239	80	4	509
139, 123	Deavs, C., assignor to Archer and Pancoast Manufacturing Company, New York, N. Y. Center-slide drop-light	May 20, 1873	600	189	3	569
141, 634	Same..... Smoke-bell for gasaliers	Aug. 12, 1873	213	67	4	160
145, 632	Same..... Center drop-light	Dec. 16, 1873	538	176	4	653
135, 092	De Barry, J. J., Chicago, Ill. Key-check	Jan. 21, 1873	549	179	3	79
143, 440	De Boucherville, G. B., Quebec, Canada. Propulsion of vessels	Oct. 7, 1873	38	13	4	384
141, 263	De Castro, D., and R. Burton, assignors to the Imperial Meter Company, London, England. Gas-meter	July 29, 1873	869	284	4	114
141, 858	Decker, C. D., Bonus, Ill. Straw-conveyor for thrashing-machines	Aug. 19, 1873	415	135	4	186
141, 703	Decker, C. E., Chicago, Ill. Pneumatic-oiler	Aug. 12, 1873	270	88	4	165
141, 497	Decker, D., et al. (See Kreter, R., assignor.) Decker, E. B., Carrollton, Ill. Farm-gate	Aug. 5, 1873	79	25	4	141
142, 896	Decker, H., Cochection, N. Y. Railway-rail joint	Sept. 23, 1873	602	204	4	324
137, 185	Decker, J. J., et al. (See Kreter, R., assignor.) Decker, L. H., Sauk Centre, Minn. Fanning-mill	Mar. 25, 1873	758	251	3	335
143, 127	Decker, L. H., Grove Lake, assignor of one-half interest to T. Bolles, Sauk Centre, Minn. Fanning-mill	Sept. 23, 1873	707	243	4	332
141, 635	Decker, P. H., and N. Lee, Chicago, Ill. Car-coupling	Aug. 12, 1873	214	67	4	160
145, 850	Déclat, G., Paris, France. Medical compound	Dec. 23, 1873	735		4	681
143, 812	De Codezo, T., New York, N. Y. Smoke and spark conduits for railway trains	Oct. 21, 1873	401	133	4	431
134, 592	De Coppet, F. V. (See Smith & De Coppet.) Dederick, L., et al. (See Carter & Keith, assignors.)	Jan. 7, 1873	88	27	3	14
135, 700	Same..... Bale-tie	Feb. 11, 1873	295	93	3	163
142, 375	Same..... Brick-machine	Sept. 2, 1873	47	17	4	246

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142, 086	Dedrick, J. H., assignor to Medbery, Stevens & Co., Milwaukee, Wis. Middlings-purifier.	Aug. 20, 1873	640	{ 210 211 }	4	214
144, 323	Deeble, J., assignor of one-half interest to the Atwater Manufacturing Company, Plantsville, Conn. King-bolt for vehicles.	Nov. 4, 1873	126	42	4	488
145, 633	Deeble, J., assignor of three-fourths interest to the Atwater Manufacturing Company, Plantsville, Conn. Die for forming ox-shoes.	Dec. 16, 1873	539	177	4	653
140, 482	De Echeverria, J. (See Mégy, De Echeverria & Bazan.) Deeley, J., and J. S. Edge, jr., Yardley, England. Means of attaching the fore-end stock to gun-barrels.	July 1, 1873	117	40	4	18
143, 226	Deere & Co. (See Nason, C. O., assignor.) Deering, M., assignor to Sweet, Barnes & Co., Syracuse, N. Y. Machine for forming spring-keys.	Sept. 30, 1873	794	274	4	355
141, 923	Deey, E. M., New York, N. Y. Fluting-machine.	Aug. 19, 1873	478	158	4	191
139, 375	De Forest, D. W., assignor of one-half interest to W. M. Lewis, Petersburg, Va. Machine for rolling tobacco.	May 27, 1873	830	266	3	596
144, 838	De Forest, D. W., Petersburg, Va., assignor of two-thirds interest to S. S. and F. P. Norton, Brooklyn, N. Y. Collar and cuff dryer.	Nov. 25, 1873	588	201	4	559
5, 334	De Forest, T. B., and T. S. Gilbert, Birmingham, Conn., assignors by mesne assignment to A. K. Young. Hoop-skirt.	Mar. 25, 1873	844	277	3	342
134, 648	De Good, J. L., Jefferson, Pa. Car-couplings.	Jan. 7, 1873	140	45	3	18
136, 820	De Groat, C. H. (See Holmes, N. L., assignor.) De Groodt, L., et al. (See De Groodt, M., assignor.) De Groodt, M., Eaton, N. Y., assignor to T. S. and L. De Groodt, Pratt's Hollow, N. Y. Pruning-shears.	Mar. 18, 1873	432	143	3	298
143, 755	De Grouilliers, H., Berlin, Germany. Manufacture of alkaline carbonates.	Oct. 21, 1873	352	.....	4	427
140, 815	De Guinon, R. V., Jersey City, N. J. Supplying oil to street-lamps.	July 15, 1873	425	144	4	62
137, 297	De Haven, I. N. (See Thorne & De Haven.) Deibert, J. M. (See Royal, Lentz & Deibert.) Deitzler, M., assignor of one-half interest to H. Adams, Ashland, Pa. Case for laces, ribbons, &c.	Apr. 1, 1873	17	5	3	358
5, 690	De Lalande, F. (See Schutzenberger & De Lalande.)	Dec. 9, 1873	393	129	4	629
5, 681	Delamater, C. A., et al. (See Ericsson, J., assignor.)	Dec. 9, 1873	395	129	4	629
144, 746	Delaney, M., New York, N. Y. Mold for rubber billiard-cushions. (Reissue.)	Nov. 18, 1873	499	169	4	542
144, 837	De Lano, A. D., Goodrich, Mich. Sleigh.	Nov. 25, 1873	587	200	4	559
140, 896	Delano, C. W. H., Cedar Rapids, Iowa. Grape and flower picker.	July 15, 1873	491	166	4	68
135, 972	Delbridge, C. J., Rochester, N. Y. Cigar-machine.	Feb. 18, 1873	539	179	3	196
140, 253	De Leide, R., Brooklyn, N. Y. Propulsion of cars.	June 24, 1873	752	238	3	701
141, 704	Dé Leon, M. J., Baltimore, Md. Cooking-apparatus.	Aug. 12, 1873	271	88	4	165
134, 649	Delessert, H. E., Paris, France. Carriage.	Jan. 7, 1873	141	45	3	18
6, 770	Delfer, F. L., Burlington, Iowa. Nuts.	July 8, 1873	.....	.....	4	36
5, 635	Delkescamp, A., Brooklyn, N. Y., assignor to J. J. Nichols, New York, N. Y. Die for cutting out ornamental forms of paper.	Oct. 28, 1873	745	248	4	469
137, 063	Same. Die for cutting out ornamental forms of paper.	Mar. 25, 1873	648	215	3	327
135, 895	Delonest, A. E., assignor of one-half interest to Poh & Raichle, Buffalo, N. Y. Stop-cock and regulator for gas-burners.	Feb. 18, 1873	480	155	3	191
142, 005	Delsarte, A. C. L., Paris, France. Pendulum level.	Aug. 19, 1873	545	180	4	196
143, 676	Demailly, G., Brussels, Belgium. System of purifying water chemically and mechanically.	Oct. 14, 1873	254	85	4	410
139, 240	Demarest, J., Belleville, N. J. Tool for cutting leather.	May 27, 1873	722	227	3	587
144, 663	Demarest, J., assignor to self and J. L. Mott, Mott Haven, N. Y. Pipe-joint.	Nov. 18, 1873	430	145	4	536
142, 842	Demartini, F., and J. Chertizza, New York, N. Y. Vessel for transporting grain in bulk.	Sept. 16, 1873	468	158	4	302
136, 045	Demers, J. (See Ruel, L., assignor.) De Meestre, A., Bordeaux, France. Bottle-stopper.	Feb. 12, 1873	602	198	3	201
139, 001	Deming, H. C. (See Weaver, T., assignor.)	May 27, 1873	777	246	3	591
137, 128	Deming, J. (See Faucett, Silver & Deming.) Same. (See Silver, A. R., assignor.)	Mar. 25, 1873	707	234	3	332
137, 764	Dempster, R. (See Allison, O. W., assignor.)	Apr. 15, 1873	453	141	3	418
142, 212	Denby, T. R., Carlinville, Ill. Land-pulverizer.	Aug. 26, 1873	746	246	4	222
141, 769	Denham, T. M., New Bedford, Mass. Shirt-front.	Aug. 12, 1873	328	108	4	170
139, 881	Denio, A. O., Wilmington, Del. Locomotive ash-pan cleaner.	June 17, 1873	470	130	3	665
144, 962	Denison, E. B. (See Brown & Denison.) Denison, T. H., et al. (See Ernst, J. G., assignor.)	Nov. 25, 1873	688	232	4	568
142, 087	Denlinger, A. R., Gordonville, Pa. Fumigator for bee-hives.	Aug. 26, 1873	643	.....	4	214
135, 412	Dennen, J., Chicago, Ill. Brick.	Feb. 4, 1873	17	5	3	129
140, 121	Denney, S. L., Gap, Pa. Turbine water-wheel bucket.	June 24, 1873	644	202	3	692
142, 006	Denney, W. H., assignor of one-third interest to J. F. King. Machine for slotting links for locomotives.	Aug. 19, 1873	546	180	4	197
138, 795	Dennis, J., and C. H. Weston, Lowell, Mass. Steam cloth-press.	May 13, 1873	304	94	3	532
136, 221	Dennis, S. J., Boston, Mass. Carriage axle-iron. Dennison, D. B., et al. (See Grotz, C., assignor.) Dennison, D. D., Ottumwa, Iowa. Cylinder-cock.	Feb. 25, 1873	768	248	3	225
136, 422	De Pauville, A. N. (See Roswag & De Pauville.)	Mar. 4, 1873	59	21	3	250
142, 213	Depledge, C. (See Wilcox & Depledge.)	Aug. 26, 1873	747	246	4	222
139, 049	Derden, J. P., Bastrop, La. Cotton-press.	May 20, 1873	526	166	3	564
139, 050	Derham, P. W., New York, N. Y. Paper-file.	May 20, 1873	527	166	3	564
135, 093	Derrom, A., Paterson, N. J. Stucco cornice.	Jan. 21, 1873	550	179	3	79
144, 747	De Sha, J. (See Dorsey, D. B., assignor.) Deshler, J. G. (See Andrews, E. B., assignor.)	Nov. 18, 1873	499	170	4	542
139, 708	De Silva, M. B., and G. T. Benjamin, Cleveland, Ohio. Trace-buckle.	June 10, 1873	253	79	3	645
144, 262	Desper, H. A., Worcester, Mass. Fluid-meter.	Nov. 4, 1873	79	26	4	484
139, 554	Desper, J. (See Hastings & Desper.) Same. (See Tobey, J. F., assignor.) Detrick, W., and J. D. Culver, said Culver assignor to said Detrick, Greencastle, Ind. Sawing-machine.	June 3, 1873	93	32	3	616

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
	Detroit Stove-Works. (See Carter, J. V. B., assignor) (Design.)					
144, 748	De Vallin, W. H., Sacramento, Cal. Pavement.....	Nov. 18, 1873	500	170	4	542
144, 749	De Vallin, W. H., San Rafael, Cal. Treating bricks for pavements.....	Nov. 18, 1873	501		4	542
140, 254	De Vaney, G., Jr., Darbyville, Ohio. Combined corn-planter and cultivator.....	June 24, 1873	753	238	3	701
137, 601	Develley, L. H., South Boston, Mass. Machinery for embossing spool-heads.....	Apr. 8, 1873	297	92	3	393
140, 685	Devendorf, A. L., Galesburgh, Ill. Cock.....	July 8, 1873	306	103	4	44
135, 094	Deveroll, S. R., Mount Gambier, South Australia. Means of operating ships' pumps.....	Jan. 21, 1873	550	179	3	80
136, 310	Devlan, P. S., Jersey City, N. J., assignor to self and Walton Brothers, Newark, N. J. Car and window washer.....	Feb. 25, 1873	846	273	3	231
143, 407	Devlan, P. S., Jersey City, N. J., assignor of one-third interest to C. Barnum, Brooklyn, N. Y. Railway-tie.....	Oct. 7, 1873	9	3	4	381
139, 882	Devlin, J., Brooklyn, N. Y. Apparatus for forcing beer and other liquids from barrels.....	June 17, 1873	418	130	3	665
	Devoe, B. G. (See Rogers & Devoe.)					
	Devoe, B. G., et al. (See Rogers, T., assignor.)					
140, 897	Devoe, B. G., Fredericktown, Ohio. Iron fence.....	July 15, 1873	493	166	4	68
140, 898	Devol, J. L., and J. M. Okey, Parkersburgh, W. Va. Sash-holder.....	July 15, 1873	494	167	4	68
140, 816	De Vore, A. B., Talkington Township, Ill. Hog-trap.....	July 15, 1873	426	144	4	62
136, 141	Dew, J. M. A., Chicago, Ill. Knob-latch.....	Feb. 25, 1873	709	228	3	220
143, 969	De Wara, L. E., Baltimore, Md. Guide for shoe-sewing.....	Oct. 28, 1873	554	184	4	453
137, 348	Deweese, A., Oak Mills, Kans. Bee-hive.....	Apr. 1, 1873	66	21	3	369
136, 140	Dewell, J. V., assignor to self, J. Jenkins, and P. C. Provost, Brooklyn, N. Y. Bucket.....	Feb. 25, 1873	708	228	3	220
	Dewey, H. M. (See Dewey, M. J. & J. T., assignors.)					
137, 535	Dewey, H. S., assignor of one-half interest to M. W. Wolf, Chicago, Ill. Railway-switch.....	Apr. 8, 1873	241	74	3	389
139, 051	Dewey, J. J., Quechee, Vt. Spinning-mule.....	May 20, 1873	527	166	3	564
145, 053	Same..... Shaft for vehicles.....	Dec. 2, 1873	13	5	4	587
	Dewey, J. T. (See Dewey, M. J. & J. T.)					
142, 068	Dewey, M. J. & J. T., assignors of one-third interest to H. M. Dewey, West Troy, N. Y. Apparatus for renovating velvet, &c.....	Aug. 26, 1873	643	211	4	214
135, 095	De Witt, E., Belvidere, N. J. Stove-grate.....	Jan. 21, 1873	551	180	3	80
135, 096	Same..... same.....	Jan. 21, 1873	552	180	3	80
140, 122	De Witt, G., Belleville, and J. Fairman, New York, N. Y. Building-block.....	June 24, 1873	645	203	3	692
143, 227	De Witt, J. H., Orange, N. Y. Machine for painting wire cloth.....	Sept. 30, 1873	795	274	4	355
	Dews, J. (See Carmichel, A., assignor.)					
140, 123	Dexter, B. E., Gowanda, N. Y. Mode of attaching sleigh-bells to harness.....	June 24, 1873	645	203	3	692
141, 124	Dexter, C. H., Baltimore, Md. Can for oysters.....	July 22, 1873	717	239	4	95
136, 907	Dexter, S. B., Mason City, Iowa. Combined adjustable pincher and grappling-tool.....	Mar. 18, 1873	503	166	3	304
137, 129	Same..... Combined wrench and grappling-tool.....	Mar. 25, 1873	707	235	3	332
137, 130	Same..... Grapple.....	Mar. 25, 1873	708	235	3	332
138, 319	Dexter, H., Chicago, Ill. Washing-machine.....	Apr. 29, 1873	985	309 } 310 }	3	478
145, 991	De Zeng, H. L., Geneva, N. Y. Railway-tie.....	Dec. 30, 1873	882	286	4	703
134, 981	Dibble, S. J., Weathersfield, Conn. Thill-coupling.....	Jan. 21, 1873	454	145	3	72
145, 991	Dibble, S. J., Lockport, N. Y. Portable stove.....	Dec. 16, 1873	410	135	4	642
	Dick, C. J. A. (See Gifford, P., assignor.)					
130, 458	Dick, D., assignor to B. M. Barmore, New York, N. Y. Door-spring.....	June 3, 1873	14	4	3	610
	Dick, J. (See Meyer & Dick.)					
	Dick, J. (See Meyer, G., assignor.)					
136, 423	Dick, W., New York, N. Y. Bottle-washer.....	Mar. 4, 1873	59	21	3	250
141, 547	Dickennan, A., Boston, Mass. Canvas stretching and protecting frame.....	Aug. 5, 1873	120	37	4	145
138, 235	Dickerman, E., Middlefield, Conn. Washing-machine.....	Apr. 29, 1873	900	284	3	472
5, 507	Dickerson, S. H., Hudson, Mich. Well-tube..... (Reissue.)	July 29, 1873	1,017	330	4	126
5, 508	Same..... Earth-auger..... (Reissue.)	July 29, 1873	1,018	330	4	126
5, 327	Dickerson, T. S., assignor to self and R. M. Whipple, Chicago, Ill. Manufacture and application of gas from petroleum, &c..... (Reissue.)	Mar. 18, 1873	625	206	3	314
5, 326	Dickerson, T. S., and R. M. Whipple, Chicago, Ill. Process and apparatus for using liquid fuel for producing heat and light..... (Reissue.)	Mar. 18, 1873	624	206	3	314
	Dickey, G. W. (See Arnot, H., assignor.)					
143, 441	Dickinson, A. S., Brooklyn, N. Y. Pulley-block.....	Oct. 7, 1873	38	14	4	384
137, 349	Dickinson, C. H., Rosedale, La. Hydraulic cane-crusher.....	Apr. 1, 1873	67	21	3	362
140, 899	Dickinson, C. W., Belleville, assignor to self and G. Rowden, Newark, N. J. Numbering heads.....	July 15, 1873	495	167	4	68
	Dickinson, F. Z., et al. (See McGregor & Vall, assignors)..... (Reissue.)					
144, 324	Dickinson, G. W., Saratoga Springs, N. Y. Billiard-cue tip.....	Nov. 4, 1873	126	42	4	489
	Dickinson, T. M. (See Mack, B. L., assignor.)					
137, 536	Dickson, R., Lansingburgh, N. Y. Horse-brush.....	Apr. 8, 1873	242	74	3	388
145, 634	Diehl, L. J., Butler, Ind. Bee-hive.....	Dec. 16, 1873	539	177	4	653
136, 142	Diehl, P., Chicago, Ill. Magic-lantern.....	Feb. 25, 1873	709	229	3	221
140, 351	Diehl, R. C., Scott Township, Pa. Shifting top for buggies.....	July 1, 1873	16	5	4	9
143, 677	Dietrich, C., Boston, Mass. Fire-escape.....	Oct. 14, 1873	258	85, 86	4	410
	Dietrich, F. (See Schüssler & Dietrich.)					
	Dietrich, C. F. (See Norman & Dietrich.)					
144, 070	Dietz, R. E., New York, N. Y. Lamp.....	Oct. 28, 1873	644	212	4	461
	Dietzel, G. (See Vogt & Dietzel.)					
139, 376	Digney, J. D., and T. H. Lartigue, and H. Forest, Paris, France. Electric railway-signal.....	May 27, 1873	832	266 } 267 }	3	596
	Digney, T. (See Digney, J. D. and T. H., Lartigue, and H. Forest.)					
	Dilke, J. (See Goldsmith & Dilke.)					
136, 908	Dillan, P. C., Villisca, Iowa. Washing-machine.....	Mar. 18, 1873	503	166	3	304
136, 143	Dillenbeck, A., Fort Plain, N. Y. Die for making clips for king-bolts.....	Feb. 25, 1873	710	229	3	221
	Dilley, J. (See Currie, C. S., assignor.)					
	Dillingham, E., et al. (See Crowell, L. C., assignor.)					
135, 469	Dillingham, G. F. (See Wing, A. T., assignor.)					
	Dillingham, M. W., Amsterdam, N. Y. Paper box.....	Feb. 4, 1873	71	22	3	133
	Dillingham, N., et al. (See Crowell, L. C., assignor.)					
144, 263	Dillon, J., New York, N. Y. Adjustable scaffold.....	Nov. 4, 1873	79	26	4	484
145, 992	Same..... Compound tool.....	Dec. 30, 1873	883	286	4	703
135, 634	Dillon, M., assignor to self and J. B. Armour, Albany, N. Y. Brush-machine.....	Feb. 11, 1873	236	74	3	158
135, 635	Same..... Paint-brush.....	Feb. 11, 1873	237	74	3	158
5, 394	Dilworth, J., Muskoka District, Canada, and J. C. Hodgins, Toronto, Canada, said Dilworth assignor to T. K. Morgan and H. Thorn, Toronto, Canada. Condenser and feed-water heater for steam-engines..... (Reissue.)	May 6, 1873	238	74	3	517
5, 378	Dimes, R., assignor to Tiffany & Co., New York, N. Y. Process and apparatus for stippling metallic surfaces..... (Reissue.)	Apr. 29, 1873	1,110	351	3	489
143, 313	Dimmick, D., Orwell Township, Bradford County, Pa. Vehicle-wheel.....	Oct. 21, 1873	402	134	4	431
139, 302	D'Infeville, G., New York, N. Y. Electro-magnetic telegraph.....	May 27, 1873	778	247	3	591

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr & G.	Vol.	Page.
136, 976	Dinsmore, A. S., Boston, Mass. Sewing-machine	Mar. 18, 1873	559	186	3	308
145, 790	Dinsmore, J. H., Boston, Mass. Locomotive-window	Dec. 23, 1873	685	224	4	677
	Dinsmore, T. H. (See Stewart, W. A., assignor.)					
	Same..... (See Trask, W. R., assignor.)					
	Diolot, S. (See Haack & Diolot.)					
136, 046	Dirksen, G., Freeport, Ill. Uterine supporter	Feb. 18, 1873	603	198	3	201
135, 896	Dirst, A. L., Seward, Ill. Clod-fender	Feb. 18, 1873	481	155	3	191
144, 264	Discher, G. H., Mobile, Ala. Combined extension measuring-rod and dividers	Nov. 4, 1873	80	26	4	484
138, 486	Disner, G., Mound City, Ill. Velocipede	May 6, 1873	17	6	3	499
140, 124	Disney, M., Oakland, Cal., assignor to self, H. C. Kibbe, and J. D. Hildreth. Car-coupling	June 24, 1873	646	203	3	692
	Diss, A. B. (See Kennedy & Diss.)					
	Diss, F. A. J. (See Fancher, C. H., assignor.)					
142, 900	Disston, H., Philadelphia, Pa. Tip for saw-files	Sept. 16, 1873	514	175	4	306
143, 445	Same..... File	Sept. 2, 1873	111	36	4	251
	Disston, H., and Sons. (See Disston, T. S., assignor.)					
	Same..... (See Disston, T. S. and H., 2d, assignor)	(Design.)				
	Same..... (See Tilton, W. C., assignor.)					
134, 982	Disston, T. S., Philadelphia, Pa. Cork-cutting machine	Jan. 21, 1873	455	146	3	72
143, 128	Disston, T. S., assignor to self and H. Disston & Sons, Philadelphia, Pa. Hand-saw	Sept. 23, 1873	708	243	4	332
6, 525	Disston, T. S. and H., 2d, assignors to selves and H. Disston & Sons, Philadelphia, Pa. Saw-frame	(Design.)				
	Same..... (Design)	Aug. 26, 1873			4	219
144, 963	Ditch, J., Five Forks, Pa. Stock for shoeing animals	Nov. 25, 1873	689	233	4	568
141, 334	Di Tergolina, V., London, England. Bridle-bit	July 29, 1873	930	303	4	120
143, 446	Dittenhaver, J. B., Napoleon, Ohio. Compound for filling wood	Sept. 2, 1873	112		4	251
144, 964	Dittman, C., assignor to self and D. N. Landis, jr., Leacock Post-office, Pa. Nut-lock	Nov. 25, 1873	690	233	4	568
145, 003	Dittman, C., Boston, Mass. Explosive compound	Dec. 9, 1873	327		4	624
	Dixie Oil Company. (See Hatfield, G. W., assignor.)					
135, 636	Dixon, A. H., Toronto, Canada. Show-card	Feb. 11, 1873	238	75	3	158
145, 492	Dixon, E. and W., Newark, N. J. Buffing-wheel	Dec. 16, 1873	411	135	4	642
141, 859	Dixon, G., Toronto, Canada. Railway-car truck	Aug. 19, 1873	416	135 136	4	188
	Dixon, H. J., & Sons. (See Gilmore, W., assignor)	(Design.)				
	Same..... (See Powell, J., assignor)	(Design.)				
140, 019	Dixon, M. J., New York, N. Y., and W. Tunstill, Brooklyn, N. Y. Ice-crusher	June 17, 1873	531	168	3	675
135, 097	Dixon, S., Nottingham, England. Corset	Jan. 21, 1873	553	180	3	80
135, 098	Dixon, S., Roseville, Ill. Corn-planter	Jan. 21, 1873	553	180	3	80
	Dixon, W. (See Dixon, E. & W.)					
	Doane, D. E. (See Dale, J. P., assignor.)					
134, 650	Doane, W. H., assignor to J. A. Fay & Co., Cincinnati, Ohio. Scroll-saw	Jan. 7, 1873	142	45	3	18
135, 099	Doane, W. H., and W. H. Dobson, assignors to J. A. Fay & Co., Cincinnati, Ohio. Scroll-saw	Jan. 21, 1873	554	181	3	80
135, 413	Dobbins, J., Litchfield, Mich. Machine for cutting and bending hoops	Feb. 4, 1873	18	6	3	120
	Dobbins, L. (See Saladee, C. W., assignor)	(Reissue.)				
142, 214	Dobbins, W. C., Zanesville, Ohio. Combined fender and ash-sifter	Aug. 26, 1873	748	247	4	222
143, 672	Dobbs, T. J., Weehawken, N. J. Harness attachment for hitching and unhitching horses	Oct. 14, 1873	258	86	4	410
136, 491	Dobson, H. C., New York, assignor to H. Sontag, Stapleton, N. Y. Banjo	Mar. 4, 1873	121	39	3	255
	Dobson, J., et al. (See Shinn, J., assignor.)					
144, 239	Dobson, J., Philadelphia, Pa. Machinery for finishing the nap of woolen cloth	Nov. 25, 1873	589	201	4	559
	Dobson, J. & J. (See Webster, J. T., assignor)	(Design.)				
144, 840	Dobson, J. & J., Philadelphia, Pa. Apparatus for delivering and drawing long-fibered wool after carding	Nov. 25, 1873	589	201	4	559
134, 651	Dobson, R. F., assignor of one-third interest to G. Frost, Belmont, Wis. Hydraulic engine	Jan. 7, 1873	143	46	3	18
	Dobson, W. (See Ruehton & Dobson.)					
	Dobson, W. H. (See Doane & Dobson.)					
139, 124	Dobson, W. H., assignor to J. A. Fay & Co., Cincinnati, Ohio. Saw-setting machine	May 20, 1873	601	189	3	560
135, 529	Dod, S., Havana, Cuba. Apparatus for the manufacture of sugar	Feb. 4, 1873	123	39	3	137
	Dodge, C. F. (See Tiffany, J. C., assignor.)					
	Dodge, D., Keeseville, N. Y. Nail-machine	(Extension)	Aug. 23, 1873		4	185
	Same..... same	(Extension)	Aug. 30, 1873		4	212
140, 255	Dodge, H., assignor of one-half interest to C. Germain, Beaver Dam, Wis. Telegraph-pole	June 24, 1873	755	238	3	701
136, 424	Dodge, J. M., Newark, N. J. Car-axle box	Mar. 4, 1873	60	21	3	250
5, 420	Dodge, J. W., Malden, Mass. Branding apparatus	May 20, 1873	704	221	3	578
136, 710	Dodge, J. W., Malden, Mass., assignor to The Shoe Machinery Manufacturing Company, Connecticut. Branding-stamps	Mar. 11, 1873	326	108	3	280
144, 515	Same..... Tool for marking edges of soles of boots and shoes	Nov. 11, 1873	294	99	4	514
	Dodge, L. (See Weacott, B. S., assignor.)					
	Dodge, L. P. (See Kingdon & Dodge.)					
136, 711	Dodge, O. H., Jackson, Tenn. Roller-skate	Mar. 11, 1873	327	108	3	280
	Dodge, P., deceased, by W. M. Pingry, administ'r. Weathersfield, Vt. Stove	(Extension)	Feb. 1, 1873		3	70
	Dodge, S., jr., and B. Potter, jr., Marblehead, Mass. Heel for boots and shoes	(Extension)	Sept. 13, 1873		4	270
139, 498	Dods, R., Southington, Conn. Whip-socket attachment	June 3, 1873	49	15	3	613
139, 377	Dodson, G. W., Mitchell, Ind. Coffee-roaster	May 27, 1873	834	267	3	596
138, 619	Dodson, J. T., Kane, Ill. Draft-hook for whiffletrees, &c	May 6, 1873	131	43	3	508
140, 483	Dodson, W. P., Philadelphia, Pa. Sad-iron	July 1, 1873	118	40	4	18
	Dodsworth, J. (See Madden & Dodsworth)	(Reissue.)				
144, 265	Doeg, I., assignor of one-half interest to O. Murray, New Market, N. H. Device for dressing the sides of nuts	Nov. 4, 1873	81	26	4	484
	Doeltz, W. (See Arndt, A. F. R., assignor.)					
	Doerfer, P. (See Mürchen & Doerfer.)					
145, 729	Dohan, J. F., Binghamton, N. Y. Hand-mirror	Dec. 23, 1873	634	207	4	673
134, 860	Doherty, M., Cambridgeport, Mass. Music-desk for pianos	Jan. 14, 1873	337	108	3	47
139, 125	Doherty, M., Cambridgeport, assignor of one-half interest to C. Skinner, Boston, Mass. Piano-lid prop-stick	May 20, 1873	603	189	3	570
134, 652	Doherty, P. W., Boston, Mass. Stench-trap	Jan. 7, 1873	144	46	3	18
	Domstreich, F. L. (See Jakel, J., assignor.)					
	Dolan, T., et al. (See Langham, T., assignor)	(Design.)				
	Same..... (See Wink, F., assignor)	(Design.)				
	Dolan, T., & Co. (See Boot, H., assignor.)					
	Same..... same	(Design.)				
	Same..... (See Osborne, O., assignor.)					
	Same..... (See Parks, J. W., assignor)	(Design.)				
	Dolan, W., et al. (See Hills, H. C., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
141, 208	Doll, A., Cleveland, Ohio. Adjustable stool.....	July 29, 1873	813	266	4	110
144, 516	Doll, A., and C. Elling, Cleveland, Ohio. Faucet.....	Nov. 11, 1873	295	100	4	514
144, 071	Dolpb, A. M., Cincinnati, Ohio. Starching-machine.....	Oct. 28, 1873	645	212	4	461
143, 901	Dolson, H. P., Highland, N. Y. Spring-coupling for vehicles.....	Sept. 16, 1873	514	175	4	306
	Dolton, G. E. (See Ward & Dolton.)					
139, 883	Dolton, G. E., Monee, Ill. Ruffler for sewing-machines.....	June 17, 1873	419	131	3	666
136, 425	Dom, J. L., Hamilton County, Ohio. Wheel for vehicles.....	Mar. 4, 1873	60	21	3	250
135, 208	Domett, J. W., Boston, Mass. Safety-check for horses.....	Jan. 28, 1873	670	216	3	102
135, 322	Doming, G., assignor of one-half interest to J. Russell, Weymouth, England. Mnsic } leaf-turner.....	Jan. 28, 1873	771	{ 249 250	{ 3 3	{ 110 110
140, 686	Donald, D., Williamsburgh, N. Y. Baker's oven.....	July 8, 1873	307	104	4	44
135, 785	Donald, F., and G. S. Newton, Waupun, Wis. Derrick.....	Feb. 11, 1873	364	117	3	169
5, 491	Donaldson, N. I., Worcester, Mass. Inhaler..... (Reissue)	July 15, 1873	593	200	4	76
134, 861	Same..... Medical inhaler.....	Jan. 14, 1873	339	104	3	47
140, 256	Doneho, D. M., Beaver, Pa. Sash-fastener.....	June 24, 1873	756	239	3	701
	Doney, A. (See Baker & Doney.)					
	Same..... (See Baker, Doney & Owen.)					
145, 056	Donisthorpe, R. F., and T. A. W. Clarke, Leicester, England. Manufacture of crimped hair.....	Dec. 2, 1873	14	5, 6	4	587
134, 653	Donn, H. D., Oshkosh, Wis. Saw-mill dog.....	Jan. 7, 1873	144	46	3	18
134, 862	Donnell, H., Philadelphia, Pa. Carriage-curtain.....	Jan. 14, 1873	340	108	3	47
	Donnell, J. F. (See Schofield, W. H., assignor.)					
141, 705	Donnelly, W., Calverton, N. Y. Plow.....	Aug. 12, 1873	272	88	4	165
142, 775	Donohue, T. H., Washington, D. C. Apparatus for cleaning boiler-fines, &c.....	Sept. 16, 1873	415	140	4	298
	Donovan, F. J. (See Hafford, A. T., assignor.)					
141, 209	Dooling, J., Boston, Mass. Ice-cream freezer.....	July 29, 1873	813	266	4	110
	Doolittle, E. W. (See Lowe, P. W., assignor.)					
136, 977	Doolittle, G., assignor to The Doolittle Manufacturing Company, Bridgeport, Conn. Suspension-ring.....	Mar. 18, 1873	500	186	3	309
144, 325	Doolittle, G., Bridgeport, Conn. Tidy-pin.....	Nov. 4, 1873	127	42	4	469
139, 499	Doolittle, J. B., Wallingford, Conn. Mechanical movement.....	June 3, 1873	50	16	3	613
140, 687	Doolittle, J. H., assignor to Wallace & Sons, Ansonia, Conn. Lamp-burner.....	July 8, 1873	307	104	4	45
	Doolittle Manufacturing Company. (See Doolittle, G., assignor.)					
	Same..... (See Ellis, J. M., assignor.)					
143, 679	Doolittle, T. B., Bridgeport, Conn. Electric vote-annunciator.....	Oct. 14, 1873	259	86	4	410
142, 215	Dopp, W. H., Buffalo, assignor of two-thirds interest to F. C. Candee, New York, N. Y. Nut-lock.....	Aug. 26, 1873	748	247	4	222
	Dorchester, E., et al. (See Baird, O. D., assignor.)					
	Dore, B. (See Hawkins, L. P., assignor.)					
	Dore, B., et al. (See Ross & Miller, assignors.)					
	Same..... (See Ross, J. G., assignor.)					
	Doremus, D., et al. (See Van Derzee, C., assignor.)					
134, 593	Doremus, W. T., New York, N. Y. Chair seat and back.....	Jan. 7, 1873	89	28	3	14
135, 973	Same..... Seat for chairs, &c.....	Feb. 18, 1873	540	179	3	196
135, 974	Same..... Oscillating-chair.....	Feb. 18, 1873	540	179	3	196
137, 600	Same..... Furniture-spring.....	Apr. 8, 1873	297	92	3	392
138, 320	Same..... Cradle.....	Apr. 29, 1873	986	310	3	479
139, 948	Same..... Chair.....	June 17, 1873	473	149	3	70
140, 188	Same..... Furniture-spring.....	June 24, 1873	702	221	3	697
140, 189	Same..... same.....	June 24, 1873	703	221	3	697
144, 020	Same..... Spring for chairs, &c.....	Oct. 28, 1873	603	199	4	457
144, 664	Same..... same.....	Nov. 18, 1873	430	145	4	536
145, 404	Same..... same.....	Dec. 9, 1873	328	110	4	624
5, 509	Doring, E. N., New York, N. Y. Sofa-bed.....	Jan. 7, 1873	89	28	3	14
	Dorman, L., Willimantic, Conn., assignor to C. W. Fillmore and J. R. Miner. Wheel for vehicles..... (Reissue)	July 29, 1873	1, 018	330	4	126
	Dorman, O. P. (See Betts, R. W., assignor)					
137, 537	Dorman, O. P., New York, N. Y. Shirt-collar..... (Design)	Apr. 8, 1873	242	74	3	388
6, 354	Dornan, J., Philadelphia, Pa. Carpet..... (Design)	Jan. 21, 1873			3	70
6, 811	Dornan, J., assignor to Dornan, Maybin & Co., Philadelphia, Pa. Carpet..... (Design)	Aug. 19, 1873			8	183
142, 681	Dornan, J., Philadelphia, Pa. Carpet..... (Design)	Sept. 9, 1873	322	107	4	220
	Dornan, Maybin & Co. (See Dornan, J., assignor)					
	Same..... (See Righter, C. A., assignor)					
143, 408	Dorsett, F., sr., Chicago, Ill., assignor to C. Parker, Meriden, Conn. Boot-jack.....	Oct. 7, 1873	10	3	4	361
141, 924	Dorsey, D. B., assignor of one-half interest to J. De Sha, Chillicothe, Mo. Washing- machine.....	Aug. 19, 1873	479	152	4	191
145, 730	Dorsey, D. B., assignor of one-half interest to E. J. Marsh, Chillicothe, Mo. Carriage-top Dorsey, R. S., et al. (See Tucker, C. and W. H., assignors)	Dec. 23, 1873	634	208	4	673
142, 376	Dorwart, B. K., Rockland, assignor to self and I. C. Winsor, Coventry, R. I. Revolving fire-arm.....	Sept. 2, 1873	49	17	4	246
	Doty, E. (See Judd & Doty)					
	Doty, F. M. (See Savage & Doty)					
140, 767	Doty, J., Buffalo, N. Y. Feeding-mechanism for rock-drills.....	July 15, 1873	380	131	4	59
143, 902	Doty, J. W., Lockport, N. Y. Bob-sled.....	Sept. 16, 1873	515	175	4	306
141, 636	Doty, L., Frankfort, Ill. Device for baling hay.....	Aug. 12, 1873	215	68	4	180
138, 078	Doty, W. M., New York, N. Y. Lifting-jack.....	Apr. 22, 1873	742	235	3	451
	Doubleday, H. H. (See Foster, T. M., assignor)					
136, 222	Doubleday, M. C., Sharon, Vt. Car-coupling..... (Reissue)	Feb. 25, 1873	769	249	3	225
141, 210	Doubler, J. W. H., West Alden, N. Y. Harvester-cutter.....	July 29, 1873	815	266	4	110
143, 903	Same..... Harvester.....	Sept. 16, 1873	516	176	4	306
144, 072	Same..... Whip-socket.....	Oct. 28, 1873	646	213	4	461
144, 073	Same..... same.....	Oct. 28, 1873	647	213	4	461
139, 662	Donbrava, F., and J. Staib, Hartford, Conn. Wood blocks for flooring.....	June 10, 1873	204	67	3	641
141, 637	Doud, E., Oshkosh, Wis. Sieve for grain-separators.....	Aug. 12, 1873	215	68	4	160
140, 484	Doud, J. W., Ward's Corner, Iowa. Cultivator.....	July 1, 1873	119	41	4	18
134, 789	Dougherty, J., Somerville, Mass. Pot for melting glass.....	Jan. 14, 1873	276	90	3	42
139, 778	Dougherty, W., Philadelphia, Pa. Manufacture of steel.....	June 10, 1873	320	99	3	650
136, 223	Doughty, C. H., Newburgh, N. Y. Candlestick.....	Feb. 25, 1873	770	249	3	225
138, 487	Doughty, S. H., Nyack, N. Y. Buckle.....	May 6, 1873	17	6	3	499
144, 448	Douglas, C. A., Franklin, N. Y. Milk-cooler.....	Nov. 11, 1873	240	81	4	509
140, 996	Douglas, C. H., Hartford, Conn. Cooking-stove.....	July 22, 1873	606	204	4	86
141, 965	Douglas, J. W., assignor to W. and B. Douglas, Middletown, Conn. Pump.....	Nov. 25, 1873	691	233	4	568
	Douglas, B. (See Brereton, R., assignor.)					
144, 074	Douglas, G., Bridgeport, Conn. Spike-bar.....	Oct. 28, 1873	647	213	4	461
135, 637	Douglas, J. A., and J. Wagner, said Douglass assignor to said Wagner, Chester Springs, Pa. Machine for shaving hoops.....	Feb. 11, 1873	239	75	3	158

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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142, 330	Douglass, W., Pittsburgh, Pa., and J. H. Brown, Youngstown, Ohio. Steam-boiler	Sept. 2, 1873	7	3	4	242
	Douglass, W. and B. (See Douglass, J. W., assignor.)					
	Dovey, J. F. (See Insull & Dovey.)					
141, 639	Dow, G. W., Brooklyn, N. Y. Propelling vessels	July 22, 1873	643	216	4	89
139, 709	Dowd, H. M., Saratoga Springs, and W. W. Dowd, jr., North Granville, N. Y. Potato-digger	June 10, 1873	254	80	3	645
	Dowd, W. W. (See Dowd, H. M. and W. W., jr.)					
142, 682	Dowling, R. H., assignor to J. F. Wilson, Newark, Ohio. Car-coupling	Sept. 9, 1873	323	107	4	280
145, 993	Dowling, T. W., Pontiac, Mich. Scroll-sawing machine	Dec. 30, 1873	884	286	4	703
137, 661	Downer, P. A., Baldwin, Iowa. Washing-machine	Apr. 8, 1873	350	108	3	397
5, 518	Downes, C. H., Hudson City, N. J. Pen and pencil case (Reissue)	Aug. 5, 1873	182	58	4	150
5, 704	Downing, B. J., Mitchell, Iowa. Horse hay-rake (Reissue)	Dec. 23, 1873	819	267	4	687
143, 278	Same same	Sept. 30, 1873	838	288	4	359
135, 786	Downing, E. H., and W. Joint, Lynn, Mass. Machines for burnishing heels	Feb. 11, 1873	365	118	3	168
138, 690	Downing, J. F., Erie, Pa. Child's chair	May 6, 1873	132	43	3	508
140, 900	Same same	July 15, 1873	497	{ 167 168 }	4	68
135, 701	Downing, J. F. and W., Erie, Pa. Wheel for vehicles	Feb. 11, 1873	206	94	3	163
138, 867	Downing, L. H., North Andover, Mass. Hydraulic hose	May 13, 1873	366	114	3	537
	Downing, W. (See Downing, J. F. and W.)					
141, 706	Downing, W. H., assignor of one-half interest to B. Masseth, Shamburgh, Pa. Rope-clamp	Aug. 12, 1873	273	89	4	165
134, 584	Downs, H. G., Seneca Falls, N. Y. Car-axle box	Jan. 7, 1873	89	28	3	14
138, 796	Downs, T. B., and W. D. Morris, Jefferson City, Mo. Stool for dental-chairs	May 13, 1873	305	94	3	532
134, 654	Downs, W. C., Providence, R. I. Suction-hose	Jan. 7, 1873	145	46	3	18
143, 442	Downs, W. E., et al. (See Harrington, I., assignor.)					
143, 228	Downton, R. L., Collinsville, Ill. Middlings-separator	Oct. 7, 1873	39	14	4	384
	Doyle, J. A. and J. A. Murphy, Lancaster, Pa. Printer's galley-rest	Sept. 30, 1873	796	274	4	355
	Doyle, R. (See Connolly, J. D., assignor.)					
5, 356	Doyle, W., et al. (See Zellers, T. A., assignor.)					
6, 586	Doyle, W., Birmingham, Pa. Jelly-glass (Reissue)	Apr. 15, 1873	656	206	3	435
136, 492	Doyle, W., Albany, N. Y. Parlor-stove (Design)	Apr. 15, 1873			3	417
141, 770	Doyle, W., Birmingham, Pa. Jelly-tumbler	Mar. 4, 1873	121	39	3	255
145, 932	Doyle, W., Albany, N. Y. Base-burning stove	Aug. 12, 1873	328	108	4	170
	Same Stove-leg	Dec. 30, 1873	829	270	4	699
	Doyle, W. H. (See Stimely, W. H., assignor.)					
142, 843	Drake, A. J., Middletown, N. Y. Butter-tub	Sept. 16, 1873	469	159	4	302
137, 186	Drake, E., Stoughton, assignor to self and J. S. Smith, Leicester, Mass. Combined percussion and time-fuse for shells	Mar. 25, 1873	759	251	3	335
139, 663	Drake, H., Attleborough, Mass. Carriage-curtain fastening	June 10, 1873	204	67	3	642
139, 500	Drake, H. L., Lynn, Mass. Heel-plate	June 3, 1873	51	16	3	613
143, 067	Drake, J. B., Goshen, Ind. Saw-sharpening device	Sept. 23, 1873	663	227	4	328
140, 688	Drake, M. D., Trenton, Ky. Scaffold	July 8, 1873	308	{ 104 105 }	4	45
	Drake, M. M. (See Hunt, L., assignor.)					
136, 821	Drake, M. S., Newark, N. J. Adjustable ingot-mold	Mar. 18, 1873	433	143	3	298
	Drake, S. N. (See Simpson & Drake.)					
140, 352	Drake, W. L., Evanston, Ill. Fire-proof tile-floor	July 1, 1873	16	5	4	9
145, 405	Same Fire-extinguisher	Dec. 9, 1873	330	110	4	624
145, 406	Same same	Dec. 9, 1873	331	111	4	624
	Draper, G. (See Bancroft, J. B., assignor.)					
	Draper, G. (See Laffin, P., assignor.)					
134, 863	Draper, G., Hopedale, Mass. Spindle-bolster and step for spinning-frame	Jan. 14, 1873	340	109	3	47
134, 864	Same Spinning-frame	Jan. 14, 1873	342	109	3	47
	Draper, G., and Son. (See Jenckes, W., assignor.) (Reissue.)					
	Draper, G. N., administrator. (See Draper, J.) (Extension.)					
135, 975	Draper, I. C., New York, N. Y. Fruit-fork	Feb. 18, 1873	541	179	3	196
	Draper, J., deceased, by G. N. Draper, administrator, Brooklyn, N. Y. Skeleton-skirt. (Extension)	Oct. 4, 1873			4	354
	Draper, O. M. (See Draper, V., assignor.) (Design.)					
137, 897	Draper, R. E., Enfield, N. C. Shoe pegging and trimming machine	Apr. 15, 1873	564	177	3	427
6, 781	Draper, V., North Attleborough, Mass., assignor to O. M. Draper, Bristol, Mass. Ornamental chain-link (Design)	July 22, 1873			4	85
6, 782	Same same (Design)	July 22, 1873			4	85
6, 783	Same same (Design)	July 22, 1873			4	85
	Draper, W. F. (See Bancroft, J. B., assignor.)					
136, 591	Drasser, C., Chicago, Ill. Slate	Mar. 11, 1873	229	77	3	273
137, 350	Dreher, A., Cleveland, Ohio. Reed-organ	Apr. 1, 1873	67	21	3	362
141, 325	Dressel, H., Springfield, Vt. Shifting-rail for carriage-seats	July 29, 1873	930	303	4	120
143, 970	Dreusike, J., New York, N. Y. Bottom for beds, &c	Oct. 28, 1873	554	184	4	453
145, 851	Drew, J., Wenona, Ill. Lightning-rod	Dec. 23, 1873	736	241	4	681
145, 407	Drew, J. C., Auburn, Me. Lasting-jack for boots	Dec. 9, 1873	332	111	4	624
6, 711	Dreyer, B., assignor to W. H. French, Philadelphia, Pa. Center-piece for ceilings. (Design)	June 24, 1873			3	691
6, 712	Same Center-piece for ceilings (Design)				3	691
	Dreyer, H. (See Dulany & Dreyer.)					
136, 712	Driesslein, C. L., Chicago, Ill. Machine for mining coal	Mar. 11, 1873	328	108	3	281
142, 216	Drips, W. H., Cincinnati, Ohio. Plane for cutting cigar-lighters	Aug. 26, 1873	749	247	4	222
140, 257	Driver, J., Marysville, Cal. Mortising-machine	June 24, 1873	756	239	3	701
145, 408	Drown, W. A., jr., Philadelphia, Pa. Umbrella-supporter	Dec. 9, 1873	332	111	4	624
	Drum, W. C. (See Strawn & Drum.)					
	Drummer, P. E. (See Malmström & Drummer.)					
	Drury, B. C., et al. (See Leonard, T. D., assignor.)					
143, 447	Dubber, J. F., Brooklyn, N. Y. Clasp for pocket-books	Sept. 2, 1873	113	36	4	251
	Dubler, J. B. (See Stewart & Dubler.)					
136, 978	Du Bois, C., Fishkill Landing, N. Y. Elevator	Mar. 18, 1873	560	{ 186 187 }	3	309
138, 740	Du Bois, F. N., New York, N. Y. Tool for use in lacing belts	May 13, 1873	256	79	3	528
135, 470	Du Bois, H. M., assignor to self and W. Filter, Philadelphia, Pa. Hub for vehicles	Feb. 4, 1873	71	22	3	133
137, 351	Du Bois, O., San José, Cal. Track-clearer for harvesters	Apr. 1, 1873	68	22	3	362
142, 683	Du Brul, N., Chicago, Ill. Cigar-mold	Sept. 9, 1873	323	108	4	280
144, 893	Du Chateau, A., and J. D. Williams, Green Bay, Wis. Folding-pail	Nov. 25, 1873	632	215	4	563
136, 822	Duchemin, P. F., Somerville, Mass. Reversible car-seat	Mar. 18, 1873	434	144	3	298
135, 032	Duchemin, W., assignor to self and G. B. Bigelow, trustee, Boston, Mass. Sewing-machine for boots and shoes	Jan. 21, 1873	503	162	3	76

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135, 787	Duchemin, W., assignor to G. B. Bigelow, trustee, Boston, Mass. Sewing-machine for boots and shoes.	Feb. 11, 1873	366	{ 118 119	{ 3 3	168
140, 258	Duchemin, W., assignor to W. Duchemin, trustee, Boston, Mass. Turned shoe.	June 24, 1873	757	239	3	702
141, 860	Ducker, W. M., Brooklyn, N. Y. Sectional folding-frame for boats.	Aug. 19, 1873	417	136	4	186
137, 898	Duckworth, J. C., Mount Carmel, Conn., assignor by mesne assignment to G. Crompton, Worcester, Mass. Loom.	Apr. 15, 1873	566	{ 177 178	{ 3 3	427
138, 139	Duckworth, W. B., Hamden, assignor to J. McLagon and H. Smith, New Haven, Conn. Clutch for machinery.	Apr. 22, 1873	790	252	3	453
137, 765	Dudgeon, R., New York, N. Y. Hydraulic jack.	Apr. 15, 1873	454	{ 141 142	{ 3 3	418
134, 738	Dudley, G. D., assignor to E. P. Woods, D. Sherwood, and C. H. Latham, Lowell, Mass. Caster-stand.	Jan. 14, 1873	232	75	3	39
145, 283	Same..... Wire-stand or holder.	Dec. 9, 1873	226	76	4	616
145, 284	Same..... Wire-bottle stand.	Dec. 9, 1873	227	76	4	616
145, 285	Same..... Wire.	Dec. 9, 1873	227	77	4	616
139, 303	Dudley, G. S., Dixon, Cal. Grain raker and loader.	May 27, 1873	779	247	3	591
137, 899	Dudley, R., Erie, Pa. Torsion-spring for vehicles.	Apr. 15, 1873	569	179	3	428
139, 779	Dueber, J. C., Cincinnati, Ohio. Watch-case.	June 10, 1873	321	100	3	650
141, 125	Same..... Manufacture of push-top for watches.	July 22, 1873	718	239	4	95
141, 861	Same..... Manufacture of watch-case centers.	Aug. 19, 1873	418	136	4	186
142, 684	Same..... Watch-case latch.	Sept. 9, 1873	324	108	4	290
145, 894	Ducker, C., Lively Grove, Ill. Spring for the seats of vehicles.	Dec. 30, 1873	884	287	4	703
	Duenz, E., administratrix. (See Bodmer, C.)					
	Duenz, J. A., administrator. (See Bodmer, C.)					
141, 771	Dierstock, B., Cincinnati, Ohio. Stove.	Aug. 12, 1873	329	108	4	170
145, 933	Diesler, D., Coldwater, Mich. Grain-cradle.	Dec. 30, 1873	830	271	4	699
137, 662	Duff, J. B., New York, N. Y. Governor.	Apr. 8, 1873	350	108	3	307
142, 561	Duffee, E., assignor to self and H. M. Bragg, Haverhill, Mass. Wool-drying frame.	Sept. 9, 1873	224	73	4	272
136, 224	Duffield, W. C., assignor to self and J. A. Faria, Wheeling, W. Va. Privy indicator.	Feb. 25, 1873	770	249	3	925
138, 741	Duffner, E., Vicksburgh, Miss. Automatic fan.	May 13, 1873	257	80	3	528
143, 129	Duffner, W., Jasper, Ind. Stump-extractor.	Sept. 23, 1873	709	243	4	329
139, 304	Duffy, E., Oakland, Cal. Saw sharpening and setting machine.	May 27, 1873	781	248	3	591
	Dufour, F. R. (See Siebenthal, A., assignor.)					
142, 685	Dugan, New York, N. Y. Casing for bottles.	Sept. 9, 1873	325	108	4	280
145, 409	Dugan, J. H., Bloomfield, N. J. Rinsing alkaline solutions from treating straw.	Dec. 9, 1873	333	112	4	624
144, 021	Dugan, J. H., and G. Moncrief, Stoneham, Mass. Umbrella.	Oct. 28, 1873	603	200	4	458
143, 889	Dugdale, E., Griffin, Ga. Coffee substitute.	Oct. 21, 1873	466		4	436
143, 890	Same..... same.	Oct. 21, 1873	467		4	436
	Duggan, H. C. (See Warwick & Duggan.)					
	Duguid, H. L. (See Hiseley, J. P., assignor.)					
144, 075	Dulany, J. J., and H. Dreyer, Oakland, Tex. Process for destroying ants.	Oct. 28, 1873	648		4	461
136, 713	Dumont, J. F., Kansas City, Mo. Butter-bucket.	Mar. 11, 1873	328	108	3	281
144, 517	Du Motay, C. M. T., Paris, France. Manufacture of baryta.	Nov. 11, 1873	295	100	4	514
141, 040	Dunbar, E. L., Bay City, Mich. Fancet-attachment.	July 22, 1873	644	217	4	89
140, 190	Dunbar, R., Buffalo, N. Y. Safety-platform for elevators.	June 24, 1873	703	221	3	697
137, 663	Dunbrack, C. H., Jacksonville, Ill. Wash-boiler.	Apr. 8, 1873	351	108	3	397
143, 561	Dunbrack, C. S., Swampscott, Mass. Boot and shoe channeling machine.	Oct. 14, 1873	155	52	4	402
	Duncan, C. H. (See Williams, A. M., assignor.)					
145, 493	Duncan, G. W., Columbia, Mo. Flood-fence.	Dec. 16, 1873	412	135	4	643
	Duncan, H. L., et al. (See Buford, A. G., assignor.)					
	Duncan, H. N. (See Michael & Duncan.)					
141, 264	Duncan, J., and W. H. Arnold, Buchanan, Mich. Hub-boring machine.	July 29, 1873	870	285	4	115
142, 998	Duncan, J. L., Fremont, Ohio. Car-coupling.	Sept. 23, 1873	604	205	4	324
142, 997	Duncan, R. A., Brooklyn, N. Y. Mangle.	Sept. 23, 1873	603	205	4	324
135, 471	Duncan, S., assignor of one-half interest to J. D. Owen, Syracuse, N. Y. Stove-grate.	Feb. 4, 1873	72	23	3	133
131, 739	Duncan, W., Lebanon, N. H. Mop-head.	Jan. 14, 1873	223	75	3	39
	Dungan, G. W. (See Wasson, Powers & Dungan.)					
	Dungan, M. D. (See Dungan, W. W., assignor.)					
136, 493	Dungan, W. W., assignor to M. D. Dungan, Baltimore, Md. Apparatus for steering vessels by steam.	Mar. 4, 1873	122	39	3	255
				{ 136 137 138 139 140		
141, 862	Dunham, G., Unionville, Conn. Machine for making paper-bags.	Aug. 19, 1873	419		4	187
137, 189	Dunham, G. B., assignor to S. G. Buzzell & Co., Lynn, Mass. Buffing-mandrel.	Mar. 25, 1873	760	251	3	335
135, 530	Dunham, T. R., Newark, N. J. Shawl-strap.	Feb. 4, 1873	124	39, 40	3	137
144, 518	Dunkelberger, H. G., Shamokin, Pa. Culinary utensil.	Nov. 11, 1873	298	100	4	514
	Dunkerly, J. (See Jones and J. and J. Dunkerly.)					
137, 664	Dunkerly, W. and W. H., jr., Woonsocket, R. I. Hand printing-press.	Apr. 8, 1873	352	109	3	307
	Dunkerly, W. H., jr. (See Dunkerly, W. and W. H., jr.)					
136, 979	Dunklee, B. F., Concord, N. H. Circular-saw bench.	Mar. 18, 1873	562	187	3	309
	Dunklee, B. W., Boston, Mass. Cooking-range. (Extension).	Apr. 19, 1873			3	415
142, 377	Dunks, C. H., New York, N. Y. Spring bed-bottom.	Sept. 2, 1873	49	17	4	246
145, 635	Dunlap, G. M., Springfield, Ohio. Thill-coupling.	Dec. 16, 1873	540	177	4	653
138, 384	Dunlap, J. C., Moffat's Creek, Va. Feed-regulator for grinding-mills.	Apr. 29, 1873	1, 035	326	3	483
136, 494	Dunlap, S., Rome, Ga. Spring bed-bottom.	Mar. 4, 1873	123	40	3	255
	Dunn, C. A. (See Little, J. R., assignor.)					
140, 486	Dunn, G. R., Newark, N. J. Seal-lock.	July 1, 1873	120	41	4	18
	Dunn, P. (See Harris & Dunn.)					
145, 339	Dunn, W. G., assignor of one-half interest to G. S. Harrall, Fairland, Ind. Railway-rail joint.	Dec. 9, 1873	275	92	4	620
	Dunning, L. O. (See Combs, E. J., assignor.)					
143, 229	Dunning, W. B., Geneva, N. Y. Pipe-coupling.	Sept. 30, 1873	797	275	4	355
137, 131	Dunton, D., Carpentersville, Ill. Temporary binder.	Mar. 25, 1873	708	235	3	332
134, 526	Dunton, U. R., United States Army. Motor for sewing-machines.	Jan. 7, 1873	21	7	3	9
139, 126	Dunwiddie, B., Monroe Wis. Ventilating cars.	May 20, 1873	604	189	3	570
140, 406	Dupré, L. A., Donaldsonville, La. Cloth-holder for sewing-machines.	July 1, 1873	57	20	4	13
140, 485	Dupuis, G. A., Detroit, Mich. Elevating machine.	July 1, 1873	119	41	4	18
142, 686	Durand, J., New York, N. Y. Button.	Sept. 9, 1873	326	109	4	280
137, 424	Durant, A. P., Athens, Ohio. Devloe for filing saws.	Apr. 1, 1873	128	42	3	367
135, 788	Durant, C. W., New York, N. Y. Apparatus for treating saccharine liquids.	Feb. 11, 1873	373	119	3	168
142, 687	Durant, G. W. and J. B., Bryan, Tex. Fence-post socket.	Sept. 9, 1873	326	109	4	280
	Durant, J. B. (See Durant, G. W. and J. B.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 337	Durbin, J. F., Pana, Ill. Wagon-brake	Sept. 30, 1873	889	304	4	363
142, 776	Durfee, J. R., Oshkosh, Wis. Bridge	Sept. 16, 1873	416	140	4	298
	Durfee, W. F. (See George & Durfee.)					
144, 266	Durham, N. A., et al. (See Clark, C. H., assignor.)					
143, 904	Durini, A., assignor to self, G. Rossi, and F. E. Miller, New York, N. Y. Watch-gear cutting-machine	Nov. 4, 1873	82	27	4	425
136, 644	Dutcher, F. J., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	Sept. 16, 1873	517	176	4	306
	Dutcher Temple Company. (See Dutcher, F. J., assignor.)	Mar. 11, 1873	274	91	3	276
	Same..... (See Stimpson, E. S., assignor.)					
139, 884	Dutcher, W. W., Hopedale, Mass. Loom-temple	June 17, 1873	421	131	3	666
142, 069	Dutertre, L., San Francisco, Cal. Cobble-stone facing-machine	Aug. 26, 1873	645	212	4	214
135, 323	Dutreih, A. E. (See Wilkinson, Passoz, Lafargue & Dutreih.)					
138, 498	Dutrow, D. E., Washington, D. C. Butter-printing machine	Jan. 28, 1873	775	251	3	110
145, 494	Du Val, B. R., Portsmouth, Va. Refrigerator	May 6, 1873	18	6	3	499
139, 555	Duval, J., St. Joseph Parish, assignor to L. O. Thayer, Montreal, Canada. Brooch-loading fire-arms	Dec. 16, 1873	412	136	4	643
	Duvall, L., assignor of one-half interest to A. T. Clark, Philadelphia, Pa. Apparatus for drying poudrette	June 3, 1873	94	32	3	616
	Dyar, N. A., Boston, Mass. Cement for roofing (Extension)	May 3, 1873			3	471
	Dyer, F., et al. (See Aray, R., assignor.)					
174, 267	Dyer, I. T., Canton, Mo. Combined over-bosom and collar	Nov. 4, 1873	83	27	4	485
141, 336	Dyer, J., Chicago, Ill. Ticket printing and registering apparatus	July 29, 1873	931	303 304 305	4	120
136, 980	Dyke, L. J., Hamilton, N. Y. Cover for coffee-roasters	Mar. 18, 1873	563	187	3	309
134, 655	Dymond, J., New York, N. Y. Apparatus for treating cane-juice with sulphurous acid gas	Jan. 7, 1873	146	47	3	18
137, 538	Dyott, M. B., Philadelphia, Pa. Street-lamp	Apr. 8, 1873	243	75	3	388
142, 154	Eachus, J., Coatesville, Pa. Sawing-machine	Aug. 26, 1873	699	231	4	218
142, 378	Eada, J. B., Saint Louis, Mo. Bridge	Sept. 2, 1873	50	17	4	246
142, 379	Same..... Iron bridge	Sept. 2, 1873	51	18	4	246
142, 380	Same..... same	Sept. 2, 1873	53	18	4	246
142, 381	Same..... same	Sept. 2, 1873	55	18	4	246
142, 382	Same..... Iron bridge foundation	Sept. 2, 1873	57	19	4	246
144, 519	Same..... Bridge	Nov. 11, 1873	298	100	4	514
139, 127	Eagan, G. L., San Francisco, Cal. Composition for pavements	May 20, 1873	605		3	570
143, 448	Same..... Manufacture of pipe	Sept. 2, 1873	113		4	251
141, 126	Eagon, J., Batesville, Ohio. Ladder	July 22, 1873	719	239	4	95
	Eames, C. J. (See Eames, H. H. and C. J.)					
134, 983	Eames, C. J., New York, N. Y. Medicated paper	Jan. 21, 1873	457		3	72
137, 132	Eames, C. J., assignor to M. E. Smithe, New York, N. Y. Combustion-chamber for burning hydrocarbon vapor	Mar. 25, 1873	710	235	3	332
135, 976	Eames, F. W., Grand Rapids, Mich. Cut-off for fire-plug systems	Feb. 18, 1873	541	180	3	196
139, 556	Eames, H. H., Gold Hill, N. C. Apparatus for separating, concentrating, and amalgamating ores	June 3, 1873	95	32	3	617
139, 664	Eames, H. H. and C. J., New York, N. Y. Apparatus for treating ores, sulphurets, animal matter, paints, &c	June 10, 1873	205	67	3	642
142, 618	Eames, J. N., Wilmington, assignor to self, J. Wadsworth, Newton, and L. Turner, Reading, Mass. Lever for drawing framed timber together	Sept. 9, 1873	270	88	4	276
135, 897	Earickson, J. K., and J. R. Harris, Saint Louis, Mo. Shaping and arranging tobacco for packing	Feb. 18, 1873	481	155	3	191
136, 225	Same..... Apparatus for pressing and packing tobacco	Feb. 25, 1873	771	249	3	226
144, 076	Earl, G. W., New York, N. Y. Propeller for cars	Oct. 28, 1873	648	213	4	461
	Earl, W., jr., et al. (See Fullam, A. J., assignor.) (Reissue.)					
	Same..... (See Priest, J. K., assignor.)					
138, 868	Earle, A. I., Valley Falls, R. I. Stop-motion for drawing-frames, &c	May 13, 1873	366	114	3	537
139, 558	Same..... Bobbin	June 3, 1873	99	33	3	617
139, 372	Earle, J. E., assignor to Elm City Company, New Haven, Conn. Folding-guide for sewing-machines	May 27, 1873	835	268	3	596
146, 053	Earle, J. E., New Haven, Conn. Railway car window-screen	Dec. 30, 1873	938	302	4	708
142, 090	Earle, O. T., Norwalk, Conn. Beer-faucet	Aug. 26, 1873	646	212	4	214
142, 091	Same..... Direct-acting steam-pump	Aug. 26, 1873	647	212	4	214
142, 092	Same..... Attachment for direct-acting steam-pumps	Aug. 26, 1873	648	213	4	214
142, 093	Earle, O. T., Norwalk, Conn., and T. J. Rider, New York, N. Y. Mode of operating presses	Aug. 26, 1873	649	213	4	214
142, 562	Earle, O. T., Norwalk, Conn. Hand-lever attachment for steam-pumps	Sept. 9, 1873	225	73	4	272
145, 340	Earle, R. H., St. John's, Newfoundland. Ice-creeper	Dec. 9, 1873	275	92	4	620
142, 007	Earle, T., Valley Falls, R. I. Reciprocating churn-dasher	Aug. 19, 1873	547	181	4	197
	Earle, W., et al. (See Smith, R. T., assignor.)					
135, 209	Earley, E. S., Philadelphia, Pa. Refrigerator	Jan. 28, 1873	671	216	3	102
135, 210	Same..... Corpse-cooler	Jan. 28, 1873	672	217	3	102
140, 901	Earl, L. J., Union City, Pa. Curtain-fixture	July 15, 1873	499	168	4	68
135, 789	Early, J. F., Ruckersville, Va. Rotary steam-engine	Feb. 11, 1873	374	120	3	169
136, 226	Eason, B., Easonville, Ala. Rotary-churn	Feb. 25, 1873	772	250	3	226
144, 750	East, J. R., Fincastle, Tenn. Bee-hive	Nov. 18, 1873	502	170	4	542
5, 498	Easterly, J., Albany, N. Y., assignor to J. S. Perry, trustee and executor, and N. B. Perry. Base-burning stove	July 22, 1873	791	259	4	100
5, 627	Easterly, J., Detroit, Mich. Cooking-stove	Oct. 28, 1873	736	246	4	468
	Same..... (Reissue.)					
141, 127	Eastes, W. T., Summitville, Ind. Harvester-rake	July 22, 1873	720	239 240	4	95
	Eastham, G. R. (See Sipe, L., assignor.)					
134, 984	Eastin, W. A., Henderson County, Ky. Corn-planter	Jan. 21, 1873	458	146	3	72
134, 527	Eastman, H. E., Green Bay, Wis. Exercising apparatus	Jan. 7, 1873	23	8	3	9
134, 740	Eastman, I. S., Madison, Wis. Rotary-fan	Jan. 14, 1873	233	75	3	39
145, 097	Eastman, J. H., Boston, Mass. Clasp	Dec. 2, 1873	55	17	4	590
142, 619	Eastman, W. W., and W. H. H. Morris, Meadville, Pa. Standard jack-post for drilling and pumping machinery	Sept. 9, 1873	271	89	4	276
	East New York Boot, Shoe and Leather Manufacturing Company. (See Ballou, C. C., assignor.)					
5, 576	Eaton & Cole. (See Snow, W. B., assignor.)					
	Eaton, C., New York, N. Y. Curtain-fixture	Sept. 23, 1873	779	269	4	338
	Eaton, D. L., et al. (See Etchell, S. W., assignor.)					
40, 259	Eaton, I. F., assignor to A. D. Davis, New York, N. Y. Toy automatic-swimmer	June 24, 1873	728	239	3	702

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
143, 891	Eaton, I. F., assignor to self and E. Bolitho, Brooklyn, N. Y. Means for fastening buttons.....	Oct. 21, 1873	167	157	4	436
143, 892	Same.....Button-fastening.....	Oct. 21, 1873	468	157	4	436
143, 449	Eaton, J., Atlanta, Ill. Siding-gage.....	Sept. 2, 1873	114	36	4	251
143, 971	Eaton, T. W., Chicago, Ill. Steam-elevator.....	Oct. 28, 1873	555	184	4	454
136, 981	Eayrs, W. P., assignor of one-half interest to T. E. Stewart, Boston, Mass. Rotary-engine.	Mar. 18, 1873	563	187 188	3	309
141, 128	Same.....same.....	July 22, 1873	721	240	4	95
140, 260	Ebbitt, W., New York, N. Y. Car-brake.....	June 24, 1873	759	240	3	702
140, 902	Same.....Steam-nozzle.....	July 15, 1873	500	168	4	68
144, 894	Ebbs, W. F. (See Eckert, A. L., assignor)..... (Reissue.)					
144, 894	Ebeling, T., San Francisco, Cal. Spring-power.....	Nov. 25, 1873	633	215	4	563
145, 636	Eberly, D. B., Pine Village, Ind. Cultivator.....	Dec. 16, 1873	541	177 178	4	653
142, 008	Ebert, J. H., and E. Pitta, Decatur, Ill. Apparatus for steaming.....	Aug. 19, 1873	548	181	4	197
134, 790	Eby, H. H., Mendota, Ill. Cob-carrier for corn-shellers.....	Jan. 14, 1873	277	90	3	42
138, 489	Eby, F., and M. B. Fenninger, Kinzer's Post-Office, Pa. Insulator for telegraph-lines.....	May 6, 1873	19	7	3	499
141, 129	Eccles, J., Philadelphia, Pa., assignor to self and S. Eccles, jr., Baltimore, Md. Frictionless journal and shaft-bearing.....	July 22, 1873	722	240	4	95
	Eccles, S., jr. (See Eccles, J., assignor.)					
	Same.....(See Thoms, J. B., assignor.)					
134, 865	Eccleston, S. S., South New Berlin, N. Y. Lifting-jack.....	Jan. 14, 1873	343	109	3	48
142, 777	Eckel, G., Richmond, Ind. Stove-pipe holder.....	Sept. 16, 1873	417	140	4	298
5, 450	Eckert, A. L., Newark, N. J., assignor to W. F. Ebbs. Hand-punch..... (Reissue.)	June 17, 1873	618	195	3	682
146, 054	Eckstein, F., New York, N. Y. Cane.....	Dec. 30, 1873	938	302	4	708
139, 559	Eddy, G. W., Waterford, N. Y. Stop-cock.....	June 3, 1873	100	34	3	617
140, 407	Same.....Stop-valve.....	July 1, 1873	57	20	4	13
141, 041	Same.....same.....	July 22, 1873	644	217	4	59
140, 997	Eddy, L., Taunton, Mass. Knife.....	July 22, 1873	607	204	4	86
135, 211	Edgar, B., Espy, Pa. Washing-machine.....	Jan. 28, 1873	673	218	3	102
142, 844	Edgar, C., Dayton, Ohio. Horse hay-rake.....	Sept. 16, 1873	469	159	4	302
145, 852	Same.....Horse-rake.....	Dec. 23, 1873	736	241	4	681
136, 922	Edgar, T. W., Espy, Pa. Means of snubbing canal-boats.....	Mar. 18, 1873	565	188	3	309
143, 450	Edge, J. S., jr. (See Deeley & Edge.)					
143, 503	Edge, W. C., Newark, N. J. Wire-fabric.....	Sept. 2, 1873	115	36	4	251
137, 900	Same.....Manufacture of watch-chains and bracelets.....	Oct. 7, 1873	89	30	4	388
137, 425	Edgell, F., Buffalo, N. Y. Pen and pencil case.....	Apr. 15, 1873	570	179	3	428
	Edgerton, H. H., Fort Wayne, Ind. Sealing dip-pipes in gas works.....	Apr. 1, 1873	129	42	3	367
	Edison, T. A. (See Pope & Edison.)					
5, 519	Edison, T. A., Newark, N. J., assignor by mesne assignment to the Gold and Stock Telegraph Company, New York, N. Y. Printing-telegraph. (Reissue.)	Aug. 5, 1873	183	58, 59	4	1.0
134, 866	Edison, T. A., Newark, N. J. Printing-telegraph instrument.....	Jan. 14, 1873	344	109	3	48
134, 867	Edison, T. A., Newark, N. J., assignor to self and G. Harrington, Washington, D. C. Automatic telegraph-instrument.....	Jan. 14, 1873	345	110	3	48
134, 868	Same.....Electro-magnetic adjuster.....	Jan. 14, 1873	346	110	3	48
135, 531	Same.....Circuit for chemical-telegraphs.....	Feb. 4, 1873	125	40	3	137
138, 869	Edison, T. A., Newark, N. J. Printing-telegraph.....	May 13, 1873	367	114	3	537
138, 870	Edison, T. A., Newark, N. J., assignor to the Gold and Stock Telegraph Company, New York, N. Y. Printing-telegraph.....	May 13, 1873	368	114	3	538
139, 128	Same.....same.....	May 20, 1873	605	189	3	570
139, 129	Same.....same.....	May 20, 1873	606	190	3	570
140, 487	Same.....same.....	July 1, 1873	121	41, 42	4	18
140, 488	Same.....same.....	July 1, 1873	122	42	4	18
140, 489	Same.....Circuit for printing-telegraphs.....	July 1, 1873	124	43	4	18
141, 772	Edison, T. A., Newark, N. J. Circuit for automatic or chemical telegraphs.....	Aug. 12, 1873	321	108	4	170
141, 773	Edison, T. A., Newark, N. J., assignor to self and G. Harrington, Washington, D. C. Circuit for automatic-telegraphs.....	Aug. 12, 1873	331	109	4	170
141, 774	Same.....Chemical telegraphs.....	Aug. 12, 1873	332	109	4	170
141, 775	Same.....Perforator for automatic-telegraphs.....	Aug. 12, 1873	333	109	4	170
141, 776	Same.....Circuit for automatic-telegraphs.....	Aug. 12, 1873	334	110	4	170
141, 777	Same.....Relay-magnet.....	Aug. 12, 1873	335	110	4	170
142, 688	Edison, T. A., Newark, N. J., assignor to the Gold and Stock Telegraph Company, New York, N. Y. Electric-regulator for transmitting instruments.....	Sept. 9, 1873	327	109	4	280
142, 999	Edison, T. A., Newark, N. J. Galvanic-battery.....	Sept. 23, 1873	605	205	4	324
141, 211	Edmonds, A. B., Saugus, Mass. Eyelet-setting machinery.....	July 29, 1873	815	267	4	110
143, 680	Edmonds, G., New Orleans, La. Car-coupling.....	Oct. 14, 1873	261	86	4	410
141, 498	Edmonston, R. A., Georgetown, D. C. Scaffold-support.....	Aug. 5, 1873	80	25	4	141
143, 751	Edson, J., Boston, Mass. Pump.....	Oct. 21, 1873	348	116	4	427
145, 731	Edson, J., assignor of one-half interest to J. Clark, Boston, Mass. Hose-coupling.....	Dec. 23, 1873	636	208	4	673
145, 495	Edson, J. B., Brooklyn, N. Y. Recording steam-gage.....	Dec. 16, 1873	414	136	4	643
139, 500	Edson, W., assignor to American Stop-Motion Company, Boston, Mass. Stop-mechanism for looms.....	June 3, 1873	102	34	3	617
139, 501	Edward, M. L., Salem, Ohio. Cutter for meat and vegetables.....	June 3, 1873	51	16	3	613
	Edwards, A. (See Andrews, A. F., assignor.)					
	Edwards, A. (See Wylé, J. H., assignor.)					
134, 528	Edwards, A., New Haven, Conn., assignor to A. R. Edwards, Chicago, Ill. Fruit-drier.....	Jan. 7, 1873	24	8	3	9
134, 529	Same.....Lumber-drier.....	Jan. 7, 1873	25	8	3	9
135, 324	Same.....Apparatus for treating offal.....	Jan. 28, 1873	775	251	3	110
	Edwards, A. R. (See Edwards, A., assignor.)					
145, 098	Edwards, C. E., assignor to S. S. White, Philadelphia, Pa. Dental drilling-machine.....	Dec. 2, 1873	56	17	4	590
142, 155	Edwards, C. H., assignor to L. C. Boyington, Chicago, Ill. Gas-regulator.....	Aug. 26, 1873	700	231	4	218
136, 047	Edwards, D., Melbourne, Victoria. Cultivator.....	Feb. 18, 1873	604	199	3	201
136, 144	Edwards, E., London, England. Machine for mixing and kneading dough.....	Feb. 25, 1873	711	229 230	3	221
142, 383	Edwards, F. C., Chicago, Ill. Cut-off nozzle for drawing liquor.....	Sept. 2, 1873	58	19	4	246
5, 342	Edwards, G. A., and G. Schieder, Syracuse, N. Y. Shuttle for sewing-machine. (Reissue.)	Apr. 1, 1873	226	69	3	375
5, 436	Same.....same.....	June 3, 1873	185	60	3	624
136, 311	Same.....same.....	Feb. 25, 1873	847	273	3	231
	Edwards, G. B., et al. (See Culmer, J. W., assignor.)					
	Edwards, G. W., et al. (See Hotlinger, A., assignor.)					
139, 710	Edwards, J., New York, N. Y. Match-plane.....	June 10, 1873	255	80	3	645
134, 869	Edwards, J. L., Cochranville, Pa. Folding feed-box.....	Jan. 14, 1873	346	110	3	48
137, 602	Edwards, W., Cleveland, Ohio. Folding ironing-table.....	Apr. 8, 1873	299	92	3	393

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 621	Edwards, W. C., West Winsted, Conn. Water-wheel	May 6, 1873	133	44	3	508
135, 532	Egan, G. A., Covington, Ky. Stock-car	Feb. 4, 1873	126	40	3	137
138, 321	Egan, K., New York, N. Y. Folding-seat for street-railway car	Apr. 29, 1873	987	310	3	479
145, 853	Egbert, F. L., executrix. (See Barnes, S. H.) (Reissue.)					
142, 778	Egge, F., assignor of one-half interest to F. W. Smith, Bridgeport, Conn. Padlock	Dec. 23, 1873	738	241	4	681
5, 466	Egger, F. J., Springfield, Ohio. Carpet-rag looper	Sept. 16, 1873	418	141	4	298
135, 638	Eggleston, J. S., Auburn, assignor by mesne assignment of one-half interest to E. H. Kellogg, New York, N. Y. Lubricating-axle for vehicles	June 24, 1873	841	266	3	709
135, 100	Egley, J. C., Philadelphia, Pa. Sewing-machine cover-hook	Feb. 11, 1873	240	75	3	158
144, 526	Ehrenberger, T., New York, N. Y. Ribbon-block	Jan. 21, 1873	555	181	3	80
137, 426	Eichenberger, J. R., and C. G. Binkly, Burton City, Ohio. Nut-lock	Nov. 11, 1873	300	101	4	514
145, 791	Eichholtz, G. W., New Berlin, Ill. Fly-trap	Apr. 1, 1873	131	42	3	367
135, 033	Eickemeyer, R., Yonkers, N. Y. Machine for stretching hat-bodies	Dec. 23, 1873	686	225	4	677
138, 622	Same..... Steam-pump	Jan. 21, 1873	505	163	3	76
138, 871	Same..... Hat-press	May 6, 1873	134	44	3	508
139, 379	Same..... Mechanical movement	May 13, 1873	369	115	3	538
140, 335	Same..... Hat-press	May 27, 1873	836	268	3	596
140, 903	Same..... Hat stretching machine	June 24, 1873	829	263 264 265	3	708
141, 337	Same..... same	July 15, 1873	500	168 169	4	68
141, 338	Same..... Expansible hat-block	July 22, 1873	935	305	4	120
141, 339	Same..... Machine for lustering hats	July 29, 1873	937	305	4	120
144, 841	Same..... Fulling-mill	July 29, 1873	939	306	4	120
145, 934	Same..... Machine for ironing hats	Nov. 25, 1873	590	201 202	4	560
142, 384	Eighme, D., Chicago, Ill. Harness-maker's clamp	Dec. 30, 1873	831	271	4	609
138, 742	Eisenmann, J., Chicago, Ill. Machine for boring hubs	Sept. 2, 1873	59	19	4	247
145, 935	Eisman, C. D. B. (See Griffith & Miller, assignors.)	May 13, 1873	257	80	3	528
134, 870	Elam, W. F., assignor of one-half interest to J. H. Wilcox, Petersburg, Ill. Top-prop for carriages	Dec. 30, 1873	835	272	4	699
140, 659	Elbreg, G., Brazil, Ind. Machine for mining coal	Jan. 14, 1873	347	110 111	3	48
135, 212	Elder, D. D., Philadelphia, Pa. Show-case	July 8, 1873	308	105	4	45
138, 872	Elder, J. F., Blairsville, Pa. Railway-car brake	Jan. 28, 1873	675	218	3	102
141, 548	Elder, J. M., and P. A. Bishop, Elyria, Ohio. Safety-bridle	May 13, 1873	371	115	3	538
136, 823	Eldersfield, F. D., Saint Louis, Mo. Sectional adjustable slotted-cam	Aug. 5, 1873	121	38	4	145
142, 689	Eldredge, J. V. D., Detroit, Mich. Sewing-machine	Mar. 18, 1873	435	144	3	299
136, 426	Same..... Hemmer for sewing-machines	Sept. 9, 1873	328	109	4	280
140, 817	Eldridge, D. D., La Fayette, Ind. Railway-rail chair	Mar. 4, 1873	61	22	3	250
144, 521	Elkins, W. L., Philadelphia, Pa. Paint for oil-barrels, &c.	July 15, 1873	426		4	62
143, 972	Elkinton, T., Philadelphia, Pa. Canopied chair	Nov. 11, 1873	300	101	4	514
136, 227	Ellacott, J. P. (See Simpson & Ellacott.)					
5, 577	Elling, C. (See Doll & Elling.)					
144, 193	Elliot, A., and J. O. Woodward, Taunton, Mass. Brick-machine	Oct. 28, 1873	556	185	4	454
136, 048	Elliot, G., Saint Louis, Mo. Railway-crossing	Feb. 25, 1873	773	250	3	226
144, 966	Elliot, W. H., Plattsburgh, assignor to E. Remington & Sons, Ilion, N. Y. Patched cart-ridge	Sept. 23, 1873	780	269	4	338
140, 904	Elliot, E. H., Charlestown, Mass. Carriage-cover	Nov. 4, 1873	20	6	4	480
5, 401	Elliot, G. R., assignor to self and F. Morrill, Boston, Mass. Game-board	Feb. 18, 1873	604	199	3	201
137, 901	Elliot, J., J. P. Harrington, and W. R. Davenport, assignors to Erie Car Works, Erie, Pa. Dumping-car	Nov. 25, 1873	692	234	4	569
132, 743	Elliot, J. F., Forest, Ill. Siding-hook	July 15, 1873	503	169	4	68
140, 490	Elliot, J. S., Chelsea, Mass., assignor to Union Stone Company. Machine for forming building-blocks	May 13, 1873	453	143	3	545
138, 385	Same..... Mold for casting molds	Apr. 15, 1873	571	179	3	428
139, 885	Elliot, J. S., Chelsea, Mass. Machine for sharpening harvester-knives	May 13, 1873	258	80	3	528
136, 645	Elliot, O. V., Mansfield, Pa. Boot-tree	July 1, 1873	125	43	4	18
141, 549	Elliot, W. B., Corning, N. Y. Stove-pipe shelf	Apr. 29, 1873	1,036	326	3	483
139, 885	Elliot, W. H., Ilion, N. Y. Cartridge-box	June 17, 1873	422	131	3	666
5, 539	Ellis, A., et al. (See Jackson, L. G., assignor.)					
5, 413	Ellis, B. F., Newton, Pa. Toy-puzzle	Mar. 11, 1873	274	92	3	276
136, 459	Ellis, C., G. W., and J. D., Philadelphia, Pa. Box-scraper	Aug. 5, 1873	121	38	4	145
140, 491	Ellis, C. A. (See Skidmore, W. H., assignor.)					
139, 130	Ellis, C. H. (See Hale & Ellis.)					
142, 217	Ellis, G. W. (See Ellis, C., G. W., and J. D.)					
145, 160	Ellis, G. W., Lynn, Mass., assignor by mesne assignment to J. W. Brooks, trustee. Machine for punching the lifts of boots and shoes	Aug. 19, 1873	616	203	4	202
143, 893	Ellis, G. W., and C. W. Glidden, Stoneham, Mass., assignors by mesne assignment to J. W. Brooks, trustee. Machinery for attaching heels to boots and shoes and polishing the same	May 20, 1873	696	218 219	3	577
145, 995	Ellis, H. A., Springfield, Mass. Hemmer for sewing-machines	Mar. 4, 1873	124	40	3	255
137, 539	Ellis, H. R. (See Leach, S. L., assignor.)					
138, 012	Ellis, J., and N. Hoffman, East Coventry, and J. Lee, Pottstown, Pa. Thrashing-machine	July 1, 1873	125	43	4	18
144, 842	Ellis, J. A. H., assignor to Co-operative Manufacturing Company, Springfield, Vt. Doll-joint	May 20, 1873	607	190	3	570
5, 540	Ellis, J. B., Washington, D. C. Filter	Aug. 26, 1873	749	247	4	222
6, 988	Ellis, J. D. (See Ellis, C., G. W., and J. D.)					
144, 077	Ellis, J. M., assignor to Doolittle Manufacturing Company, Bridgeport, Conn. Coil-spring garter and belt	Dec. 2, 1873	113	37	4	594
142, 094	Ellis, J. W., Camden, N. J. Turning-tool	Oct. 21, 1873	468	157	4	436
137, 665	Ellis, R. J., Liverpool, England. Tubular fire-bar and connecting-bearing	Dec. 30, 1873	885	287	4	703
136, 824	Ellis, S. K., Waltham, Mass. Clasp for stocking-supporters	Apr. 8, 1873	244	75	3	388
144, 842	Ellis, W. C., Worcester, Mass. Piano-forte bridge	Apr. 22, 1873	680	215	3	446
5, 440	Same..... Piano-string bridge	Nov. 25, 1873	593	202	4	560
144, 077	Ellis, Z., Philadelphia, Pa. Anchor for securing cores	Aug. 19, 1873	618	204	4	202
142, 094	Ellison, A. S., New York, N. Y. Collarette	Nov. 11, 1873			4	504
137, 665	Ellison, J. C., assignor to self and D. N. Rothermel, Philadelphia, Pa. Loom for weaving pile-fabrics	Oct. 28, 1873	649	214	4	461
136, 824	Elliston, C. T., Clinton, Mo. Rotary-plow	Aug. 26, 1873	649	213	4	214
144, 194	Ellis, C. W., Bridgeport, Conn. Shuttle for sewing-machines	Apr. 8, 1873	353	109	3	397
	Ellis, G. F., Deposit, N. Y. Chair-brace	Mar. 18, 1873	435	144	3	299
	Ellsworth, E. W., South Windsor, Conn. Tobacco-drying house	Nov. 4, 1873	21	6	4	480

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
136, 646	Ellwood, M., Girard, Ohio. Indicator and low-water alarm for boilers	Mar. 11, 1873	275	92	3	276
	Elm City Company. (See Crosby & Kellogg, assignors)					
	Same.....(See Earle, J. E., assignor.)					
139, 450	Elmer, E. S., Hudson, N. Y. Metallic hose-coupling	June 3, 1873	15	5	3	610
141, 499	Elmer, H. O., Sand Bank, N. Y. Fence-post	Aug. 5, 1873	80	25	4	141
5, 283	Elmer, W., New York, N. Y. Gasifying fuel for heating, &c	Feb. 18, 1873	672		3	206
5, 284	Same.....Manufacture of inflammable gases for fuel, &c	Feb. 18, 1873	674		3	206
141, 500	Same.....Manufacture of illuminating gas	Aug. 5, 1873	81		4	141
	Elmer, W. F. (See Warfield & Elmer.)					
137, 666	Elmer, W. H., Berlin, Wis. Turbine water-wheel	Apr. 8, 1873	354	109	3	397
144, 195	Elmslie, G., Toronto, Canada. Car-wheel	Nov. 4, 1873	22	6	4	490
138, 744	Elsaesser, M., Brooklyn, N. Y. Rotary-engine	May 13, 1873	259	90	3	528
135, 790	Eisey, G., Sterling, Ill. Harness and saddle pad	Feb. 11, 1873	375	120	3	169
138, 140	Same.....Wash-board	Apr. 22, 1873	790	252	3	455
144, 967	Same.....Stove-pipe stretcher, &c	Nov. 25, 1873	693	234	4	569
136, 228	Elston, W. H., Marshall, Mich. Carbureter	Feb. 25, 1873	774	250	3	228
143, 443	Eltonhead, G. W., assignor to self and W. Gerhardt, Saint Louis, Mo. Stove-grate	Oct. 7, 1873	40	14	4	384
141, 863	Elward, J. H., Saint Paul, Minn. Harvester	Aug. 19, 1873	426	140	4	187
141, 864	Elward, J. H., Polo, Ill. same	Aug. 19, 1873	427	140	4	187
141, 865	Elward, J. H., Saint Paul, Minn. same	Aug. 19, 1873	429	141	4	187
141, 866	Same same	Aug. 19, 1873	431	141	4	187
141, 867	Same same	Aug. 19, 1873	433	141	4	187
141, 868	Elward, J. H., assignor to Saint Paul Harvester Works, Saint Paul, Minn. Harvester	Aug. 19, 1873	434	142	4	187
136, 049	Elwell, H. H., assignor to Norwalk Lock Company, South Norwalk, Conn. Door-lock	Feb. 18, 1873	606	199	3	201
143, 451	Same.....Door-knob	Sept. 2, 1873	115	37	4	252
140, 333	Elwood, R. and R. L. Pitcher, Sycamore, Ill. Cultivator	July 1, 1873	17	5, 6	4	9
134, 530	Ely, C. L., Branford, Conn. Music-rack	Jan. 7, 1873	26	8	3	9
	Ely, E. A. (See Hopping, E. C., assignor.)					
142, 156	Ely, F. W., Du Luth, Minn. Picture-hanger	Aug. 26, 1873	701	231	4	218
	Ely, W. G. (See Walker, G. A., assignor)					
	Elzenhaefer, G. (See Van Kannel & Elzenhaefer.)					
140, 690	Emerrick, F., New York, N. Y. Gearing	July 8, 1873	309	105	4	45
137, 831	Emerson, D. L., Oakland, Cal. Construction of houses	Apr. 15, 1873	512	160	3	423
138, 236	Emerson, J. E., Beaver Falls, Pa. Saw-teeth	Apr. 29, 1873	901	284	3	472
142, 779	Same.....Saw-swage	Sept. 16, 1873	418	141	4	298
142, 780	Same.....Blank for saw-teeth	Sept. 16, 1873	419	141	4	298
142, 781	Same.....Saw-teeth	Sept. 16, 1873	420	141	4	298
136, 647	Emerson, R., Rockford, Ill. Colter	Mar. 11, 1873	276	92	3	276
141, 042	Emerson, S. F., Akron, Ohio. Sharpening-machine	July 22, 1873	645	217	4	89
138, 873	Emerson, W. P., Pleasantville, Ky. Horse-power	May 13, 1873	372	116	3	538
	Emery, A. D. (See Cooper & Emery.)					
143, 562	Emery, A. G., South Boston, Mass. Wash-bench	Oct. 14, 1873	156	52	4	402
139, 052	Emery, C. E., New York, N. Y. Compound steam-engine	May 20, 1873	528	167	3	564
143, 681	Emery, E. E., Boston, Mass. Gage for marking cloth for cutting	Oct. 14, 1873	232	87	4	410
	Emery, G. D. (See McCollum & Emery.)					
142, 218	Emery, S., Cameron, Mo. Earth-auger	Aug. 26, 1873	751	248	4	223
136, 145	Emery, T., Peshtigo, Wis. Device for rolling logs	Feb. 25, 1873	712	230	3	221
134, 871	Emig, G., Cincinnati, Ohio. Screw-cutting machine	Jan. 14, 1873	348	111	3	48
	Emley, F. (See Rood, D., assignor.)					
	Emmeluth, E. P. (See Hunt, C. F., assignor.)					
138, 997	Emmert, J., Chicago, Ill. Stove-pipe damper	May 20, 1873	485	153	3	560
138, 322	Emory, I. J., jr., Webster, Ohio. Scrubber	Apr. 29, 1873	988	310	3	479
135, 414	Emrick, I., Vernon, Mich. Corn-cultivator	Feb. 4, 1873	19	6	3	129
139, 557	En-Earl, G., Boston, Mass., assignor to Automatic Car-Brake Manufacturing Company, New York, N. Y. Automatic railway car-brake	June 3, 1873	97	33	3	617
138, 386	Enell, C. A., Philadelphia, Pa. Boat-detaching apparatus	Apr. 29, 1873	1,036	326	3	483
136, 983	Engel, S., Chicago, Ill. Safety-pocket	Mar. 18, 1873	566	188	3	309
144, 522	Engelman, J. J., Chillicothe, Mo. Saw-filing machine	Nov. 11, 1873	301	101	4	514
5, 486	Engelmann, H., Salt Lake City, Utah. Process of making coke from lignites, &c. (Reissue)	July 15, 1873	588	198	4	75
136, 592	Same.....Process for making coke from lignites	Mar. 11, 1873	230	77	3	273
141, 778	Same.....Coking-furnace	Aug. 12, 1873	335	110	4	170
	Same.....same	Aug. 12, 1873	338	111	4	170
144, 022	Engelsman, G., New York, N. Y. Extension-trunk	Oct. 28, 1873	604	200	4	458
144, 603	Enger, J., Portland, Me. Tilting-chair	Nov. 18, 1873	378	127	4	532
145, 341	England, M., New York, N. Y. Inking apparatus for printing-presses	Dec. 9, 1873	276	92	4	620
	English, J., et al. (See Newton, J. M., assignor.)					
135, 898	English, T., Dulwich, England. Screw bolt and nut	Feb. 18, 1873	482	156	3	191
142, 620	English, W. J., Providence, R. I. Combined water cooler and filter	Sept. 9, 1873	272	89	4	276
	Enoch, A. I., et al. (See Skinner, H. M., assignor.)					
	Enoch, J., et al. (See Ross, L. E., assignor.)					
143, 894	Enos, J., Chicago, Ill. Car-coupling	Oct. 21, 1873	470	158	4	436
	Enos, J. A. (See Gardner & Enos.)					
138, 874	Enos, J. A., Peabody, Mass., assignor to J. M. Caller, trustee. Leather-dressing machine	May 13, 1873	372	116	3	538
139, 131	Enos, J. A., assignor of three-fourths interest to G. Holman, G. Plumer, and J. O. Whitten, Peabody, Mass. Gas purifier and regulator	May 20, 1873	607	190	3	570
142, 219	Enos, J. M., St. Joseph, Mich. Car-coupling	Aug. 26, 1873	751	248	4	223
140, 261	Enos, L. S., assignor of one-half interest to S. B. Estabrook, Almond, N. Y. Wash-pounder	June 24, 1873	760	240	3	702
143, 130	Enos, L. S., assignor to self and S. B. Estabrook, Almond, N. Y. Feather renovator	Sept. 23, 1873	709	243	4	332
135, 101	Enright, J., Cleveland, Ohio. Turn-table	Jan. 21, 1873	556	181	3	80
	Enterprise Manufacturing Company. (See Baker, J. G., assignor.)					
	Same.....(Design.)					
145, 161	Eutrekkin, W. G., Philadelphia, Pa. Burnisher for photographs	Dec. 2, 1873	114	37	4	594
139, 132	Eutrekkin, W. G., and J. Bramble, jr., Philadelphia, Pa. Burnishing-press for photographs	May 20, 1873	608	190	3	570
	Entwistle, T. C. (See Follensbee & Entwistle.)					
139, 380	Epler, P., Collomsville, assignor of one-half interest to J. Zerbe, Limestone Township, Pa. Neck-yoke	May 27, 1873	839	268	3	597
136, 312	Eppinger, I., New York, N. Y. Manufacture of plug and bunch tobacco	Feb. 25, 1873	848	274	3	231
140, 020	Same.....Plug and bunch tobacco	June 17, 1873	532	168	3	675
	Erbacher, J., et al. (See Giebrich, L., assignor.)					
141, 430	Erbe, B., Pittsburgh, Pa. Reversible knob-latch	Aug. 5, 1873	18	5	4	136
140, 905	Erdmann, J. F. W., Philadelphia, Pa. Cutter-head	July 15, 1873	503	169	4	68

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr-g.	Vol.	Page.
146, 055	Ericsson, J., assignor to C. H. Delamater and G. H. Robinson, New York, N. Y. Air-compressing apparatus.	Dec. 30, 1873	939	303	4	708
	Erie Car-Works. (See Elliott, Harrington & Davenport, assignors.)					
141, 431	Erikson, J., Madison, Wis. Baby-walker.	Aug. 5, 1873	19	5	4	136
	Ermentrout, H. Z. (See Smith, W. M., assignor.)					
136, 229	Ernat, A., Baltimore, Md. Revivifying charcoal used in rectifying spirits.	Feb. 25, 1873	775		3	226
133, 797	Ernst, G. W., and I. Lucas, Fremont, Ohio. Fly-trap.	May 13, 1873	305	94	3	532
140, 125	Ernst, J. G., assignor of two-thirds interest to T. H. Denison, Baltimore, Md., and A. J. Fisher, New York, N. Y. Ruler.	June 24, 1873	647	203	3	692
140, 906	Ernst, T., Fort Madison, Iowa. Cigar-machine.	July 15, 1873	504	{ 169 170 }	4	68
140, 021	Errani, L. C., and R. Anders, Liege, Belgium. Dynamic machine.	June 17, 1873	533	168	3	675
135, 533	Ertel, G., Quincy, Ill. Beater and compressing press.	Feb. 4, 1873	127	40, 41	3	137
143, 814	Ertola, B., and A. Caselli, New York, N. Y. Machine for forming hat-frames.	Oct. 21, 1873	402	134	4	431
141, 212	Erwin, J. B., Batavia, N. Y. Water-elevator.	July 29, 1873	819	{ 287 288 }	4	110
136, 368	Erwin, J. B., and G. H. Shoulters, Batavia, N. Y. Water-elevator.	Mar. 4, 1873	13	5	3	246
144, 523	Ersesky, T., St. Petersburg, Russia. Calculating-machine.	Nov. 11, 1873	302	102	4	514
	Esmond, E. R. (See Martin, B. G., assignor.)					
5, 613	Esmond, R., New York, N. Y., assignor to United Power-Press Company. Press. (Reissue.)	Oct. 21, 1873	518	174	4	440
142, 220	Same. same.	Aug. 26, 1873	752	248	4	223
144, 968	Espalla, J., Mobile, Ala. Center-board for vessels.	Nov. 25, 1873	694	234	4	569
135, 192	Espey, R., Saint Louis, Mo. Spring for doors, gates, &c.	Jan. 21, 1873	632	206	3	86
	Essex, H. (See Kenfell & Essex.)					
136, 146	Essex, D., New York, N. Y. Child's table napkin holder and clasp.	Feb. 25, 1873	713	230	3	221
140, 617	Essex, H., Meadville, Pa. Padlock.	July 8, 1873	252	85	4	40
144, 524	Same. Machine for dressing metal cocks.	Nov. 11, 1873	303	102	4	514
140, 691	Essick, S. V., Alliance, assignor of two-thirds interest to G. W. Raff, Canton, and H. C. Hedges, Mansfield, Ohio. Knitting-machine.	July 8, 1873	309	106	4	45
138, 623	Essig, O. A., Canton, Ohio. Hollow auger.	May 6, 1873	136	44	3	509
135, 415	Estabrook, A. C., assignor to The Florence Manufacturing Company, Florence, Mass. Manufacture of brushes.	Feb. 4, 1873	20	6	3	129
	Estabrook, E. (See Blaisdell & Estabrook.)					
	Estabrook, S. B. (See Enos, L. S., assignor.)					
135, 534	Estell, S. F., Chicago, Ill., assignor to A. W. Kendrick, Brooklyn, N. Y., and H. Ogborn, Richmond, Ind. Animal-trap.	Feb. 4, 1873	129	41	3	137
143, 230	Estell, S. F., Chicago, Ill. Programme-clock.	Sept. 30, 1873	798	275	4	355
137, 188	Estes, S., Newburyport, Mass. Loom take-up mechanism.	Mar. 25, 1873	761	251	3	336
143, 279	Estee, W. A., China, Me. Plow.	Sept. 30, 1873	839	289	4	359
	Estey, J., & Co. (See Fuller, L. K., assignor.)					
	Same. same. (Design.)					
	Same. (See Hayward, S., assignor.) (Design.)					
134, 872	Etchell, S. W., assignor to self and D. L. Eaton, Weatherly, and A. E. Allen, Philadelphia, Pa. Process of hardening steel.	Jan. 14, 1873	349		3	48
5, 277	Ettenborough, J. S., Easton, Pa. Tool-holder for slotting-machines. (Reissue.)	Feb. 11, 1873	450	146	3	174
	Eurgens, A. (See Kingman & Eurgens.)					
	Evans, D. L. (See Hatfull, R., assignor.)					
134, 791	Evans, F., New York, N. Y. Treating damaged coffee.	Jan. 14, 1873	278		3	42
134, 792	Same. same.	Jan. 14, 1873	278		3	42
143, 815	Evans, H. S., deceased, by J. D. Evans, executrix, West Chester, Pa. Automatic railway-signal.	Oct. 21, 1873	404	134	4	431
135, 105	Evans, J., Portsmouth, Ohio. Machine for cold-rolling sheet-metal.	Jan. 21, 1873	556	181	3	80
139, 305	Evans, J., Rosehayn, N. J. Treadle-movement.	May 27, 1873	782	248	3	592
	Evans, J. D., executrix. (See Evans, H. S.)					
145, 996	Evans, J. H., Dallas, Ky. Fence machine.	Dec. 30, 1873	885	287	4	703
141, 340	Evans, J. W., New York, N. Y. Means of propelling vessels.	July 29, 1873	942	306	4	120
144, 751	Same. Girder for bridges.	Nov. 18, 1873	502	170	4	542
135, 213	Evans, O., Saint Paul, Minn. Alarm, and lubricating device for car-axle boxes.	Jan. 28, 1873	676	218	3	102
136, 825	Evans, O. B., Titusville, Pa. Washing-machine.	Mar. 18, 1873	437	145	3	299
143, 816	Evans, P., New York, N. Y. Grinding mill.	Oct. 21, 1873	404	135	4	431
144, 196	Evans, R. M., Buffalo, N. Y. Consecutive-number printer.	Nov. 4, 1873	22	6	4	480
	Evans, T., Branchport, N. Y. Metallic ear for attaching handles to pails and like vessels. (Extension.)	June 21, 1873			3	662
5, 578	Same. Metallic pail-ear. (Reissue.)	Sept. 23, 1873	781	269	4	338
141, 550	Evans, T. R., Philadelphia, Pa. Boot and shoe tree and stretcher.	Aug. 5, 1873	122	38	4	145
144, 969	Evans, W., Long Island City, N. Y. Machine for forging hammers.	Nov. 25, 1873	694	234	4	569
	Evans, W. J. (See Thomas & Evans.)					
139, 502	Evans, W. J., and W. Perry, New York, N. Y. Kettle.	June 3, 1873	52	16	3	613
	Evans, W. N. (See Rawle & Evans.)					
143, 131	Evard, C. E., Leesburgh, Va. Watchmakers' chain-clamp.	Sept. 23, 1873	710	244	4	332
142, 221	Evard, M., St. Etienne, France. Apparatus for washing coal, ore, &c.	Aug. 26, 1873	753	248	4	223
444, 078	Evarts, C., administratrix. (See Evarts, M.)					
444, 078	Evarts, J. A., assignor to Bradley & Hubbard, West Meriden, Conn. Suspension-pulley.	Oct. 28, 1873	651	214	4	461
145, 637	Same. Slide-pendant for hanging lamps.	Dec. 16, 1873	542	178	4	653
5, 395	Evarts, J. A., and P. Cinquini, assignors to Bradley & Hubbard, West Meriden, Conn. Drawer-pull label-holder. (Reissue.)	May 6, 1873	239	74	3	517
140, 907	Evarts, J. M., New Haven, Conn. Filter.	July 15, 1873	505	170	4	69
135, 416	Evarts, M., deceased, by C. Evarts, administratrix, Girard Township, Pa. Machine for making dowel-pins.	Feb. 4, 1873	22	6	3	129
137, 766	Even, H., Pekin, Ill. Manufacture of sweet biscuit.	Apr. 15, 1873	455		3	418
	Evenen, J. G. (See Wilson, F. G., assignor.)					
5, 597	Evenen, J. G., Chicago, Ill. Oil-can. (Reissue.)	Oct. 14, 1873	322	107	4	414
5, 598	Same. Can for oils, &c. (Reissue.)	Oct. 14, 1873	322	107	4	414
5, 599	Same. Sheet-metal can. (Reissue.)	Oct. 14, 1873	323	107	4	414
140, 022	Evenen, J. G., assignor to self and F. C. Wilson, Chicago, Ill. Apparatus for drawing oil from cans.	June 17, 1873	534	169	3	675
144, 268	Evered, J., assignor to self and J. Davis, Muskegon, Mich. Balanced slide-valve.	Nov. 4, 1873	84	27	4	485
	Everett, C. D. (See Parmalee & Johns, assignors.)					
138, 634	Everett, C. D., Cleveland, Ohio. Felly-plate.	May 6, 1873	137	45	3	509
139, 949	Everitt, J. M., Hackettstown, N. J. Gauge for horse-collars.	June 17, 1873	474	149	3	670
141, 130	Everson, O. J., Lake City, Minn. Grain-separator.	July 22, 1873	724	241	4	95
136, 313	Evert, C. L., Washington, D. C., and A. Johnson, New York, N. Y. Street letter-box.	Feb. 25, 1873	849	274	3	232
144, 326	Evinger, N., Sanford, Ind. Thread-cutter for sewing-machine.	Nov. 4, 1873	128	43	4	489
	Ewing, J. F. (See Bingham & Ewing.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Excelsior Needle Company. (See Dayton, W. H., assignor.)					
137, 902	Exner, W., Harper's Ferry, W. Va. Wash-boiler	Apr. 15, 1873	572	179	3	428
137, 427	Eynon, D., Saint Louis, Mo. Spike-making machine	Apr. 1, 1873	131	43	3	367
143, 000	Eyrae, J. H., Pekin, Ill. Street-lamp	Sept. 23, 1873	666	205	4	324
	Ezekiel, H. C. (See Templeton, N. J., assignor.)					
	Faber, E. (See Schrag & Hufeland, assignors.) (Reissue.)					
	Same. (See Warth, A., assignor.) (Reissue.)					
139, 306	Faber, H. C., Utica, N. Y. Trunk-catch	May 27, 1873	782	248	3	592
140, 023	Fabré, J. M., Bordeaux, France. Bridle-bit	June 17, 1873	535	169	3	675
143, 905	Fachs, H., New York, N. Y. Table-caster	Sept. 16, 1873	517	176	4	506
138, 387	Faginae, G. W., assignor of one-half interest to J. Cotner, Shelby, Ohio. Washing-machine	Apr. 29, 1873	1,037	327	3	483
6, 468	Fagan, G. R., Philadelphia, Pa. Ornamentation (Design)	Mar. 4, 1873			3	245
135, 325	Fagan, M. G., assignor to self and A. C. Corse, Troy, N. Y. Cooking-stove	Jan. 28, 1873	777	251	3	110
	Fagin, L., trustee. (See Blackford, H., assignor.)					
143, 409	Fahrney, E., Deep River, Iowa. Rein-holder	Oct. 7, 1873	11	4	4	381
	Fairbanks, G. S. (See Moody, F. G., assignor.)					
135, 417	Fairbanks, H., Saint Johnsbury, Vt. Toy-blocks	Feb. 4, 1873	23	7	3	129
136, 714	Fairbanks, H., and L. J. Robinson, Saint Johnsbury, Vt. Carpenters' bevel	Mar. 11, 1873	329	109	3	281
	Fairbanks, T., Saint Johnsbury, Vt. Platform-scales (Extension)	Dec. 20, 1873			4	640
	Fairchild, A. (See Naylor & Fairchild.)					
	Fairchild, F. H., et al. (See McGee, S., assignor.)					
144, 079	Fairchild, J. M., New Haven, Conn. Lock for fire-alarm boxes	Oct. 28, 1873	651	214	4	461
6, 539	Fairchild, L. W., New York, N. Y. Pen-sign (Design)	Apr. 1, 1873			3	356
	Fairchild Water-Meter Company. (See White, A. M., assignor.)					
	Fairfield, H. P. (See Glidden & Fairfield.)					
142, 452	Fairfield, H. P., assignor to J. W. Brooks, trustee, Boston, Mass. Air-compressor	Sept. 2, 1873	116	37	4	252
143, 682	Fairfield, H. P., and W. W. Messor, jr., Boston, Mass. Machinery for finishing the soles of boots and shoes	Oct. 14, 1873	263	87	4	410
140, 908	Fairlie, R. F., London, England. Apparatus for extracting nitrate of soda	July 15, 1873	505	170	4	69
	Fairman, J. (See De Witt & Fairman.)					
139, 460	Fairman, J., New York, N. Y. Trunk and strap fastener	June 3, 1873	16	5		
140, 354	Fales, A. B., and H. Seabury, said Seabury assignor to said Fales, Albany, N. Y. Reservoir cooking-stove	July 1, 1873	19	6	4	9
139, 133	Fales, E. C., Foxborough, Mass. Machine for blocking hats	May 20, 1873	609	191	3	570
137, 352	Fales, J. E., assignor to Rice, Barton & Fales Machine and Iron Company, Worcester, Mass. Expanding pulley	Apr. 1, 1873	69	22	3	362
142, 453	Fales, L. S., Monmouth Junction, N. J. Compound for preserving wood	Sept. 2, 1873	117		4	252
143, 444	Falke, C., New York, N. Y. Apparatus for graining wood, &c.	Oct. 7, 1873	41	14	4	384
145, 266	Fallows, J., assignor to C. B. Porter & Co., Philadelphia, Pa. Handle for sheet-metal ware	Dec. 9, 1873	228	77	4	616
	Fallows, J. T. (See Walton & Fallows.)					
137, 064	Fancher, C. H., assignor to self and F. A. J. Diss, San Francisco, Cal. Forming and gauging butter-rolls	Mar. 25, 1873	650	215	3	337
134, 873	Fankhauser, L., Columbus, Ohio. Carpet-stretcher	Jan. 14, 1873	350	111	3	48
	Fanning, J. (See Nugent & Fanning.)					
145, 287	Fanning, J., and E. Nugent, Brooklyn, N. Y. Sewing-machine	Dec. 9, 1873	228	77	4	616
	Fanning, W. W. (See Cox & Fanning.)					
135, 396	Fanelan, R., New Haven, Conn. Machines for cutting food for animals	Jan. 28, 1873	778	252	3	110
	Fantini, T. (See Timm & Fantini.)					
145, 288	Farclot, C. W., Kelley's Island, Ohio. Filter for wine	Dec. 9, 1873	229	77	4	616
145, 289	Faries, R., Decatur, Ill. Sash-balance	Dec. 9, 1873	230	78	4	616
	Faria, J. A. (See Duffield, W. C., assignor.)					
142, 621	Faria, R. W., Murfreesborough, Tenn. Traveling thrashing-power	Sept. 9, 1873	272	89	4	276
134, 741	Farley, C. H., Portland, Me. Locomotive fire-box	Jan. 14, 1873	234	75	3	39
137, 667	Farley, H. W., Oswego, Ill. Elevated way	Apr. 8, 1873	355	110	3	397
145, 638	Same. same	Dec. 16, 1873	543	178 } 179 }	4	653
140, 262	Farmer, G. P., Brooklyn, N. Y. Needle setter and threader for sewing-machines	June 24, 1873	761	240	3	702
128, 999	Farmer, J. C., Providence, R. I. Thimble for protecting boiler-fues	May 20, 1873	486	154	3	560
	Farmer, M. G., Salem, Mass. Electro-magnetic fire-alarm apparatus (Extension)	Feb. 22, 1873			3	218
	Same. Electro-magnetic telegraph (Extension)	Nov. 15, 1873			4	504
134, 874	Farmer, W., New York, N. Y. Hydraulic mains of gas-works (See Knelsly & Wensthoft, assignors.)	Jan. 14, 1873	350	111	3	48
138, 141	Farnsworth, E., Tipton, Pa. Car-brake	Apr. 22, 1873	791	252	3	455
143, 001	Farnsworth, L. H., Hudson, assignor to the Boot and Shoe Improvement Company, Boston, Mass. Boot	Sept. 23, 1873	606	206	4	324
140, 355	Farquhar, A. B., York, Pa. Machine for making plow-handles	July 1, 1873	19	6	4	9
138, 999	Farquhar, S., Boston, Mass. Mode of attaching roofing-slates	May 20, 1873	486	154	3	560
	Farr, C. N. (See Van Horn & Farr.)					
	Farr, G. (See Hubbard, E. R., assignor.)					
141, 869	Farrand, W. D., New York, N. Y. Spark-arrester	Aug. 19, 1873	435	142	4	187
145, 099	Farrant, F., Gloversville, N. Y. Gauntlet-glove	Dec. 2, 1873	57	18	4	590
138, 237	Farrar, A., Brookline, Mass. Refining petroleum	Apr. 29, 1873	902	282	3	472
142, 782	Farrar, F. W., Waterford, Pa. Compound tool	Sept. 16, 1873	420	142	4	298
136, 314	Farrar, O., Chicago, Ill. Sewing-machine	Feb. 25, 1873	850	274	3	232
5, 581	Farre, W. T., Montreal, Canada. Machine for bending tubing (Reissue)	Sept. 30, 1873	947	320	4	368
5, 582	Same. Method of bending tubing (Reissue)	Sept. 30, 1873	949	321	4	368
136, 593	Same. Ice-tongs	Mar. 11, 1873	231	78	3	273
144, 449	Same. Machine for bending tubing	Nov. 11, 1873	240	81	4	509
138, 876	Farrel, F., Ansonia, Conn. Crane	May 13, 1873	375	117	3	538
141, 551	Same. Hoisting-apparatus	Aug. 5, 1873	122	38	4	145
139, 561	Farrell, F., assignor to self and A. J. Nichols, Cincinnati, Ohio. Car-seat	June 3, 1873	102	34	3	617
134, 531	Farrington, J., Corry, Pa. Harvester	Jan. 7, 1873	96	9	3	9
144, 604	Farrington, J. D., jr., New York, N. Y., and T. P. Austin, Portland, Conn. Sheet-metal coffin	Nov. 18, 1873	379	128	4	532
141, 501	Farrington, W., Brooklyn, N. Y., assignor to C. Chambers, jr., and E. Chambers, Philadelphia, Pa. Packing and carrying device for paper-folding machines	Aug. 5, 1873	82	26	4	142
141, 780	Farris, W. H., Cairo, Ill. Fire-grate	Aug. 12, 1873	339	111 } 112 }	4	170
142, 009	Farrow, W., Alexandria, Ill. Machine for dressing mill-stones	Aug. 19, 1873	548	181	4	197
145, 162	Farson, E. S., Philadelphia, Pa. Ironing-table	Dec. 2, 1873	115	38	4	594
137, 428	Farwell, W. B., New York, N. Y. Machine-gun	Apr. 1, 1873	132	43	3	368
137, 603	Fasoldt, C., Albany, N. Y. Clock-escapement	Apr. 5, 1873	300	93	3	393

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 973	Fath, V., Saint Louis, Mo. Stove-pipe thimble.	Oct. 28, 1873	559	185	4	454
142, 454	Faubion, M. W., Parrottsville, Tenn. Fertilizer-distributor.	Sept. 2, 1873	117	37	4	252
143, 133	Faucett, E. W., E. W. Silver, and J. Deming, assignors to A. R. Silver and J. Deming, Salem, Ohio. Hollow auger.	Sept. 23, 1873	711	244	4	332
140, 692	Faucett, H. W., Titusville, Pa. Apparatus for raising oil, &c., from wells.	July 8, 1873	313	106	4	45
143, 974	Faught, L. R., Philadelphia, Pa. Horse-power.	Oct. 28, 1873	559	186	4	454
134, 875	Faub, E., New York, N. Y. Folding-chair, bed, and ottoman combined.	Jan. 14, 1873	351	112	3	48
140, 693	Faul, W. J., New York, N. Y. Self-cleaning tobacco-cutter.	July 8, 1873	314	106	4	45
	Faulkner, E. H. (See Turpie, J., assignor.)					
143, 975	Faulkner, W. J., Chicago, Ill. Tuck-creaser for sewing-machines.	Oct. 28, 1873	561	186	4	454
142, 222	Fauver, J. W., Augusta County, Va. Ditching-machine.	Aug. 26, 1873	754	249	4	223
141, 265	Fawcett, E. W., and R. and W. E. Sefton, Salem, said Fawcett assignor to E. S. Holloway, Columbiana, Ohio. Bolt-cutter.	July 29, 1873	871	285	4	115
144, 895	Fawcett, J., Boston, Mass. Fire indicator and alarm.	Nov. 25, 1873	634	216	4	563
145, 559	Fawcett, L., Salem, Ohio. Rein-holder.	Dec. 16, 1873	478	156	4	648
	Fawcett, R. (See Fawcett, E. W. and R., and Sefton.)					
143, 817	Fawcett, T., New York, N. Y. Harness-mounting.	Oct. 21, 1873	405	135	4	431
143, 683	Faxon, J. W., Boston, Mass. Cook.	Oct. 14, 1873	265	87	4	410
135, 977	Fay, C. T., assignor to Jenison Lubricator Company, San Francisco, Cal. Car-axle box.	Feb. 18, 1873	544	180	3	196
	Fay, J. A., & Co. (See Bugbee, G. W., assignor.)					
	Same..... (See Doane & Dobson, assignors.)					
	Same..... (See Doane, W. H., assignor.)					
	Same..... (See Dobson, W. H., assignor.)					
137, 189	Fay, W., New Orleans, La. Automatic fan.	Mar. 25, 1873	763	252	3	336
6, 952	Fayerweather, J. S., Bridgefield, Conn. Hat (Design).	Oct. 7, 1873			4	380
	Feamster, T. L. (See Moore, C. T., assignor.)					
138, 388	Fearon, T., Yonkers, N. Y. Row-lock.	Apr. 29, 1873	1,038	327	3	483
	Fear, A. (See Johnson, M., assignor.)					
137, 668	Fee, J. S., Rockford, Ind. Stirrup.	Apr. 8, 1873	356	110	3	397
5, 550	Fee, W. R., Cincinnati, Ohio. Machine for hulling cotton-seed. (Reissue).	Aug. 26, 1873	837	278	4	230
	Feeder, S. (See Rosenstein & Feeder.)					
142, 010	Feely, L., Rochester, N. Y. Clamp.	Aug. 19, 1873	549	{ 181 182 }	4	197
146, 056	Same..... Bit-stock.	Dec. 30, 1873	941	303	4	708
143, 133	Fehr, J., Hoboken, N. J. Medical compound or powder for infants.	Sept. 23, 1873	712		4	332
144, 605	Felix, J., San Francisco, Cal. Ingot-mold for gold or silver.	Nov. 18, 1873	380	128	4	532
144, 896	Same..... Manufacture of copper ingots for alloying gold and silver.	Nov. 25, 1873	635		4	563
144, 080	Feldkamp, G., Cincinnati, Ohio. Chair.	Oct. 28, 1873	652	{ 214 215 }	4	462
136, 984	Felgner, E. L., Baltimore, Md. Tobacco-package.	Mar. 18, 1873	566		3	309
	Fell, S. B., et al. (See Weagant, H. L., assignor.)					
134, 876	Fellner, L. G., Las Vegas, N. Mex. Extract of yucca.	Jan. 14, 1873	352		3	48
139, 503	Fellows, C. E., Philadelphia, Pa. Case for containing indexes.	June 3, 1873	52	17	3	613
140, 909	Fels, M. and J. W., Cincinnati, Ohio. Railway-switch.	July 15, 1873	507	171	4	69
	Fels, J. W. (See Fels, M. and J. W.)					
134, 985	Felt, J. Q., Detroit, Mich. Wood pavement.	Jan. 21, 1873	459	147	3	72
144, 525	Felton, L. (See Rogers & Felton.)					
145, 057	Felzer, W., Frank Hill, Minn. Treadle.	Nov. 11, 1873	304	102	4	514
	Fend, J., and J. W. Stevenson, Johnstown, Pa. Railway time-signal.	Dec. 2, 1873	16	6	4	587
	Fender, W. J., et al. (See Hardenbergh, Miner & Fender.)					
	Fenimore, G. W. (See Barrett & Fenimore.)					
144, 391	Fenner, C. A., Mystic River, Conn. Cradle.	Nov. 11, 1873	193	66	4	506
	Fenninger, M. B. (See Eby & Fenninger.)					
134, 793	Fenno, I., Boston, Mass. Cloth-cutting machine.	Jan. 14, 1873	278	90	3	42
144, 606	Fenton, F. A., Camden, N. J. Hatters' head-measure.	Nov. 18, 1873	381	128	4	532
	Feret, L. (See Scacher & Feret.)					
144, 607	Ferguson, D. P., Jonesborough, Ga. Cotton-seed planter.	Nov. 18, 1873	382	128	4	532
	Ferguson, J. C. (See Kinsley & Ferguson.)					
	Ferguson, P. H. (See Spence, A., assignor.)					
	Ferguson, R. (See Martin & Ferguson.)					
137, 767	Ferguson, W., assignor to self, T. A. Lathrop, and T. H. Reevee, Canton, Ohio. Saw-sawage.	Apr. 15, 1873	455	142	3	418
143, 687	Ferguson, W. H., Forest, Ill. Manufacture of boots.	Oct. 14, 1873	269	88	4	410
	Ferm, C. (See Rosenstjerna, A., assignor.)					
137, 540	Fernald, E. C., Flatbush, N. Y. Safety-valve.	Apr. 8, 1873	245	75	3	388
137, 541	Same..... Feed-water regulator.	Apr. 8, 1873	246	75	3	388
142, 223	Fernald, H. B., Washington, D. C. Signal-lantern.	Aug. 26, 1873	756	249	4	223
143, 231	Ferren, M., Freedom, N. H. Car-coupling.	Sept. 30, 1873	798	275	4	355
137, 903	Ferren, M. J., Stoneham, assignor to H. E. Townsend, Boston, Mass. Welt-edge burnishing-tool.	Apr. 15, 1873	573	180	3	428
	Ferrier, J. (See Haakins, C. C., assignor.)					
137, 298	Ferrin, F., Camden, N. J. Carrier for lathes.	Apr. 1, 1873	17	5	3	358
	Ferris & Miles. (See Miles, F. B., assignor.)					
144, 081	Ferris, J. L., South Brunswick, assignor to self and I. S. Buckalew, Jamesburgh, N. J. Spark-arrester.	Oct. 28, 1873	653	215	4	462
144, 197	Ferris, L., San Francisco, Cal. Glove-fastener.	Nov. 4, 1873	23	7	4	480
	Ferris, O. C., et al. (See Hahn, F. E., assignor.)					
	Same..... (See Miles, F. B., assignor.)					
145, 936	Ferris, S., New York, N. Y. Railway-rail chair.	Dec. 30, 1873	835	272	4	699
	Ferry, W. M. (See Gronberg & Ferry.)					
	Ferry, W. M., Grand Haven, Mich. Journal-box for saw-mill carriages. (Extension).	Nov. 29, 1873			4	557
143, 563	Ferslew, W. E., New Orleans, La. Compound for making artificial stone.	Oct. 14, 1873	157		4	402
139, 134	Fetter, G., Philadelphia, Pa. Car-starter.	May 20, 1873	611	191	3	570
139, 569	Fewell, C. L., Corsicana, Tex. Bed-bug exterminator.	June 3, 1873	103	34	3	617
135, 791	Fowkes, J. T., assignor to self, J. L. Wilkins, and W. C. Cranmer, Philadelphia, Pa. Sad-iron.	Feb. 11, 1873	375	120	3	169
	Feyh, A. (See Schlich & Feyh.)					
134, 794	Fickett, H. S., Yarmouth, Me. Leather punch and cutter.	Jan. 14, 1873	279	91	3	43
141, 638	Fickett, W. S., Rochester, N. Y. Blacking-brush.	Aug. 12, 1873	215	68	4	160
140, 126	Field, A., Springfield, Mass. Medical compound or lotion for the skin.	June 24, 1873	648		3	692
136, 715	Field, D. C. G., Lowell, Mass. Loom-shuttle.	Mar. 11, 1873	330	109	3	281
5, 431	Field, E. S., Middlesex County, England. Flexible lip-formed valve. (Reissue).	June 3, 1873	177	58	3	623
139, 490	Field, E. S., Hartford, Conn. Spring bed-bottom.	May 6, 1873	19	7	3	499
138, 491	Same..... Same.	May 6, 1873	20	7	3	449
138, 563	Field, G. W., and J. Steger, New York, N. Y. Car-starter.	June 3, 1873	103	35	3	617

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 560	Field, S., Galva, Ill. Medical compound	Dec. 16, 1873	479		4	648
140, 618	Field, S. D., San Francisco, Cal. Screw-post for electrical apparatus	July 8, 1873	253	85	4	40
	Field, S. T., Worcester, Mass. Machine for manufacturing wooden troughs. (Extension)	Feb. 1, 1873			3	70
138, 492	Field, W. D., Providence, R. I. Cotton-bale tie	May 6, 1873	21	7	3	499
140, 024	Same..... same	June 17, 1873	535	169	3	675
143, 976	Fields, M. F., Lawrence, Mass. Loom-shuttle	Oct. 28, 1873	562	186	4	454
144, 608	Fields, W., Wilmington, Del. Dumping-wagon	Nov. 18, 1873	383	129	4	532
136, 826	Fifield, L. W., Worcester, Mass. Window-screen	Mar. 18, 1873	437	145	3	299
139, 135	Filkins, A., Ypsilanti, Mich. Washing-machine	May 20, 1873	612	191	3	570
141, 266	Filkins, R. A., Cheshire, assignor to self and A. R. Tyrrell, Savoy, Mass. Musical railway-signal	July 29, 1873	871	285	4	115
142, 385	Filkins, R. A., Cheshire, Mass. Steam-lubricator	Sept. 2, 1873	59	20	4	247
144, 269	Filley, G. F., Saint Louis, Mo. Fender	Nov. 4, 1873	84	23	4	485
	Filmore, C. W., et al. (See Dorman, L., assignor)..... (Reissue.)					
142, 783	Filmer, W., San Francisco, Cal. Apparatus for casting printers' leads	Sept. 16, 1873	421	142	4	298
138, 238	Filson, L., Bushnell, Ill. Automatic gate	Apr. 29, 1873	903	285	3	472
	Filter, W. (See Du Bois, H. M., assignor.)					
	Finch, E. B., & Son. (See Meyersberg, A., assignor.)					
137, 429	Finch, J. M., assignor to J. M. Finch and U. Torry, Cedar Falls, Iowa. Hopper and casing for grinding-mills	Apr. 1, 1873	134	44	3	368
6, 685	Finch, R. R., assignor to Union Stove Works, Peekskill, N. Y. Cooking-stove. (Design.)	May 27, 1873			3	586
	Finch, W. (See Swan & Finch.)					
	Fink, A. J. (See Seltzer & Fink.)					
145, 855	Fink, A. J. & J. Reading, Pa. Refrigerator	Dec. 23, 1873	739	242	4	681
	Fink, J. (See Fink, A. J. & J.)					
135, 418	Finkbeiner, G., Syracuse, N. Y. Slide for extension-tables	Feb. 4, 1873	94	7	3	129
134, 887	Finley, J. R., Delphi, Ind. Latch for gates	Jan. 14, 1873	352	112	3	48
137, 834	Finn, C., Des Moines, Iowa. Bee-hive	Apr. 15, 1873	514	160	3	423
134, 432	Finn, J., Boston, Mass. Machine for molding marble	Jan. 7, 1873	27	9	3	9
135, 535	Same..... Machine for grinding and polishing stone	Feb. 4, 1873	130	41	3	138
138, 079	Same..... Machine for molding the edges of marble slabs	Apr. 22, 1873	743	235	3	451
141, 213	Same..... Marble-molding machine	July 29, 1873	821	268	4	111
140, 818	Finney, J. A., Nashville, Ohio. Insect-destroyer	July 15, 1873	427	144	4	62
143, 290	Finton, G., Meadville, Pa. Oscillating gland for flowing oil-wells	Sept. 30, 1873	840	289	4	359
5, 643	Firman, H. S., New York, N. Y. Apparatus for rendering fats and deodorizing the gases	Nov. 4, 1873	176	60	4	493
136, 827	Same..... Apparatus for rendering fats and deodorizing the gases..... (Reissue.)	Mar. 18, 1873	438	145	3	299
	Firth, J., deceased, by M. Firth and J. Ingham, executors, Phillipsburgh, Pa., and J. Ingham. Pipe-molding. (Extension.)	Dec. 20, 1873			4	640
140, 619	Firth, J. B., Brooklyn, N. Y. Cake-pan	July 8, 1873	254	86	4	40
	Firth, M., executrix. (See Firth & Ingham)..... (Extension.)					
137, 669	Firth, S., Leeds, England. Machine for cutting coal	Apr. 8, 1873	356	110 } 111 }	3	397
144, 752	Fischer, C., Gloucester, N. J. Centrifugal sugar-draining machine	Nov. 18, 1873	503	171	4	542
140, 910	Fischer, C. A., Baltimore, Md. Mold for forming clay articles	July 15, 1873	509	171	4	69
138, 559	Fischer, E. J., Philadelphia, Pa. Stamp for cutting out figures	May 6, 1873	83	27	3	504
139, 136	Fischer, F. A., Harzburg, Germany. Condensing and feed apparatus for steam-boilers	May 20, 1873	612	191 } 192 }	3	570
135, 327	Fischer, H. S., Xenia, Ohio, and D. Bruhn, Eckernforde, Schleswig, Prussia. Securing carriage-wheels to their axles	Jan. 28, 1873	778	252	3	110
5, 475	Fischer, W. E., Boston, assignor by mesne assignment to C. H. Trask, Lynn, and Gould, Boston, Mass. Hand-nailer for lasting boots and shoes..... (Reissue.)	July 1, 1873	203	67	4	25
	Fish, J. C. (See West & Fish.)					
141, 707	Fish, R. A., Worcester, Mass. Cultivator	Aug. 12, 1873	273	80	4	165
	Fisher, A. J. et al. (See Ernst, J. G., assignor.)					
140, 998	Fisher, F. A., Elizabeth, N. J. Carbureter	July 22, 1873	607	205	4	86
	Fisher, G. (See Loesch, F., assignor.)					
	Fisher, G. B. (See Burnet & Fisher.)					
6, 412	Fisher, J. Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Feb. 18, 1873			3	189
6, 413	Same..... Carpet..... (Design)	Feb. 18, 1873			3	189
6, 414	Same..... same..... (Design)	Feb. 18, 1873			3	189
6, 415	Same..... same..... (Design)	Feb. 18, 1873			3	189
6, 594	Same..... same..... (Design)	Apr. 22, 1873			3	444
7, 050	Same..... same..... (Design)	Dec. 16, 1873			4	641
6, 705	Fisher, J., Philadelphia, Pa. Carpet..... (Design)	June 17, 1873			3	663
6, 706	Same..... same..... (Design)	June 17, 1873			3	663
6, 707	Same..... same..... (Design)	June 17, 1873			3	663
6, 708	Same..... same..... (Design)	June 17, 1873			3	663
136, 828	Fisher, J. B., Amsterdam, N. Y. Wash-board	Mar. 18, 1873	439	145	3	299
136, 909	Same..... Washing-machine	Mar. 18, 1873	504	167	3	304
143, 068	Fisher, J. H., Chicago, Ill. Tap-holder attachment for beer-coolers	Sept. 23, 1873	663	227	4	328
137, 065	Fisher, J. S., Utica, Mo. Wheel for road-steamers	Mar. 25, 1873	651	216	3	327
140, 263	Fisher, R. A., San Francisco, Cal. Means for preventing incrustation in steam-boilers	June 24, 1873	761		3	702
141, 043	Same..... Blast-furnace breast-plate	July 22, 1873	646	217	4	69
145, 496	Same..... Preventing the corrosion of iron and steel	Dec. 16, 1873	415		4	643
140, 768	Fisher, R. C., Belleville, N. Y. Eye-wash	July 15, 1873	380		4	59
	Fisher, T. J. (See Jones, G., assignor.)					
138, 389	Flake, I., Worcester, Mass. Musical wind-instrument	Apr. 29, 1873	1,039	327	3	483
143, 134	Same..... same	Sept. 23, 1873	712	244	4	333
	Fitch, E. T., et al. (See Hubbard, G., assignor.)					
143, 445	Fitch, G. L., and H. M. Jones, Little Lake, Cal. Shoe-fastening	Oct. 7, 1873	42	15	4	384
	Fitch, I. M. (See Graunns & Fitch.)					
137, 904	Fitch, I. M., Morrisville, N. Y. Towel and clothes rack	Apr. 15, 1873	573	180	3	428
134, 656	Fitch, P. S., Hanly, Ky. Hemp-harvester	Jan. 7, 1873	147	47	3	18
136, 496	Fitch, S. S., New York, N. Y. Ice-cream freezer	Mar. 4, 1873	125	40	3	255
136, 829	Same..... Sad-iron	Mar. 18, 1873	440	146	3	299
137, 604	Same..... Culinary boiler	Apr. 8, 1873	301	93	3	393
140, 769	Same..... Dish-heater	July 15, 1873	381	131	4	59
143, 446	Same..... Apparatus for freezing liquids	Oct. 7, 1873	42	15	4	384
143, 564	Same..... Waffle-baker	Oct. 14, 1873	157	53	4	402
	Fitch, W., et al. (See Hubbard, G., assignor.)					
	Fitts, B. (See Ball & Fitts.)					
	Fitts, B., Worcester, Mass. Governor-valve..... (Extension.)	Aug. 9, 1873			4	134
135, 103	Fitts, B., assignor to Union Water-Meter Company, Worcester, Mass. Damper-regulator	Jan. 21, 1873	557	182	3	80

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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146, 057	Fitts, B., assignor to Union Water-Meter Company, Worcester, Mass. Valve	Dec. 30, 1873	942	303	4	708
5, 654	Fitts, R. B., assignor by mesne assignment to the Nutrio Manufacturing Company, Philadelphia, Pa. Preparing wheat and other grain for food. (Reissue)	Nov. 11, 1873	367	.....	4	519
5, 655	Same.....same.....same..... (Reissue)	Nov. 11, 1873	368	.....	4	519
140, 127	Fitzgerald, G. W., Jerseyville, Ill. Portable rick-cover	June 24, 1873	648	204	3	692
144, 082	Fitzgerald, O., Dexter, Me. Bottle-protector	Oct. 28, 1873	653	215	4	462
	Fitzgibbons, M. (See Hornfager & Fitzgibbons)					
	Fitzgibbons, M., et al. (See Palmer, H. L., assignor) (Reissue)					
137, 768	Fitzhugh, B. G., Frederick, Md. Cart-loading apparatus	Apr. 15, 1873	456	{ 142 143 }	3	418
139, 013	Fitzhugh, B. G., Frederick, assignor to M. Martin, Baltimore, Md. Dumping-cart	Apr. 22, 1873	680	215	3	446
138, 014	Same.....Curtain-roller holder	Apr. 22, 1873	682	215	3	446
140, 025	Fitzhugh, B. G., assignor to J. Byerly, Frederick, Md. Dumping-cart	June 17, 1873	536	169	3	675
136, 985	Fitzsimmons, H., Houston, Texas. Balanced valve	Mar. 18, 1873	568	189	3	309
145, 854	Flack, C. E., Jacksonville, Ill. Pessary	Dec. 23, 1873	738	241	4	681
144, 970	Flagg, T. J., New York, N. Y. Suspender	Nov. 25, 1873	695	235	4	569
142, 622	Flagler, H. K., assignor to the National Tube-Works Company, Boston, Mass. Tube-welding mandrel	Sept. 9, 1873	273	89	4	276
139, 564	Flanagin, J., Pawnee City, Nebr. Plow-truck	June 3, 1873	104	35	3	617
141, 341	Flanders, I., Paw Paw, Mich. Stump-extractor	July 29, 1873	943	307	4	120
140, 819	Flanders, J. P., assignor to self and E. B. Hayes, Vergennes, and A. M. Mitchell, Burlington, Vt. Double acting force-pump	July 15, 1873	428	145	4	62
139, 886	Flanders, L. B., Philadelphia, Pa. Attaching cork-retaining bail to bottles	June 17, 1873	424	132	3	666
	Flanders, M. R. (See Burdick & Flanders.)					
136, 427	Flanagin, F. A., Fagundus City, Pa. Lamp	Mar. 4, 1873	61	22	3	250
136, 230	Flanigan, W. H., Philadelphia, Pa. Combined ruler and pencil-sharpener	Feb. 25, 1873	776	250	3	226
136, 648	Flatley, A., Brooklyn, N. Y. Clasp-button	Mar. 11, 1873	276	92	3	276
137, 353	Same.....Collar	Apr. 1, 1873	70	22	3	362
	Fleeharty, J. T. (See Collins, S. C., assignor.)					
139, 137	Fleeharty, J. T., assignor of one-half interest to C. S. Collins, Baltimore, Md. False mantel	May 20, 1873	614	192	3	570
	Fleur, F. R. (See Bellemere & Fleur.)					
137, 190	Fleetwood, T. M., Savannah, Ga. Combined sail and marine drag	Mar. 25, 1873	764	252	3	336
135, 214	Fleischhauer, A., Brooklyn, N. Y. Tanning hides	Jan. 28, 1873	677	.....	3	102
136, 147	Fleischmann, C. L., Washington, D. C. Revivifying charcoal used in rectifying spirits	Feb. 25, 1873	713	.....	3	221
142, 845	Fleishman, S. L., Pittsburgh, Pa. Glass-blowing machine	Sept. 16, 1873	470	159	4	302
143, 752	Fleming, F. A., Curwinstown, Pa. Car-coupling	Oct. 21, 1873	349	116	4	427
141, 708	Fleming, J., Shamburgh, Pa. Valve for artesian wells, &c.	Aug. 12, 1873	274	89	4	165
145, 163	Fleming, J. G., Cochran, Pa. Hames-fastener	Dec. 2, 1873	116	38	4	594
145, 856	Fletcher, A. C., New York, N. Y. Car-wheel	Dec. 23, 1873	740	242	4	681
145, 857	Same.....Paddle-wheel	Dec. 23, 1873	741	242	4	681
143, 565	Fletcher, H., Louisville, Ky. Cutter-head	Oct. 14, 1873	158	53	4	402
	Fletcher, T. H. (See Morrison & Fletcher.)					
139, 138	Fletcher, W. H., Washington, D. C. Window-screen	May 20, 1873	614	192	3	571
	Flickinger, A. E. (See Huber & Flickinger.)					
140, 620	Flietstra, W. K., Holland, Mich. Washing-machine	July 8, 1873	254	86	4	40
145, 858	Fling, I. J., Hudson, and A. Land, Hillsdale, Mich., said Fling assignor to H. Blackmar, Hillsdale, Mich. Sewing-stand	Dec. 23, 1873	742	{ 242 243 }	4	681
138, 239	Flint, D. B., assignor to the Rodney Hunt Machine Company, Orange, Mass. Turbine-wheel	Apr. 29, 1873	903	285	3	472
135, 268	Flora, F., Pierce, Ohio. Animal-trap	Jan. 28, 1873	727	233	3	106
145, 639	Flora, O. V., assignor to self, J. G. Moore, and J. B. Ross, Madison, Ind. Saddle-tree	Dec. 16, 1873	545	179	4	633
	Florence Manufacturing Company. (See Estabrook, A. C., assignor.)					
143, 684	Flory, M. K., Viola, Ill. Revolving horse-rake	Oct. 14, 1873	265	88	4	410
140, 128	Flower, J., Detroit, Mich. Screw-tap	June 24, 1873	649	204	3	693
142, 011	Flowers, F. I., Tarrytown, N. Y. Side-bar for vehicles	Aug. 19, 1873	550	182	4	197
144, 023	Fluck, N. C., Gloucester, England. Machine for cutting cloth	Oct. 28, 1873	604	200	4	458
	Fluirscheim, M. (See Korwan, F., assignor.)					
143, 685	Flynn, M. B., Brooklyn, N. Y. Screw-cutting machine	Oct. 14, 1873	266	88	4	410
143, 002	Flynt, O. P., Boston, Mass. Lady's under-vest	Sept. 23, 1873	607	206	4	324
144, 609	Same.....Under-garment	Nov. 18, 1873	383	129	4	532
135, 419	Foard, J. W., San Francisco, Cal. Peg-rasp	Feb. 4, 1873	24	7	3	129
145, 164	Fobes, A., Attleborough, Mass. Bracelet	Dec. 2, 1873	117	38	4	594
	Fobes, D. (See Wells, H., assignor.)					
139, 461	Foehl, C., Philadelphia, Pa. Revolving fire-arm	June 3, 1873	16	5	3	610
134, 433	Fogarty, T. B., New York, N. Y. Spring motive-power	Jan. 7, 1873	28	9	3	9
135, 978	Same.....Gas-burner	Feb. 18, 1873	544	180	3	196
135, 979	Same.....same	Feb. 18, 1873	545	180	3	196
135, 980	Fogarty, T. B., Warren, Mass. Gas-machine	Feb. 18, 1873	546	181	3	196
135, 981	Same.....Carbureter	Feb. 18, 1873	547	181	3	196
135, 982	Same.....same	Feb. 18, 1873	548	181	3	196
6, 493	Fogelstrand, O. F., assignor to J. P. Connell, Kensington, Conn. Ornamenting bells. (Design)	Mar. 18, 1873	.....	.....	3	297
6, 775	Fogelstrand, O. F., assignor to Hart, Bliven & Mead Manufacturing Company, Kensington, Conn. Drawer-pull (Design)	July 15, 1873	.....	.....	4	58
6, 896	Same.....Boot-jack (Design)	Sept. 30, 1873	.....	.....	4	354
6, 973	Same.....Bracket (Design)	Nov. 4, 1873	.....	.....	4	478
135, 215	Fogelstrand, O. F., Kensington, Conn. Door-button	Jan. 28, 1873	677	219	3	102
138, 142	Fogg, T., Saint Mary's, Canada. Convertible freight-car	Apr. 22, 1873	792	253	3	455
136, 986	Foglesong, W., Dayton, Ohio, assignor to self, J. E. Boyer, J. McMaster, and I. Haas. Machine for wiring sheet-metal pans	Mar. 18, 1873	568	{ 189 190 }	3	309
141, 925	Foit, J. S., Kenton, Ohio. Automatic gate	Aug. 19, 1873	480	158	4	191
143, 895	Foley, M., Appleton, Wis. Scroll-sawing machine	Oct. 21, 1873	470	158	4	437
145, 937	Foley, W. F., assignor to P. R. Clute, Albany, N. Y. Device for trimming leather	Dec. 30, 1873	836	272	4	699
	Folk, J. E. (See Miller, S. H., assignor.)					
	Same.....(See Wilson & Miller, assignors.)					
	Same.....(See Wilson, C. F., assignor.)					
137, 605	Follensbee, G. S., and T. C. Entwistle, Lewiston, Me. Stop-mechanism for warping-machines	Apr. 8, 1873	301	93	3	393
139, 307	Follet, G., and A. Brummel, Brooklyn, N. Y. Hatchway	May 27, 1873	783	249	3	592
135, 536	Follett, J. L., Troy, N. Y. Sewing-machine	Feb. 4, 1873	131	41	3	138
137, 835	Follett, O. S., Mont Clair, N. J. Manufacture of glue	Apr. 15, 1873	515	.....	3	423
	Folsom, J. R. (See Addy, C. J., assignor.)					
139, 053	Fontaine, E., Fort Wayne, Ind. Spark-arrester	May 20, 1873	531	168	3	564

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144, 753	Foote, A. D., Berlin, assignor to A. N. Helmer, Milwaukee, Wis. Rotary grain-distributor.....	Nov. 18, 1873	505	171	4	542
140, 999	Foote, A. W., Buffalo, N. Y. Stove-pipe drum.....	July 22, 1873	608	205	4	86
135, 899	Foote, E., East Bloomfield, N. Y. Grain-band, bag-tie, &c.....	Feb. 18, 1873	483	156	3	191
137, 905	Foote, E., Yonkers, N. Y. Gas-burner.....	Apr. 15, 1873	574	180	3	428
140, 129	Foote, W. W., Saybrook, Ohio. Electric hotel-annunciator.....	June 24, 1873	650	204	3	693
5, 660	Forbes, J., Halifax, Nova Scotia. Skate..... (Reissue)..	Nov. 18, 1873	563	191	4	547
5, 705	Same..... (Reissue)..	Dec. 23, 1873	690	267	4	687
146, 058	Forbis, H. K., assignor to self and J. W. Proctor, Dauville, Ky. Mortising-tool.....	Dec. 30, 1873	943	304	4	708
136, 716	Force, W. M., Newark, N. J. Oil-press.....	Mar. 11, 1873	331	109	3	281
	Ford, E. (See Hughes, A. E., assignor.)					
	Ford, E. L. (See Kastenbein, C., assignor.)					
144, 083	Ford, E. T., Stillwater, N. Y. Potato-digger.....	Oct. 28, 1873	654	{ 215 216 }	4	462
143, 003	Ford, F., Point Pleasant, W. Va. Ice-breaker and fonder.....	Sept. 23, 1873	608	206	4	324
137, 191	Ford, F. G., Bridgeton, N. J. Bedstead.....	Mar. 25, 1873	764	252	3	336
145, 410	Ford, F. G., Philadelphia, Pa. Flour-sifter.....	Dec. 9, 1873	334	112	4	624
142, 085	Ford, G. A., Cleveland, Ohio. Pulley-block.....	Aug. 26, 1873	650	214	4	214
143, 135	Ford, H. H., Sanford, Me., assignor of one-half interest to H. N. Ford, Boston, Mass., and L. H. Ford, Great Falls, N. H. Railway time-signal.....	Sept. 23, 1873	713	245	4	333
	Ford, H. M., et al. (See Ford, H. H., assignor.)					
	Ford, L. H., et al. (See Ford, H. H., assignor.)					
144, 198	Ford, J. C., Montreal, Canada, assignor of one-half interest to A. D. Cable. Pastern halter for hitching horses.....	Nov. 4, 1873	24	7	4	460
	Ford, L. (See Smith, E. D., assignor.)					
	Ford, M., et al. (See Harvey, J., assignor.)					
135, 420	Ford, S. A., Chicago, Ill. Smoke-burning furnace.....	Feb. 4, 1873	25	7	3	129
141, 870	Same..... Boiler-furnace.....	Aug. 19, 1873	436	142	4	187
143, 004	Same..... Smoke-burning furnace.....	Sept. 23, 1873	609	{ 206 207 }	4	324
	Forden, J. M., et al. (See Gross, E. L., assignor.)					
139, 565	Forden, J. M., assignor to E. L. Gross, J. M. Forden, J. K. Welter, J. O. Sloan, and J. Rayburn, Springfield, Ill. Seed-dropper.....	June 3, 1873	105	35	3	617
144, 397	Forden, J. M., Springfield, Ill. Seed-dropper.....	Nov. 4, 1873	128	43	4	489
143, 568	Forehand, S., and H. C. Wadsworth, Worcester, Mass. Revolving fire-arms.....	Oct. 14, 1873	159	53	4	402
137, 430	Foreman, B. F., and J. P. Speck, Upton, Pa. Bolt for flour and middlings.....	Apr. 1, 1873	135	44	3	368
	Foreman, S. H. (See Grosh & Foreman.)					
	Forest, H. (See Digney, J. D. and T. Lartigue, & Forest.)					
137, 606	Forgy, E. S., et al. (See Curtner, I., assignor.)	Apr. 8, 1873	302	93	3	393
138, 080	Forgy, E. S., Dayton, Ohio. Grain-drier.....	Apr. 22, 1873	744	236	3	451
137, 354	Forman, W. A., assignor of one-half interest to W. H. Kelsey, Geneseo, N. Y. Machine for cutting and dressing stone.....	Apr. 1, 1873	70	22, 23	3	362
134, 742	Forrest, H. E., Cambridgeport, Mass., assignor to self, H. Boothby, Boston, Mass., and J. H. Leavitt, Portland, Me. Tool for finishing axle-blanks.....	Jan. 14, 1873	235	76	3	39
137, 769	Same..... Machine for turning carriage-axes.....	Apr. 15, 1873	459	143	3	418
139, 240	Forster, C., Pittsburgh, Pa. Rock and ore crusher.....	Apr. 29, 1873	904	285	3	472
135, 900	Forster, F. E., New York, N. Y. Fishing-line.....	Feb. 18, 1873	484	156	3	191
	Forsyth, J. B. (See Gately & Forsyth.)					
145, 792	Forsyth, O. C., jr., Newburgh, N. Y. Dust-pan.....	Dec. 23, 1873	686	225	4	677
137, 670	Forsyth, R. G., Oakland, Ill. Lamp-chimney cleaner.....	Apr. 8, 1873	358	111	3	397
141, 781	Fort, S. M., Syracuse, N. Y. Refrigerator.....	Aug. 12, 1873	341	112	4	171
144, 971	Fosket, W., assignor to C. Parker, Meriden, Conn. Shutter-hinge.....	Nov. 25, 1873	696	235	4	569
	Foskett, W. A. (See Brown & Foskett.)					
132, 390	Foster, A. D., Council Bluffs, Iowa. Prescription-file.....	Apr. 29, 1873	1,040	327	3	483
	Foster, D. P., Waltham, Mass. Wrench..... (Extension)..	Feb. 15, 1873			3	127
	Foster, H. T., et al. (See Foster, J. T., assignor.)					
	Foster, J. (See Wilson & Foster.)					
136, 428	Foster, J. J., Belmont, Tex. Floor-clamp.....	Mar. 4, 1873	62	22	3	250
137, 770	Foster, J. T., Jersey City, N. J. Door and gate spring.....	Apr. 15, 1873	460	143	3	418
137, 906	Foster, J. T., assignor to H. T. Foster and L. Mills, Jersey City, N. J. Flour-sieve.....	Apr. 15, 1873	575	180	3	428
134, 434	Foster, J. W., Pawtucket, R. I. Mandrel for making spools.....	Jan. 7, 1873	29	9	3	9
136, 429	Foster, J. W., assignor of one-half interest to E. A. Greene, Pawtucket, R. I. Gear-cutting machine.....	Mar. 4, 1873	63	22	3	250
136, 497	Foster, M. A., Saint Louis, Mo. Steam-boiler furnace.....	Mar. 4, 1873	126	41	3	256
138, 875	Same..... same.....	May 13, 1873	374	117	3	538
	Foster, R. (See Foster, W. and R.)..... (Extension.)					
137, 192	Foster, R. F., T. S. Baylie, and J. Harbin, Washington, D. C. Machine for rounding and backing books.....	Mar. 25, 1873	765	{ 252 253 }	3	336
141, 267	Foster, S. R., St. John, Canada. Shutter-worker.....	July 29, 1873	872	285	4	115
144, 665	Foster, T. G., Gloversville, N. Y. Glove.....	Nov. 18, 1873	431	146	4	536
5, 606	Foster, T. N., South Pass, Ill., assignor to H. H. Doubleday. Harvester..... (Reissue)..	Oct. 14, 1873	331	{ 109 110 111 }	4	415
5, 607	Same..... same..... (Reissue)..	Oct. 14, 1873	332	{ 110 111 }	4	415
142, 224	Foster, W., jr., New York, N. Y. Pneumatic signal-apparatus.....	Aug. 26, 1873	756	249	4	223
	Foster, W., and R. Foster, deceased, by W. Foster, executor, Brooklyn, N. Y. Screw-tap..... (Extension)..	Dec. 20, 1873			4	640
143, 567	Foster, W. A., Fitchburgh, Mass. Oil-can.....	Oct. 14, 1873	160	53	4	402
	Foster, W. B., et al. (See Chorrington, W. P., assignor.)					
	Fouke, F. B. (See Lang, J. C., assignor.)					
	Foullis, W. (See Wotherspoon & Foullis.)					
144, 526	Foullis, W., Glasgow, North Britain. Apparatus for charging and drawing gas-retorts.....	Nov. 11, 1873	304	{ 102 103 }	4	514
144, 972	Foulke, E. A., Paris, Ill. Clothes-tongs.....	Nov. 25, 1873	697	235	4	569
	Foulke, J. (See Hunt, J., assignor.)					
138, 798	Fouts, F. A., Bloomington, Ill. Car-wheel.....	May 13, 1873	306	94	3	533
135, 104	Fowlds, T., jr., assignor of one-half interest to J. H. Gabel, Trevorton, Pa. Water-elevator.....	Jan. 21, 1873	560	182	3	80
	Fowler, W. B. (See Smith, H. J., assignor.)					
135, 901	Fowler, B. A. (See Glidden, O. F., assignor.)					
	Fowler, C. W., Chicago, Ill. Window-screen.....	Feb. 18, 1873	484	156	3	181
	Fowler, E. P. (See Clements & Fowler.)					
143, 896	Fowler, F. G., Bridgeport, Conn. Steering-propeller.....	Oct. 21, 1873	471	158	4	437
136, 498	Fowler, G. B., Brooklyn, N. Y., assignor of one-half interest to E. S. and J. Torrey, New York, N. Y. Crusher and press for culinary purposes.....	Mar. 4, 1873	127	41	3	256

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145, 290	Fowler, H., Detroit, Mich. Cigar-box.....	Dec. 9, 1873	230	78	4	616
	Fowler, H. C. (See Stafford & Fowler.)					
	Fowler, J. H. (See Thurston, C. H., assignor.)					
140, 130	Fowler, J. N., Green Point, N. Y. Portable wardrobe.....	June 24, 1873	651	205	3	693
145, 640	Fowler, J. S., Davenport, Iowa. Harvester-dropper.....	Dec. 16, 1873	545	179	4	654
144, 610	Fowler, R. B., Worcester, Mass. Narrow-ware loom.....	Nov. 18, 1873	384	129	4	532
141, 342	Fowler, R. F., assignor to self and C. T. Martincourt, Canton, Ohio. Device for reducing and screw-threading rods.....	July 29, 1873	944	307	4	120
139, 462	Fowler, S. T., Brooklyn, N. Y. Building block.....	June 3, 1873	17	5	3	610
	Fowler, S. W. (See Rearden, J., assignor.)					
142, 157	Fowler, W. M., Brooklyn, N. Y. Implement for uncapping, capping, and charging cart-ridges.....	Aug. 26, 1873	701	231	4	219
145, 997	Fox, C., and E. G. Heston, Gap, Pa. Telegraph-insulator.....	Dec. 30, 1873	887	288	4	703
138, 323	Fox, C. D., Philadelphia, Pa. Mold for glass bottles.....	Apr. 29, 1873	988	311	3	479
135, 105	Fox, C. H., New Orleans, La. Steam-boiler furnace.....	Jan. 21, 1873	560	182	3	80
135, 106	Same..... same.....	Jan. 21, 1873	561	182	3	80
142, 906	Fox, E. A. C., Frederick City, Md. Smoke and spark conveyer for locomotives.....	Sept. 16, 1873	518	176	4	306
135, 537	Fox, F., and F. A. Howarth, Providence, R. I. Car-coupling.....	F. b. 4, 1873	133	42	3	138
	Fox, G. (See Woodward, L., assignor.)					
	Fox, J., Lansingburgh, N. Y. Cracker-machine..... (Extension)	Feb. 1, 1873	.....	.....	3	324
143, 666	Same..... same.....	Oct. 14, 1873	267	88	4	410
	Fox, J. J. (See Hiera, J., assignor.)					
135, 703	Fox, M., New York, N. Y. Dress-elevator.....	Feb. 11, 1873	299	94	3	163
137, 907	Foy, L. H., New Haven, Conn. Reversible cuff.....	Apr. 15, 1873	576	181	3	428
145, 497	Foye, W. H., Portland, Me. Bill and paper file.....	Dec. 16, 1873	416	137	4	643
141, 432	Fraiken, J. J., Fort Howard, Wis. Car-coupling.....	Aug. 5, 1873	19	5	4	136
137, 355	France, S. W., Brooklyn, N. Y. Reservoir cooking-stove.....	Apr. 1, 1873	71	23	3	362
139, 308	Francis, A. E., Ravenna, Ohio. Wrapper for bottles.....	May 27, 1873	784	249	3	592
143, 232	Frank, A. H., and G. Spire, Buffalo, N. Y. Planing-machine.....	Sept. 30, 1873	799	275	4	256
137, 908	Frank, D., Allentown, Pa. Screw-wrench.....	Apr. 15, 1873	577	181	3	428
135, 034	Frank, H., Pittsburgh, Pa. Bottle-label.....	Jan. 21, 1873	506	163	3	76
135, 639	Same..... Metallurgic gas-furnace.....	Feb. 11, 1873	241	76	3	158
135, 640	Same..... Regenerator furnace.....	Feb. 11, 1873	241	76	3	159
141, 639	Frank, J. H., assignor to S. S. Phillips and A. E. Vosburg, Ilion, N. Y. Ironing-table.....	Aug. 12, 1873	216	68	4	160
143, 338	Frank, J. H., Millheim, Pa. Cultivator.....	Sept. 30, 1873	890	304	4	363
143, 504	Frank, S. B., Knobnoster, Mo. Rotary steam-engine.....	Oct. 7, 1873	20	31	4	388
140, 356	Frankenfeld, J., and W. E. Kichline, Bethlehem, Pa. Ironing-table.....	July 1, 1873	20	6	4	9
143, 618	Frankfeld, A., New York, N. Y. Clock-calendar.....	Oct. 14, 1873	206	69	4	406
143, 619	Same..... Double-stop movement for watches.....	Oct. 14, 1873	207	70	4	406
144, 084	Same..... Manufacture of music-box cylinders.....	Oct. 28, 1873	637	216	4	462
144, 270	Same..... Watch.....	Nov. 4, 1873	85	28	4	485
140, 492	Frankfoder, D., assignor to self and G. W. Staley, Wakarusa, Ind. Bed-bottom.....	July 1, 1873	126	44	4	18
135, 792	Franklin, G., Philadelphia, Pa. Car-spring.....	Feb. 11, 1873	376	120 121	3	169
138, 625	Franklin, G. E., Natick, Mass. Surfacing-plane.....	May 6, 1873	138	45	3	509
138, 081	Franklin, W. G., Shelbina, Mo. Gate-hinge.....	Apr. 22, 1873	744	236	3	451
141, 214	Frantze, P. J., M. Tillesen, and J. A. Gregersen, Chicago, Ill. Machine for cutting balusters.....	July 29, 1873	822	268	4	111
6, 757	Frary, J. D., New Britain, Conn. Table-cutlery..... (Design)	July 8, 1873	.....	.....	4	36
7, 002	Same..... Knife-handle..... (Design)	Nov. 25, 1873	.....	.....	4	558
7, 078	Same..... Handle for table-cutlery..... (Design)	Dec. 30, 1873	.....	.....	4	698
	Frary, H. H. (See Nichols, C. W., assignor.)					
141, 343	Fraser, A., Virginia City, Nev. Steam-engine.....	July 29, 1873	945	307	4	121
141, 552	Fraser, A. J., Toledo, Ohio. Machine for bending shafts.....	Aug. 5, 1873	123	39	4	145
145, 342	Fraser, J. D., Pictou, Canada. Vibrating propeller for vessels.....	Dec. 9, 1873	277	93	4	620
135, 269	Frazier, J. N., Elmer, N. J. Pump-handle.....	Jan. 28, 1873	728	233	3	106
142, 907	Frazier, K., Syracuse, N. Y. Buckle for harness.....	Sept. 16, 1873	519	177	4	306
143, 339	Frazier, E., Camden County, N. J. Smoke-stack for locomotive-engines.....	Sept. 30, 1873	890	305	4	363
139, 665	Frazier, C. E., Baltimore, Md. Feed-water heater.....	June 10, 1873	207	67	3	642
	Frazier, T. J. (See Lamb & Frazier.)					
137, 193	Frear, G. A., assignor of one-half interest to C. Holland, Chicago, Ill. Process and implements for expelling air from the composition from which artificial stone is molded.....	Mar. 25, 1873	768	254	3	336
145, 411	Frearson, J., Birmingham, England. Screw.....	Dec. 9, 1873	334	112	4	624
141, 782	Frederici, C., assignor of one-half interest to E. B. Grant, New York, N. Y. Ornamental window-glass.....	Aug. 12, 1873	342	112	4	171
	Frederick, B. F. (See Scholfield, I., assignor.)					
145, 165	Frederick, H., Butler, Pa. Axle for vehicles.....	Dec. 2, 1873	117	38	4	594
5, 558	Fredericks, C. A., Brooklyn, N. Y. Speaking-tube..... (Reissue)	Oct. 7, 1873	144	48	4	392
135, 421	Same..... same.....	Feb. 4, 1873	26	8	3	129
141, 871	Freed, D., Philadelphia, Pa. Screw-propeller.....	Aug. 19, 1873	437	143	4	187
136, 050	Freed, W. H., assignor of one-half interest to D. M. McKnight, Sioux City, Iowa. Washing-machine.....	Feb. 18, 1873	607	200	3	201
	Freeman & Co. (See J. J. Freeman, assignor.)					
143, 568	Freeman, C., Brewster, Mass. Stay for ships' sails.....	Oct. 14, 1873	160	54	4	402
135, 793	Freeman, E. A., Moscow, Pa. Razor.....	Feb. 11, 1873	377	121	3	169
138, 745	Freeman, H., Petroleum Centre, Pa. Button and stud attachment.....	May 13, 1873	260	81	3	528
134, 878	Freeman, H. M., J. Lowe, and J. F. Stevens, Lathrop, Mo. Wheel-plow.....	Jan. 14, 1873	353	112	3	48
136, 051	Freeman, H. O., Sherburne, N. Y., assignor to H. D. Gardner, North Marksfield, Mass. Process for making cheese.....	Feb. 18, 1873	608	.....	3	201
	Freeman, J. (See Tallbonis & Renevey, assignors.)					
141, 553	Freeman, J. D., assignor to self and J. Gillespie, Abbeville, Ala. Ice-shaving machine.....	Aug. 5, 1873	124	39	4	145
136, 594	Freeman, J. J., assignor to Freeman & Co., Attleborough, Mass. Link for ornamental chains.....	Mar. 11, 1873	231	78	3	273
144, 754	Freeman, S. B., Fort Wayne, Ind. Bed-bottom.....	Nov. 18, 1873	507	172	4	542
	Freeman, W. A. (See Jones, J., assignor.)					
	Same..... (See Quimby, A. F., assignor.)					
135, 328	Freeman, W. A., Jr., Newark, N. J. Sad-iron.....	Jan. 28, 1873	779	252	3	110
136, 430	Freimuth, H., and A. Büttner, Aachen, Prussia. Machine for grooving sewing-machine needles.....	Mar. 4, 1873	64	23	3	250
145, 793	Frémaux, L. J., New Orleans, La. Piano and organ attachment.....	Dec. 23, 1873	687	225	4	677
142, 386	French, C. A., Davenport, Iowa. Piano-truck.....	Sept. 2, 1873	60	20	4	247
145, 058	French, C. G., Springfield, Ill. Dental forceps.....	Dec. 2, 1873	17	6	4	587
145, 291	French, D. B., Grafton, Vt. Wheel for vehicles.....	Dec. 9, 1873	231	78	4	616
138, 324	French, E. F., New York, N. Y. Binding for sewing-machine covers.....	Apr. 29, 1873	989	311	3	479
135, 107	French, E. S., assignor to F. S. Coolidge, Westminster, Mass. Clothes-drier.....	Jan. 21, 1873	562	183	3	80

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139, 241	French, J. C., Chicago, Ill. Vault-cover.....	May 27, 1873	722	228	3	587
144, 271	French, J. S., Alexandria, Va. Locomotive.....	Nov. 4, 1873	85	28	4	485
	French, J. W., et al. (See Ross & Miller, assignors.)					
	French, J. W., et al. (See Ross, J. G., assignor.)					
145, 561	French, R., Seymour, Conn. Machine for making ox-shoes.....	Dec. 16, 1873	479	157	4	648
138, 877	French, S., and R. D. Chase, Orange, Mass. Copy-holder.....	May 13, 1873	376	117	3	538
	French, W. H. (See Dreyer, B., assignor.)					
	Freier, O. H. (See Adams, J., assignor.)					
134, 595	Frerichs, W. C. A., Tottenville, N. Y. Snow-ram for railways.....	Jan. 7, 1873	90	28	3	14
	Freund, A. (See Hinden, M. J., assignor.)					
139, 139	Frey, F. E., assignor to Frey, Sheckler & Co., Bucyrus, Ohio. Saw-sharpening machine.	May 20, 1873	615	192	3	571
138, 628	Frey, J. A., Jersey City, N. J. Soldering-furnace.....	May 6, 1873	139	45	3	509
	Frey, Sheckler & Co. (See Frey, F. E., assignor.)					
138, 325	Frick, A. O., Waynesborough, Pa. Balanced slide-valve.....	Apr. 29, 1873	909	311	3	479
136, 231	Friday, R., Crockett, Tex. Seed-planter.....	Feb. 25, 1873	776	251	3	226
135, 422	Fridley, J., jr., Carlisle, Pa. Hot-air furnace.....	Feb. 4, 1873	27	8	3	129
	Friedman, N., et al. (See Hoffman, A. D., assignor.)					
	Friedrich, J. (See Kent, A., assignor.)					
139, 140	Friel, W., San Francisco, Cal. Lamp-heater.....	May 20, 1873	617	193	3	571
144, 755	Friest, J. F., Chillicothe, Mo. Churn.....	Nov. 12, 1873	507	172	4	542
142, 908	Frink, C. L., Rockville, Conn. Rubber compound for the manufacture of packing, &c.	Sept. 16, 1873	520		4	307
	Frink, E. O. (See Smith & Frink.)					
	Frink, M. S. (See Manning, I., assignor.)					
140, 357	Frisbee, G., Pottsville, Pa. Guide and core-barrel for revolving rock-drills.....	July 1, 1873	20	7	4	9
6, 619	Frisbie, R., assignor to the J. and E. Stevens Company, Cromwell, Conn. Toy savings-bank (Design).....	Apr. 29, 1873			3	471
	Same..... Toy money-box.....	July 1, 1873	21	7	4	10
140, 358	Frischia, F. A., Brooklyn, N. Y. Food or sauce.....	Dec. 16, 1873	480		4	648
145, 641	Fritsch, J. W., Cincinnati, Ohio. Coupling for tubular lightning-rods.....	Dec. 16, 1873	546	179	4	654
138, 493	Fritts, C. E., assignor to J. S. Fritts, Oneonta, N. Y. Curtain-fixture.....	May 6, 1873	21	8	3	499
	Fritts, J. S. (See Fritts, C. E., assignor.)					
	Fritz, G. (See Fritz, J. and G.)..... (Extension.)					
145, 156	Fritz, G., deceased, by J. Fritz, J. McMiller, and W. R. Tucker, executors, Johnstown, Pa. Process of utilizing old railway-rails.....	Dec. 2, 1873	118	39	4	595
	Fritz, J., executor. (See Fritz, G.)					
	Fritz, J., Bethlehem, and G. Fritz, Johnstown, Pa. Rolling-mill..... (Extension.)	Sept. 27, 1873			4	321
139, 566	Fritz, J., and W. C. Pooley, Memphis, Tenn. Machine for introducing water and gas pipes.....	June 3, 1873	105	35	3	617
	Fritzche, C. O. H. (See Macdonald & Fritzche.)					
140, 359	Frizell, C., Boston, Mass. Step-ladder.....	July 1, 1873	22	7	4	10
140, 578	Same..... same.....	July 8, 1873	217	72	4	37
145, 642	Frontier, P., and A. Bellemere, San Francisco, Cal. Watch-chain.....	Dec. 16, 1873	548	180	4	654
145, 859	Froshang, J. O., Albert Lea, Minn. Coloring and preserving wood to imitate slate.....	Dec. 23, 1873	743		4	682
	Frost, A. H. (See Ames & Frost.)					
	Frost, A. H., et al. (See Moody, W. F., assignor.)					
137, 209	Frost, E. W., Brooklyn, N. Y. Rubber eraser.....	Apr. 1, 1873	18	6	3	358
	Frost, G. (See Dobson, R. F., assignor.)					
140, 026	Frost, J. B., Jackson, Mich. Fastener for sashes and doors.....	June 17, 1873	537	170	3	675
143, 620	Frost, L. C., Fredericksburgh, Va. Plow.....	Oct. 14, 1873	208	70	4	406
137, 356	Frost, R. W., New York, N. Y. Wardrobe-bedstead.....	Apr. 1, 1873	72	23	3	363
136, 232	Frost, T., Piermont, N. Y. Sash fastener and tightener.....	Feb. 25, 1873	777	251	3	226
	Fry, H. R. (See Wagner & Fry.)					
145, 794	Fry, J. W., Panama, Colombia. Nipper for twisting wire.....	Dec. 23, 1873	688	226	4	677
144, 328	Fry, M. W., Guyandotte, W. Va. Removing acids from leather.....	Nov. 4, 1873	129		4	489
145, 343	Fry, W. T., Brooklyn, N. Y. Combined shutter and window fastener.....	Dec. 9, 1873	278	93	4	620
136, 052	Frye, J., Brooklyn, N. Y. Endless rolling-gear for railways.....	Feb. 18, 1873	609	200	3	201
136, 053	Same..... Wheel for endless railways.....	Feb. 18, 1873	610	200	3	201
136, 054	Same..... Platform-carrier for endless railways.....	Feb. 18, 1873	611	200	3	201
135, 794	Fryer, R. M., Nashville, Tenn., assignor of one-half interest to G. W. Saulpaw. Cut-off and reversing valve-gear for engines.....	Feb. 11, 1873	377	121	3	169
135, 795	Same..... Valve-gear and connection for steam and other engines.....	Feb. 11, 1873	378	122	3	169
135, 796	Same..... Valve-gear for engines.....	Feb. 11, 1873	379	122	3	169
	Fryer, W. J., jr. (See Johnson, G. H., assignor.)					
141, 215	Fryer, W. J., jr., and G. H. Johnson, said Johnson assignor to said Fryer, New York, N. Y. Fire-proof Mansard roofs.....	July 29, 1873	822	269	4	111
	Fuchs, J. (See Boeklen, R., assignor.)					
140, 493	Fulghum, J. P., and L. L. Lawrence, assignors to Wayne Agricultural Company, Dublin, Ind. Corn-planter.....	July 1, 1873	127	44	4	19
140, 694	Fulghum, J. P., assignor to self and Wayne Agricultural Company, Dublin, Ind. Grass-seed attachment to grain-drills.....	July 8, 1873	315	107	4	45
143, 795	Same..... Grain-drill.....	Dec. 23, 1873	669	226	4	677
	Fulghum, W. (See Garretson & Fulghum.)					
5, 701	Fullam, A. J., Springfield, Vt., assignor to W. Earl, jr., J. G. Blunt, R. T. Smith, and J. K. Priest. Device for shearing sheep..... (Reissue).....	Dec. 24, 1873	815	266	4	687
	Fuller, C. S. (See Burdick & Fuller.)					
144, 329	Fuller, C. S., Oswego, New York. Middlings-purifier.....	Nov. 4, 1873	129	43, 44	4	489
	Fuller, E. P. (See Wells, W., assignor.)					
145, 938	Fuller, G. H., Pawtucket, R. I. Manufacture of catches for jewelers' use.....	Dec. 30, 1873	837	272	4	700
6, 677	Fuller, L. K., assignor to J. Estey & Co., Brattleborough, Vt. Organ-case..... (Design).....	May 27, 1873			3	586
6, 678	Same..... Ends of an organ..... (Design).....	May 27, 1873			3	586
139, 666	Same..... Reed-organ.....	June 10, 1873	207	68	3	642
142, 690	Same..... same.....	Sept. 9, 1873	329	110	4	220
140, 695	Fuller, O. B., Newark, N. J. Dough-machine.....	July 8, 1873	315	107	4	45
144, 666	Same..... Machine for sheeting dough.....	Nov. 18, 1873	431	146	4	536
141, 216	Fuller, S. B., Lynn, Mass. Die for molding shoe-soles.....	July 29, 1873	823	269	4	111
144, 527	Fuller, W. M., New York, N. Y. Steam-beater.....	Nov. 11, 1873	307	103	4	515
145, 167	Same..... same.....	Dec. 2, 1873	118	39	4	595
	Fullerton, J. M., et al. (See Moody, B. D., assignor.)					
135, 108	Fullgraff, L. A., New York, N. Y. Packing-box.....	Jan. 21, 1873	562	183	3	81
137, 357	Fulton, J. G., Toledo, Ohio. Feeder and filter for boilers.....	Apr. 1, 1873	73	24	3	363
142, 784	Fulton, J. R., West Mahoning Township, Pa. Stove-pipe thimble.....	Sept. 16, 1873	422	142	4	292
135, 216	Funck, S., Quincy, Ill. Wood-sawing machine.....	Jan. 28, 1873	678	219	3	102
140, 408	Fuqua, A., Woodville, Ky. Medical compound.....	July 1, 1873	58		4	13
141, 709	Fuqua, A. W., Sandford, Ind. Churn.....	Aug. 12, 1873	274	89	4	165

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146, 059	Furbush, C. A. (See Furbush, M. A., assignor.) Furbush, M. A., assignor to self and C. A. Furbush, Philadelphia, Pa. Spindle-whorl for spinning-machines.	Dec. 30, 1873	943	304	4	708
144, 611	Furlong, E. P., Springfield, Mass. Collar and cuff.	Nov. 14, 1873	357	130	4	533
138, 627	Furness, J. C., Boston, Mass. Metallic packing for piston-rods, &c.	May 6, 1873	139	45	3	509
144, 667	Furr, A. J., and W. C. Knaus, Boonsborough, Mo. Shaving-mug.	Nov. 18, 1873	432	146	4	536
140, 409	Fyfe, R., New York, N. Y. Rotary hog-scraper.	July 1, 1873	58	21	4	13
142, 623	Gabel, J. H. (See Fowlds, T., jr., assignor.) Gable, P., Elizabeth, Ill. Sled-brake.	Sept. 9, 1873	274	90	4	276
136, 499	Gaches, J. H., Atlanta, Ga. Combined putty-knife and sprig-box.	Mar. 4, 1873	128	41	3	256
144, 668	Gaddy, N. W., Nichols, S. C. Cotton-gin.	Nov. 18, 1873	432	146	4	536
137, 431	Gaffey, W., Philadelphia, Pa. Velocipede.	Apr. 1, 1873	136	44	3	368
137, 133	Gafney, M., Newark, N. J. Core for casting stench-traps.	Mar. 25, 1873	711	236	3	332
138, 628	Gage, D. H., Dover, N. H. Pug-mill.	May 6, 1873	140	46	3	509
146, 060	Gage, E. C., Witoka, Minn. Corn-planter.	Dec. 30, 1873	944	304	4	708
138, 629	Gaggin, R., Erie, Pa. Deodorizing oils obtained from acid-tar of oil-refineries.	May 6, 1873	142	.....	3	509
137, 542	Gahn, H., Upsala, Sweden. Medical compound.	Apr. 8, 1873	247	.....	3	388
5, 706	Gahren, C., assignor to M. Cohn, New York, N. Y. Take-up for looms. (Reissue).	Dec. 23, 1873	221	267	4	688
144, 756	Gahren, C., New York, N. Y. Take-up mechanism for looms.	Nov. 18, 1873	508	172	4	542
138, 391	Gahren, C., and L. Langlotz, assignors to M. Cohn, New York, N. Y. Let-off mechanism for looms.	Apr. 29, 1873	1,040	323	3	483
136, 910	Gaillard, T., Brooklyn, N. Y. Turn-buckle.	Mar. 18, 1873	505	187	3	304
136, 987	Gaines, L. J., assignor to C. Parker, West Meriden, Conn. Cartridge-holder.	Mar. 18, 1873	570	190	3	309
140, 027	Gaisberg, F., New York, N. Y. Spittoon.	June 17, 1873	538	170	3	675
140, 028	Galand, C. F., Paris, France. Frame and stock for revolving fire-arms.	June 17, 1873	538	170	3	676
139, 054	Gale, D. T., Fort Wayne, Ind. Nut and coffee roaster.	May 30, 1873	532	168	3	564
140, 131	Gale, J. A., West Medway, Mass. Car-coupling.	June 24, 1873	653	205	3	693
	Gale, L. D., Washington, D. C. Apparatus for the manufacture of gas. (Extension).	Nov. 8, 1873	.....	.....	4	504
	Same. Manufacture of gas. (Extension).	Nov. 8, 1873	.....	.....	4	504
140, 029	Gale, M. F., New York, N. Y. Vapor-burner.	June 17, 1873	539	171	3	676
140, 930	Same. Same.	June 17, 1873	540	171	3	676
135, 109	Gallager, M. L., Savannah, Ga. Automatic dental-drill.	Jan. 21, 1873	563	183	3	81
137, 066	Gallagher, B., Saint John, Canada, and J. Coyle, Belfast, Great Britain. Sole-trimming machine.	Mar. 25, 1873	652	216	3	327
137, 432	Gallagher, B., Saint John, Canada. Ratchet-drill.	Apr. 1, 1873	137	45	3	368
136, 988	Gallagher, C. H., Gloucester, Mass. Lizard for sails.	Mar. 18, 1873	570	190	3	309
143, 005	Gallagher, D., Cincinnati, Ohio. Core-bar for casting.	Sept. 23, 1873	610	207	4	324
	Gallagher, J., et al. (See Lee, J., assignor.) Same. (See Smith & Lee, assignors.)					
144, 085	Gallagher, J. M., Carthage, N. Y. Composition for preserving dead bodies.	Oct. 28, 1873	657	.....	4	462
141, 131	Gallagher, J. P., Saint Louis, Mo. Fire-plug.	July 22, 1873	726	241	4	95
139, 711	Gallet, J. G., Saint Augustine, Ill. Traction-wheel.	June 10, 1873	255	80	3	645
144, 450	Galloway, J., New York, N. Y. Type-writing machine.	Nov. 11, 1873	241	81, 82	4	509
5, 492	Gallup, W. H., Troy, N. Y. Dress-facing. (Reissue).	July 15, 1873	595	200	4	76
138, 326	Same. Dress-facing.	Apr. 29, 1873	990	311	3	479
135, 423	Gally, M., Rochester, N. Y. Governor.	Feb. 4, 1873	28	8	3	130
136, 369	Same. Printing-telegraphs.	Mar. 4, 1873	14	5, 6	3	246
138, 241	Same. Machine for distributing type.	Apr. 29, 1873	905	285	3	473
143, 340	Same. Circuit-closer and circuit for multiplex or interval telegraphs.	Sept. 30, 1873	691	305	4	363
143, 341	Same. Multiplex or interval telegraphs.	Sept. 30, 1873	694	305, 306	4	363
138, 746	Galpin, T. D., et al. (See Dawson, A. and H. T., assignors.) Galt, T., Rock Island, Ill. Child's carriage.	May 13, 1873	260	81	3	528
143, 818	Same. Same.	Oct. 21, 1873	406	135	4	431
5, 233	Galt, T. A., and G. S. Tracy, Sterling, Ill. Stalk-cutter. (Reissue).	Jan. 14, 1873	434	138	3	54
140, 031	Same. Corn-planter.	June 17, 1873	540	171	3	676
141, 872	Galway, Semple & Co. (See Semple, W. G., assignor.) (Design.) Gamber, J., Petersburg, Pa. Ballot box.	Aug. 19, 1873	438	143	4	188
138, 878	Gammel, C., Utica, N. Y. Curtain-cord fastener.	May 13, 1873	377	118	3	538
139, 567	Same. Spring bed-bottom.	June 3, 1873	107	36	3	617
136, 500	Ganong, L. M., Friar's Point, Miss. Cultivator.	Mar. 4, 1873	128	41	3	256
139, 950	Garaud, J., New York, N. Y. Hunting-jacket.	June 17, 1873	475	149	3	670
135, 641	Garcia, J. E., New York, N. Y. Rotary sail.	Feb. 11, 1873	242	76	3	159
145, 796	Gard, W. J., Winona, Minn. Scrubbing-machine.	Dec. 23, 1873	690	226	4	677
142, 909	Gardewine, G. H., Nokomis, Ill. Chimney-cowl.	Sept. 16, 1873	521	177	4	307
134, 743	Gardiner, P. G., New York, N. Y. Railway-car truck.	Jan. 14, 1873	236	76	3	39
144, 201	Same. Volute spring.	Nov. 4, 1873	26	8	4	480
	Gardiner, S., jr. (See Mott & Gardiner.) Gardner, A. (See Simpson & Gardner.)					
145, 860	Gardner, A. P., Moscow, Pa. Fermentation-guard for barrels, &c.	Dec. 23, 1873	743	243	4	682
137, 671	Gardner, C. A., and J. A. Enoe, Peabody, Mass. Carrier's tool.	Apr. 8, 1873	358	111	3	397
	Gardner, D. P. (See Bliss, F. D., assignor.) Gardner, D. P., et al. (See Hammond, J. E., assignor.) Gardner, E., et al. (See Moore, S., assignor.) Gardner, E. M. (See Cox, C. A., assignor.) Gardner, G., et al. (See Gardner, W., assignor.)					
142, 624	Gardner, G., Glen Gardner, N. J., assignor of two-thirds interest to O. L. and W. Gardner. Chair seat and back.	Sept. 9, 1873	274	90	4	276
142, 625	Gardner, G., Glen Gardner, N. J., assignor of one-half interest to O. L. Gardner. Chair-frame.	Sept. 9, 1873	275	90	4	276
	Gardner, G. A. (See Quick & Gardner.) Gardner, G. W., Troy, N. Y. Molding covers for cooking-stoves. (Extension). Gardner, H. D. (See Freeman, H. O., assignor.) Gardner, H. W. (See Baker, A. E., assignor.) Gardner, I., 2d. (See Haynes, C. E., assignor.)					
140, 696	Gardner, O., New York Mills, N. Y. Meat-chopper.	July 8, 1873	316	107	4	45
	Gardner, O. L. (See Gardner, W., assignor.) Gardner, O. L., et al. (See Gardner, W., assignor.)					
139, 055	Gardner, R. W., Quincy, Ill. Governor.	May 20, 1873	533	169	3	564
142, 846	Same. Governor for steam-engines.	Sept. 16, 1873	471	159	4	302
144, 330	Gardner, S., New York, N. Y. Ore-pulverizer.	Nov. 4, 1873	360	44	4	489
134, 657	Gardner, T. W., assignor of one-half interest to H. J. Keeler, Terre Haute, Ind. Lamp-burner.	Jan. 7, 1873	148	47	3	18
	Gardner, W. (See Gardner, G., assignor.)					

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139, 568	Gardner, W., assignor of two-thirds interest to O. L. and G. Gardner, Glen Gardner, N. J. Chair	June 3, 1873	107	36	3	617
142, 925	Garfield, C. L., Albany, N. Y. Revolving chimney-top	Aug. 26, 1873	757	249	4	233
140, 410	Garland, J. G., Biddeford, Me. Apparatus for moistening the atmosphere	July 1, 1873	59	21	4	13
136, 989	Garlington, J. E., Chambers Court-House, Ala. Portable fence	Mar. 18, 1873	571	190	3	309
140, 691	Garlington, J. L., Snapping Shoals, Ga. Fire-place	July 8, 1873	255	86	4	40
135, 704	Garlington, T. C., La Fayette, Ala. Seed-planter	Feb. 11, 1873	300	95	3	163
135, 472	Garlock, D. G., White Cloud, Kans. Harness-maker's gage	Feb. 4, 1873	73	23	3	133
	Garlock, J. (See Bartle & Garlock.)					
	Garman, S. J. (See Wishart, T., assignor.)					
	Garner, H. B. (See Gish, D. J., assignor.)					
139, 569	Garnham, A., Saint Louis, Mo. Device for removing sand-bars in rivers	June 3, 1873	108	36	3	618
142, 331	Garnhart, J. H., Madison, Wis. Binder's attachment for harvesters	Sept. 2, 1873	8	3	4	243
143, 505	Same	Oct. 7, 1873	90	31	4	388
145, 344	Same	Dec. 9, 1873	278	93	4	620
140, 770	Garnsey, J. C., New York, N. Y. Urinal	July 15, 1873	381	131	4	59
5, 328	Garratt, A. C., Boston, Mass. Railway-switch	Mar. 18, 1873	627	207	3	314
138, 630	Garratt, W. T., San Francisco, Cal. Lubricator (Release)	May 6, 1873	143	46	3	509
143, 233	Garretson, E. K., and W. Fulghum, Winchester, Ind. Bed-bottom	Sept. 30, 1873	800	276	4	356
145, 797	Garretson, J. C., Marshland, N. Y. Wheel for vehicles	Dec. 23, 1873	691	226	4	677
140, 061	Garretson, O. S., Buffalo, N. Y. Blind-hinge	Dec. 30, 1873	945	304	4	708
	Garrett, J. M., Brenham, Tex. Cotton-chopper					
	Garrison, H. W. (See Wall, W. H., assignor.)					
	Garrison, J., et al. (See Clifford, W. P., assignor.)					
	Garrison, L., et al. (See Clifford, W. P., assignor.)					
6, 742	Garrison, S., Baltimore, Md. Picture-frame molding (Design)	July 1, 1873			4	8
137, 672	Garsed, G. L., Wilmington, Del. Beam and roller for looms	Apr. 8, 1873	359	111	3	397
134, 435	Garsed, R., Philadelphia, Pa. Spindle and bobbin for spinning-frames	Jan. 7, 1873	30	10	3	9
143, 006	Garsed, R. P., Norristown, and J. D. Buck, Philadelphia, Pa., said Buck assignor to said Garsed. Feed and blow-off for steam-boilers	Sept. 23, 1873	610	207	4	324
134, 986	Garside, J. E., Hennepin, Ill. Hand-seeder	Jan. 21, 1873	459	147	3	72
136, 501	Gartenmann, A., New York, N. Y. Loom-shuttle motion	Mar. 4, 1873	129	42	3	256
	Garvin, H. R. (See Smith, J. D., assignor.)					
142, 332	Gascoigne, J., Rochester, N. Y. Insole for boots and shoes	Sept. 2, 1873	10	4	4	243
137, 771	Gash, G. W., and C. L. Owens, Clinton, Ill. Corn-husking thimble	Apr. 15, 1873	460	144	3	419
144, 973	Gaskell, J., Bridgeport, assignor to Colt's Patent Fire-arm Manufacturing Company, Hartford, Conn. Safety appliance for governors	Nov. 25, 1873	698	235	4	569
136, 148	Gaskill, H. C., Mount Holly, N. J., assignor to Hay & Co., Philadelphia, Pa. Fruit-jar	Feb. 25, 1873	714	230	3	221
144, 974	Gaspary, F. R., Berlin, Prussia. Needle-threader	Nov. 25, 1873	698	236	4	569
137, 673	Gaston, H. A., San José, Cal. Spring-mattress	Apr. 8, 1873	360	112	3	398
	Gately, D. C., Newtown, Conn. Making rubber-belt (Extension)	Nov. 22, 1873			4	531
	Same.....Rubber-belt (Extension)	Nov. 22, 1873			4	531
140, 494	Same.....Plate for vulcanizing belting, hose, &c	July 1, 1873	129	44	4	19
141, 433	Gately, D. C., Newton, Conn., and J. B. Forsyth, Boston, Mass. Apparatus for the manufacture of vulcanized rubber-belt	Aug. 5, 1873	20	6	4	136
135, 902	Gates, A., Burnside, Ill. Scaffold	Feb. 18, 1873	485	157	3	191
135, 705	Gates, J., Saint Louis, Mo. Bridge	Feb. 11, 1873	300	95	3	163
138, 243	Gates, J., Portland, Oreg. Lubricator	Apr. 29, 1873	907	286	3	473
	Gates, J. H. (See Kilburn, C., assignor.)					
136, 431	Gates, J. P., Red River County, Texas. Lever for presses	Mar. 4, 1873	67	24	3	251
136, 911	Gates, L., Pleasant Hill, Mo. Moth-trap for bee-hives	Mar. 18, 1873	506	167	3	304
138, 747	Gates, L., Mount Vernon, Ohio. Portable fence	May 13, 1873	261	81	3	528
144, 897	Gates, O., Columbus, Ohio. Reversible center-pinion for watches	Nov. 25, 1873	635	216	4	564
138, 242	Gates, S. F., Cambridge, Mass. Car-axle box	Apr. 29, 1873	906	286	3	473
	Gates, W. (See Caple & Gates.)					
	Gates, W., et al. (See Haver, W. W., assignor.)					
144, 898	Gathmann, L., Chicago, Ill. Blind-hinge	Nov. 25, 1873	636	216	4	564
136, 370	Gathright, J. B., Louisville, Ky. Harvester-dropper	Mar. 4, 1873	18	6	3	247
145, 292	Same.....Machine for punching, splitting, and creasing brilles	Dec. 9, 1873	252	78	4	616
145, 563	Gatling, R. J., Hartford, Conn. Traversing mechanism for machine guns	Dec. 16, 1873	481	157	4	648
139, 056	Gatty, F. A., Accrington, England. Dyeing madder colors	May 20, 1873	535		3	564
141, 132	Gauduin, O., J. B. J. Mignon, and S. H. Rouart, Paris, France. Coating metals with copper	July 22, 1873	727		4	95
134, 658	Gault, G. E., and A. W. Winall, assignors to Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer	Jan. 7, 1873	149	47	3	18
	Gault, T. B., et al. (See Snyder, J. H., assignor.)					
139, 780	Gaunt, J. F., assignor of one-half interest to E. B. Knott, Newark, N. J. Conductor's check-box	June 10, 1873	322	100	3	650
143, 069	Gaver, C. P., Ashland, Ky. Barge-pump	Sept. 23, 1873	664	228	4	328
146, 697	Gay, A. E., Nashua, N. H. Glass piston and packing for pumps	July 8, 1873	316	107	4	45
	Gay, J. (See Kerr, H. S., assignor.) (Design)					
	Same.....(See Knight, H., assignor.) (Design)					
	Same.....(See Righter, C., assignor.) (Design)					
135, 270	Gaylord, E. L., Bridgeport, Conn. Lock for sewing-machines	Jan. 28, 1873	728	233	3	106
	Gaylord Manufacturing Company. (See Payne, S. F., assignor.)					
139, 309	Gazley, J. F., Canyonville, Oreg. Harrow	May 27, 1873	784	249	3	592
135, 642	Gear, A. S., Boston, Mass. Machine for cutting stone	Feb. 11, 1873	243	77	3	159
136, 432	Same.....Machine for turning stone	Mar. 4, 1873	68	24	3	251
142, 096	Same.....Stone-channeling machine	Aug. 26, 1873	651	214	4	214
137, 067	Same.....Stone-channeling machine		653	216	3	328
	Gearhart, C. H., Farmer City, Ill. Car-coupling					
	Gearhart, J. R. (See McKimm & Gearhart.)					
140, 264	Gearing, C., assignor of four-eighths interests to G. M. Irwin, C. Walters, and N. Milligan, Pittsburgh, and S. B. Row, Clearfield, Pa. Manufacture of illuminating gas	June 24, 1873	762	{ 240 241	3	702
143, 688	Gebhard, J. B., and C. G. Schwarz, Philadelphia, Pa. Heel for boots, &c	Oct. 14, 1873	269	89	4	410
	Gebhardt, C., jr. (See Wirtz & Gebhardt.)					
135, 963	Gecmen, J., New York, N. Y. Medical compound or rheumatic ointment	Feb. 18, 1873	549		3	196
137, 194	Same.....Kiln for drying malt, &c	Mar. 25, 1873	769	254	3	336
134, 879	Geddes, W. B., Rochester, N. Y. Hot-air furnace	Jan. 14, 1873	354	{ 112 113	3	48
140, 360	Geddes, A., New York, N. Y. Smoking-tube	July 1, 1873	22	7	4	10
141, 640	Gee, M., Oakland, Cal. Fastener for the meeting-rails of sahes	Aug. 12, 1873	217	69	4	100
134, 880	Gee, W., New York, N. Y. Sirup-device for soda-fountains	Jan. 14, 1873	355	113	3	49
137, 195	Same.....Dispensing apparatus for soda-water	Mar. 25, 1873	770	254	3	336
138, 143	Same.....Soda-water and sirup cock	Apr. 22, 1873	793	253	3	455
141, 133	Same.....Cooler for soda-water, &c	July 22, 1873	727	241	4	96
143, 689	Same.....Cooling-coil for liquids	Oct. 14, 1873	270	89	4	411

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144,086	Gee, W., New York, N. Y. Apparatus for dispensing soda and mineral waters.....	Oct. 28, 1873	658	217	4	462
142, 158	Geer, D. L., Lake City, Fla. Rice-cleaner.....	Aug. 26, 1873	703	232	4	219
136, 371	Geer, G., Plainville, Conn. Door-spring.....	Mar. 4, 1873	19	7	3	247
	Gebring, J. D. (See Lehman, D. A., assignor.)					
142, 847	Geiger, C., Philadelphia, Pa. Street-sweeper.....	Sept. 16, 1873	472	160	4	302
142, 012	Geiger, G. L., Philadelphia, Pa. Till-alarm.....	Aug. 19, 1873	351	182	4	197
141, 783	Geiser, P., Waynesborough, Pa. Thrashing-machine.....	Aug. 12, 1873	342	113	4	171
143, 897	Geisinger, N. A., Coopersburgh, Pa. Bag-holder.....	Oct. 21, 1873	472	158	4	437
141, 784	Geisler, K., assignor to self and J. Lertora, New York, N. Y. Folding-chair.....	Aug. 12, 1873	343	113	4	171
	Geller, C. C. (See Shepard, G. L., assignor.)					
137, 909	Genise, C., Fonilloy, assignor to G. P. Lanier, Paris, France. Bed-bottom.....	Apr. 15, 1873	577	181	3	426
143, 342	Gentry, J. J., and J. E. Collett, Corinth, Miss. Swinging-gate.....	Sept. 30, 1873	900	306	4	364
	George, C. P. (See George, R. W., assignor.)					
136, 149	George, E. M., Three Rivers, Mich. Adjustably hinged gate.....	Feb. 25, 1873	714	231	3	261
137, 358	George, J. S., and W. Houghtaling, Bridgeport, Conn. Machine for cutting cam-grooves.....	Apr. 1, 1873	74	24	3	363
135, 903	George, R. W., Boston, Mass. Machine for jointing staves.....	Feb. 18, 1873	486	157	3	191
139, 242	George, R. W., assignor to C. P. George, Boston, Mass. Machine for jointing and planing staves.....	May 27, 1873	723	228	3	587
	George, W. (See Moore, George & Holley.)					
139, 000	George, W., and W. F. Durfee, Philadelphia, Pa. Machinery for rolling metal.....	May 20, 1873	487	154	3	561
	George, W. E. (See Brown, D., assignor.)					
141, 502	Geraghty, J., Jersey City, N. J. Terret and martingale ring.....	Aug. 5, 1873	83	26	4	142
143, 070	Gerard, J. N., New York, N. Y. Atomizer or vaporizer.....	Sept. 23, 1873	664	228	4	328
137, 772	Gerau, G. W., Brooklyn, N. Y. Awning.....	Apr. 15, 1873	461	144	3	419
5, 669	Gerdea, F. W., Allegheny City, Pa. Manufacture of paints. (Reissue.)	Nov. 25, 1873	762		4	575
	Gerhard, D. (See Ahrens & Gerhard.)					
137, 359	Gerhard, S., Camden, N. J. Propelling vessels.....	Apr. 1, 1873	74	24	3	363
136, 502	Gerhardt, C. C., Wyandotte, Kans. Car-ventilator.....	Mar. 4, 1873	130	42	3	256
135, 110	Gerike, H., Berlin, Prussia, assignor to B. Harrass, Böhlen, Germany. Device for making cigarettes.....	Jan. 21, 1873	564	183	3	81
	Gerkhardt, W. (See Eltonhead, G. W., assignor.)					
	Germain, C. (See Dodge, H., assignor.)					
143, 008	Gerner, H., New York, N. Y. Steam-engine cylinder.....	Sept. 23, 1873	612	208	4	324
143, 009	Same..... Fly-wheel.....	Sept. 23, 1873	613	208	4	324
143, 007	Gerner, R., New York, N. Y. Steam-generator.....	Sept. 23, 1873	611	208	4	324
135, 706	Gernsey, M., Middlebury, N. Y. Fire-kindler.....	Feb. 11, 1873	302		3	163
134, 436	Gerrish, W. H., Boston, Mass. Reed-organ.....	Jan. 7, 1873	31	10	3	10
137, 433	Gerry, E., Garden City, Minn. Bee-hive.....	Apr. 1, 1873	138	45	3	368
139, 141	Gerry, J. H., Boston, Mass. Music-leaf turner.....	May 20, 1873	618	193	3	571
	Gervis, F. X. (See Spencer, J. C., assignor.)					
142, 387	Getchell, W., Bath, Me. Combined wardrobe, bedstead, chair, and table.....	Sept. 2, 1873	61	20	4	247
140, 032	Getty, G. B., assignor to self, E. Mendenhall, and E. Barton, Bloomsburgh, Pa. Head-block for saw-mills.....	June 17, 1873	541	171	3	676
138, 631	Geysler, J. B., Pittsburgh, Pa. Music-leaf turner.....	May 6, 1873	144	47	3	509
138, 015	Gheen, J. W., Wilmington, Del. Molding-machine.....	Apr. 22, 1873	682	216	3	446
141, 217	Ghirardini, M. L., Providence, R. I. Rail for street railways.....	July 29, 1873	823	269	4	111
	Giant Powder Company. (See Judson, E., assignor.)					
	Giant Powder Company et al. (See Nobel, A., assignor.)					
	Giant Powder Company. (See Nobel, A., assignor.) (Reissue.)					
	Giant Powder Company et al. (See Varney, Y., assignor.)					
145, 100	Gibbins, J., Springfield, Mass. Shaft-coupling.....	Dec. 2, 1873	57	18	4	590
140, 132	Gibbons, R. J., Saint Louis, Mo. Railway-tank feeder.....	June 24, 1873	654	205	3	693
142, 323	Gibbons, S., Freedom, Pa. Steam air-pump and condenser.....	Sept. 2, 1873	10	4	4	243
	Gibbons, W. (See Metcalf & Gibbons.)					
138, 879	Gibbs, A. H., Norwalk, Conn. Slutter worker.....	May 13, 1873	377	118	3	538
145, 644	Gibbs, A. W., Norwich, Conn. Automatic catch for sliding doors.....	Dec. 16, 1873	549	180	4	654
136, 830	Gibbs, G., Canton, Ohio. Brace-drill.....	Mar. 18, 1873	440	146	3	299
139, 463	Gibbs, G. H., Nunda, N. Y. Piston-valve.....	June 3, 1873	18	6	3	610
5, 329	Gibbs, I., Worcester, Mass. Stock for holding cutters in planing-machines. (Reissue.)	Mar. 18, 1873	627	207	3	314
	Gibbs, J. et al. (See Hinman, W. W., assignor.)					
137, 134	Gibbs, J., Opelousas, La. Locomotive spark-arrester.....	Mar. 25, 1873	711	236	3	332
142, 910	Gibbs, J., Fremont, Ohio. Fence-post.....	Sept. 16, 1873	521	177	4	307
5, 421	Gibbs, L., Canton, Ohio, assignor to self, J. R. Bucher, and W. A. Wikidal. Plow. (Reissue.)	May 20, 1873	705	221	3	578
145, 643	Gibbs, L., assignor to self and H. Hudson, Fremont, Ohio. Saw-gunner.....	Dec. 16, 1873	548	180	4	654
137, 910	Gibbs, P. L., Chicago, Ill. Railway-track wrench.....	Apr. 15, 1873	578	181	3	428
146, 062	Same..... Annular leather-washer.....	Dec. 30, 1873	945	305	4	708
139, 381	Gibbs, R., Spring Hill, Mo. Clevis bar and hook.....	May 27, 1873	839	268	3	597
142, 455	Gibbs, R., assignor to self and S. E. Gibbs, Spring Hill, Mo. Tire-upsetting machine.....	Sept. 2, 1873	118	38	4	252
	Gibbs, S. E. (See Gibbs, R., assignor.)					
	Gibbs, Sterrett & Co. (See Van Syckel, S., assignor.)					
134, 659	Gibbs, W. A., Sewardstone, and A. Borwick, London, England. Dryer.....	Jan. 7, 1873	150	{ 48 49 50 }	3	18
140, 495	Giblin, J., Boston, assignor to self and H. K. Hines, East Boston, Mass. Saw-attachment.....	July 1, 1873	130	44	4	19
135, 217	Gibson, C. T., Baltimore, Md. Sash lock.....	Jan. 28, 1873	679	219	3	102
	Gibson, D., et al. (See Lowrie, H. C., assignor.)					
	Gibson, J. (See Beckmann & Gibson.)					
141, 331	Gibson, J. S., Martinsburgh, W. Va. Combined condenser and feed-water apparatus.....	Nov. 4, 1873	131	44	4	489
141, 710	Gibson, S., assignor to H. Young, York, Pa. Rotary steam-engine.....	Aug. 12, 1873	275	90	4	165
	Gibson, S. T. (See Abbott & Gibson.)					
138, 632	Gibson, W. G., Lynchburgh, Ohio. Wash-boiler.....	May 6, 1873	146	47	3	509
139, 570	Gidley, R., Moore's Mill, N. Y. Ore-washer.....	June 3, 1873	109	36	3	618
	Giebrich, K., et al. (See Giebrich, L., assignor.)					
140, 496	Giebrich, L., assignor to K. Giebrich and J. Erbacher, Ottumwa, Iowa. Envelope.....	July 1, 1873	130	45	4	19
143, 136	Giebrich, L., Ottumwa, Iowa. Envelope.....	Sept. 23, 1873	714	245	4	333
136, 315	Giffard, P., Paris, France. Air repeating-gun.....	Feb. 25, 1873	853	274	3	232
136, 316	Same..... Compressed-air defense-stick.....	Feb. 25, 1873	654	275	3	232
138, 633	Giffard, P., Paris, France, assignor to C. J. A. Dick, Pittsburgh, Pa. Packing for pistons and stop-valves.....	May 6, 1873	146	47	3	509
142, 226	Gifford, E. N., assignor to self, T. B. Stevens, and F. A. Brady, Cleveland, Ohio. Car-coupling.....	Aug. 26, 1873	739	250	4	223
136, 717	Gifford, L. C., Monticello, Ill. Harrow.....	Mar. 11, 1873	331	109	3	281
	Gifford, S. J. (See Skinner & Gifford.)					
144, 757	Gigodot, R., Lyons, France. Blast for furnaces of steam-boilers.....	Nov. 18, 1873	509	173	4	543

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142, 456	Gilberda, J., and M. Harris, Jamestown, N. Y. Butter-bucket	Sept. 2, 1873	119	38	4	252
135, 904	Gilbert, C., Buffalo, N. Y. Manufacture of starch	Feb. 18, 1873	486	157	3	191
137, 911	Same..... Apparatus for the manufacture of starch	Apr. 15, 1873	578	182	3	428
137, 912	Same..... Starch-mill	Apr. 15, 1873	579	182	3	428
143, 819	Gilbert, E. E., Montreal, Canada. Slide-valve mechanism	Oct. 21, 1873	406	135	4	431
143, 506	Gilbert, E. M., Knesson, Minn. Fanning-mill	Oct. 7, 1873	91	31, 32	4	388
136, 990	Gilbert, H. C., New London, Conn. Knife-cleaner	Mar. 18, 1873	571	191	3	309
144, 451	Gilbert, O. H., Darien, Wis. Sash-fastener	Nov. 11, 1873	243	82	4	510
138, 880	Gilbert, R., and J. P. Topham, Rochester, N. Y. Supplementary heater for steam fire-engines	May 13, 1873	378	118	3	538
145, 498	Gilbert, S., Portsmouth, N. H. Medical compound or liver-lozenge	Dec. 16, 1873	416		4	643
	Gilbert, T. S. (See De Forest & Gilbert)	(Reissue.)				
141, 134	Gilbert, T. S., Birmingham, Conn. Corset	July 22, 1873	728	{ 241 242 }	4	96
	Gilchrist, L. (See Linthicum, J. F., assignor.)					
	Gildersleeve, C. E. (See Orr & Gildersleeve.)					
136, 831	Gildersleeve, E. B., Wading River, N. Y. Clothes-drier	Mar. 18, 1873	441	146	3	299
	Gildersleeve, J. P., et al. (See Smith, T. S., assignor.)					
145, 939	Giles, F. A., Jersey City, N. J. Watch-barrel	Dec. 30, 1873	838	273	4	700
140, 622	Gillillan, W., Speter, Minn. Horse-power	July 8, 1873	256	86, 87	4	40
143, 234	Gillillan, W., Syracuse, N. Y. Combined door hinge and spring	Sept. 30, 1873	800	276	4	356
135, 905	Gill, C. B., Rochester, N. Y. Pump-piston	Feb. 18, 1873	487	158	3	191
6, 378	Gill, G., assignor to Reed & Barton, Taunton, Mass. Card-receiver	(Design) Feb. 4, 1873			3	127
6, 379	Same..... Cake-basket	(Design) Feb. 4, 1873			3	127
6, 380	Same..... same	(Design) Feb. 4, 1873			3	127
6, 799	Same..... Cake-holder	(Design) Aug. 12, 1873			4	159
6, 802	Same..... Tea-service	(Design) Aug. 12, 1873			4	159
	Gill, J. H. (See Smith & Gill.)					
144, 612	Gill, J. N., Oshkosh, Wis. Carriage-top	Nov. 18, 1873	388	130	4	533
	Gill, R. (See Scott, J., assignor.)					
135, 984	Gillam, J. W. and J. W., jr., Newton, N. J. Car-coupling	Feb. 18, 1873	550	182	3	197
139, 712	Gillepie, C. E., Edwardsville, Ill. Automatic gate	June 10, 1873	256	80	3	645
	Gillepie, J. (See Freeman, J. D., assignor.)					
141, 000	Gillepie, J. E., Norwich, Conn. Rotary pump	July 22, 1873	609	205	4	86
137, 360	Gillepie, J. E., Norwich, and T. Kohn, Hartford, Conn., said Gillepie assignor to said Kohn. Machine for covering cord	Apr. 1, 1873	75	24	3	363
137, 434	Gillepie, J. P., Louisville, Ky. Diamond-pointed drill for dental use	Apr. 1, 1873	139	45	3	362
137, 435	Same..... Machine for cutting grindstones	Apr. 1, 1873	139	46	3	368
141, 344	Gillepie, M., Smith's Ferry, Pa. Reamer for enlarging oil-wells	July 29, 1873	946	307	4	121
	Gillett, G. W. (See Briggs, O. P. and L. W., assignors.)					
	Gillett, W. R. (See Wilson, A. M., assignor.)					
	Gillette, G. W. (See Harris, G. W., assignor.)					
	Same..... (See Prosser & Gillette.)					
144, 528	Gillette, L. D., Meriden, Conn. Fastener for meeting-rails of sashes	Nov. 11, 1873	308	103	4	515
141, 873	Gilliam, A., Pittsburgh, Pa. Coach-pad for harness	Aug. 19, 1873	439	143	4	188
144, 613	Same..... Harness-saddle	Nov. 18, 1873	389	130	4	533
144, 529	Gillott, J., and P. Copley, Barnsley, England. Machine for cutting coal	Nov. 11, 1873	309	104	4	515
	Gilman, C. H., et al. (See Utley, R. G., assignor.)					
	Gilman, E. S. (See Martin, P., assignor.)					
	Gilman, H. (See Curtis, D., assignor.)	(Reissue.)				
	Gilman, H., et al. (See Curtis, D., assignor.)	(Reissue.)				
143, 753	Gilman, S. H., New Orleans, La. Sample-bottle	Oct. 21, 1873	350	117	4	427
143, 754	Same..... Apparatus for refining sugar and sirup	Oct. 21, 1873	350	117	4	427
6, 336	Gilmore, W., assignor to H. J. Dixon & Sons, Kidderminster, England. Carpet (Design)	Jan. 7, 1873			3	7
134, 437	Gilson, L., Boston, Mass. Hand-truck	Jan. 7, 1873	31	10	3	10
139, 310	Gimlich, J., Pittsfield, Mass. Beer-cooler	May 27, 1873	785	250	3	592
	Gingras, L. (See Gingras, T. and L.)					
139, 057	Gingras, T. and L., Buffalo, N. Y. Knife-cleaner	May 20, 1873	536	169	3	564
137, 913	Ginkinger, C. L., Sterling, Ill. Bridle-bit	Apr. 15, 1873	579	182	3	428
136, 150	Gird, E. D., Syracuse, N. Y. Apparatus for cooling and transporting milk	Feb. 25, 1873	715	231	3	221
140, 698	Gish, D. G., assignor of one-half interest to H. B. Garner, Hopkinsville, Ky. Medical compound or liniment	July 8, 1873	317		4	45
	Githens, J. C. (See Nutting & Githens.)					
144, 530	Glad, G. H., Boston Highlands, Mass. Caster for furniture	Nov. 11, 1873	309	104	4	515
136, 151	Gladding, F. H., Providence, R. I. Buckle-fastening	Feb. 25, 1873	716	231	3	221
	Gladding, T. S. (See Haight & Gladding.)					
138, 881	Gladney, R., Buena Vista, Miss., assignor to E. H. Hotchkiss, New York, N. Y. Sewing-machine brake	May 13, 1873	379	118	3	538
137, 543	Glantz, C., Baltimore, Md. Crimper for boots and shoes	Apr. 8, 1873	247	76	3	388
145, 940	Same..... Machinery for crimping the uppers of boots and shoes	Dec. 30, 1873	839	273	4	700
144, 087	Glanville, C., San Francisco, Cal. Method of laying off shoe-uppers	Oct. 28, 1873	659	217	4	462
144, 531	Glanville, W. W., Crawford County, Iowa. Wash-boiler attachment	Nov. 11, 1873	310	104	4	515
5, 600	Glascock, F. R., Hillsborough, Ohio. Pitman	(Reissue) Oct. 14, 1873	324	107	4	414
	Glasgow, R. W. (See McCreight & Glasgow.)					
5, 265	Glass, H., Honeoye Falls, N. Y., assignor by mesne assignment to Bailey Washing and Wringing Machine Company. Wringing-machine	(Reissue) Feb. 4, 1873	215	67	3	144
141, 641	Glass, J., assignor to Wilson, Glass & Co., Pittsburgh, Pa. Rolls for rolling wagon-hub bands	Aug. 12, 1873	217	69	4	161
	Glasure, A. J., et al. (See Thomas, O. F., assignor.)					
	Gleason, C. J. (See Pitkin & Gleason.)					
140, 191	Gleason, E. P., Brooklyn, N. Y. Gas-lighting torch	June 24, 1873	704	222	3	697
142, 334	Gleason, J., Brooklyn, N. Y. Shield for sad-irons	Sept. 2, 1873	11	4	4	243
138, 799	Gleason, J. H., Troy, N. Y. Carriage-curtain fastening	May 13, 1873	306	95	3	533
143, 898	Gleason, W., assignor of one-half interest to Kidd Iron Works Company, Rochester, N. Y. Screw-cutting attachment for lathes	Oct. 21, 1873	472	159	4	437
141, 218	Glen, W., Toronto, Canada. Balanced valve for steam-engines	July 29, 1873	824	269	4	111
143, 569	Glendinning, D. W., Detroit, Mich. Brick-machine	Oct. 14, 1873	161	54	4	402
141, 135	Glenn, G. K., assignor of one-half interest to J. L. and M. Robinson, Ashton, Ill. Feathering paddle-wheels	July 22, 1873	729	242	4	96
	Glidden, C. W. (See Ellis & Glidden.)	(Reissue.)				
134, 538	Glidden, C. W., Lynn, Mass. Manufacture of boot and shoe heels	Jan. 7, 1873	33	11	3	10
135, 111	Same..... Lasting-machine	Jan. 21, 1873	565	184	3	81
135, 329	Same..... Machines for separating and delivering tacks	Jan. 28, 1873	780	{ 252 253 }	3	110
135, 538	Same..... Machine for shaping the edges of boot and shoe heels	Feb. 4, 1873	135	42	3	138

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 539	Glidden, C. W., Lynn, Mass. Lasting-machine for boots and shoes	Feb. 4, 1873	136	42, 43	3	138
135, 540	Same..... Machine for lasting boots and shoes	Feb. 4, 1873	137	43, 44	3	138
135, 797	Glidden, C. W., Lynn, Mass., assignor to J. W. Brooks, trustee, Boston, Mass. Nail-cutting machine	Feb. 11, 1873	380	123	3	169
136, 233	Glidden, C. W., Lynn, Mass. Boot and shoe heeling machine	Feb. 25, 1873	777	251	3	226
136, 317	Same..... Machine for lasting boots and shoes	Feb. 25, 1873	854	275	3	232
136, 318	Same..... Lasting-tool	Feb. 25, 1873	855	275	3	232
136, 503	Glidden, C. W., Lynn, assignor to J. W. Brooks, trustee, Boston, Mass. Machine for pricking and nail-loading boot and shoe heels	Mar. 4, 1873	131	42, 43	3	256
138, 634	Same..... Machine for forming boot-heels	May 6, 1873	147	47	3	509
139, 382	Same..... Machine for manufacturing boot and shoe heel blanks	May 27, 1873	840	269	3	597
140, 265	Glidding, C. W., Lynn, Mass. Lasting-machine	June 24, 1873	763	241	3	702
143, 507	Glidding, C. W., Lynn, Mass., assignor to J. W. Brooks, trustee, Boston, Mass. Heel-burnishing machine	Oct. 7, 1873	92	32	4	388
143, 680	Same..... same	Oct. 14, 1873	270	89	4	411
143, 899	Same..... Machine for burnishing the heels of boots and shoes	Oct. 21, 1873	473	159	4	437
139, 058	Glidden, C. W., Lynn, H. P. Fairfield, assignors to J. W. Brooks, trustee, Boston, Mass. Heeling-machine	May 20, 1873	537	{ 169 170	3	564
137, 545	Glidden, O. F., assignor of one-half interest to B. A. Fowler, Stoneham, Mass. Wash-boiler	Apr. 8, 1873	250	76	3	389
141, 044	Glidden, R. W. (See Marble & Glidden.)					
	Glines, J., Postville, Iowa. Washing-machine	July 22, 1873	647	218	4	89
	Globe Nail Company. (See Turbayne & Wyman, assignors.)					
	Same..... (See Turbayne, D., assignor.)					
143, 820	Glover, J. H., Freedom, Ky. Wheel for vehicles	Oct. 21, 1873	407	136	4	431
145, 861	Glue, W., Muskegon, Mich. Refuse-burner	Dec. 23, 1873	744	243	4	662
135, 798	Gminder, W., Reutlingen, Germany. Shedding mechanism	Feb. 11, 1873	381	123	3	169
142, 388	Goble, G. S., Saint Louis, Mo. Hose-coupling	Sept. 2, 1873	62	20	4	247
139, 789	Goddard, A. D., Chicago, Ill. Stucco ornaments	June 10, 1873	323	100	3	650
135, 985	Goddard, C. F., Saint Ansgar, Iowa. Grain-binding harvester	Feb. 18, 1873	551	182	3	197
142, 389	Same..... Harvester-reel	Sept. 2, 1873	62	21	4	247
144, 024	Goddard, E., Saint Louis, Mo. Steam-generator	Oct. 28, 1873	605	200	4	458
145, 293	Same..... same	Dec. 9, 1873	234	79	4	616
136, 055	Goddu, L., Boston, Mass. Armor-clad vessel	Feb. 18, 1873	611	201	3	201
143, 137	Goddu, L., assignor to the American Cable-Screw Wire Company, Boston, Mass. Spool for boot and shoe soling machines	Sept. 28, 1873	714	245	4	333
	Godfrey, L. (See Andrews & Godfrey.)					
	Godfrey, W. L. (See Popping, J., assignor.)					
	Godfroy, W. A. T., et al. (See McPherson, W. H., assignor.)					
137, 300	Godley, G. F., New York, N. Y. Car-spring	Apr. 1, 1873	19	6	3	358
140, 192	Same..... Railway-car spring	June 24, 1873	705	222	3	697
140, 033	Godwin, J. B., Washington, N. C. Press	June 17, 1873	542	172	3	676
144, 899	Goebel, J., and J. Preis, Caledonia, Wis. Leather-splitting machine	Nov. 25, 1873	636	216	4	564
144, 025	Goetze, F., and D. Müller, New York, N. Y. Accorition, &c.	Oct. 28, 1873	606	201	4	458
6, 480	Goetze, H. F., assignor to The Roxbury Carpet Company, Boston, Mass. Carpet. (Design)	Mar. 4, 1873			2	245
6, 481	Same..... Carpet	Mar. 4, 1873			3	245
6, 758	Same..... same	July 8, 1873			4	36
6, 950	Same..... same	Oct. 7, 1873			4	380
141, 554	Goewey, G., Philadelphia, Pa. Apparatus for treating and aging spirituous liquors	Aug. 5, 1873	125	39	4	145
137, 436	Goff, J. W., Providence, R. I. Iron-tender and car-frame	Apr. 1, 1873	140	46	3	368
137, 544	Goffie, C. F. L., and J. H. Schucht, London, England. Piano and organ keys	Apr. 8, 1873	249	76	3	329
145, 168	Gogge, S., New York, N. Y. Ear-muff	Dec. 2, 1873	120	39	4	593
5, 553	Going, A. J., Clinton, La. Cotton-bale tie. (Reissue)	Aug. 22, 1873	843	278	4	230
137, 301	Same..... same	Apr. 1, 1873	20	6	3	359
	Gold and Stock Telegraph Company. (See Edison, T. A., assignor.)					
	Same..... same					
	Same..... (See Pope & Edison, assignors)					
137, 546	Gold, S. F., Englewood, N. J. Apparatus for heating buildings by steam. (Extension)	June 21, 1873			3	662
139, 571	Same..... Hot-air furnace	Apr. 8, 1873	250	77	3	389
144, 086	Golden, W. N., Coldwater, Mich. Butter-worker	June 3, 1873	109	37	3	618
145, 101	Golding, W., New Orleans, La. Steam-generator	Oct. 28, 1873	659	217	4	462
138, 144	Golding, W. H., Chelsea, Mass. Printing-press	Dec. 2, 1873	58	18, 19	4	590
143, 900	Goldman, I. S., Winterset, Iowa. Automatic cradle	Apr. 22, 1873	794	253	3	455
141, 503	Same..... Tobacco-knife	Oct. 21, 1873	474	159	4	437
144, 843	Goldmann, H., New York, N. Y. Treating cotton-seed oil to render it drying	Aug. 5, 1873	84		4	142
143, 343	Goldsmith, G., and J. Dilkes, Leicester, England. Apparatus for removing obstructions from gas-pipes	Nov. 25, 1873	594	202	4	560
145, 169	Goldsmith, J. M., Boston, Mass. Cotton-bale tie	Sept. 30, 1873	901	306	4	364
140, 911	Goldthorp, D., and T. Hield, assignors of one-half interest to J. B. Clapp, Hartford, Conn. Brick-machine	Dec. 2, 1873	120	39, 40	4	595
136, 649	Goldthorp, S. H., assignor to R. H. Smith, Pittsburgh, Pa. Apparatus for making gas from oils	July 15, 1873	509	171	4	69
143, 138	Goldthwait, C., South Weymouth, Mass. Shoe-fastening	Mar. 11, 1873	277	93	3	276
144, 090	Goldthwait, J. F., Boston, Mass. Gas-bracket	Sept. 23, 1873	715	245	4	333
140, 821	Golletz, J. (See Phillips & Golletz.)					
143, 508	Gonberg, O. H., Ferrysburgh, Mich. Balanced slide-valve	Oct. 28, 1873	661	218	4	462
143, 977	Gonellaz, H., Vermillionville, La. Ditching-machine	July 15, 1873	428	145	4	62
	Same..... Dredging-machine	July 15, 1873	429	146	4	62
	Good, J., Williamsburgh, N. Y. Condensing-tube for spinning-machines, &c.	Oct. 7, 1873	93	33	4	328
	Good, J., Lancaster, Pa. Kitchen and ironing table	Oct. 28, 1873	562	187	4	454
	Goodale, W., Clinton, Mass. Machine for making paper bags. (Extension)	July 12, 1873			4	35
	Same..... same	Aug. 23, 1873			4	185
136, 152	Goodchild, W. H., Bayonne, N. J., and S. F. Hay, Brooklyn, N. Y., assignors to said Goodchild. Joiner's clamp	Feb. 25, 1873	717	232	3	221
139, 667	Goodell, A. D., assignor to Miller's Falls Company, Miller's Falls, Mass. Bit-stock	June 10, 1873	209	68	3	642
141, 345	Same..... same	July 29, 1873	946	308	4	121
	Goodell, A. T. (See Loomis & Goodell)					
	Goodell, A. W. (See Johnson & Goodell)					
6, 698	Goodell, B. A., Waltham, Mass. Watch-hands. (Design)	June 3, 1873			3	608
142, 097	Goodell, Braun & Co. (See Braun, J., assignor.)					
136, 718	Goodenough, C., New York, N. Y. Horseshoe	Aug. 26, 1873	652	214	4	215
	Goodes, E. A., Philadelphia, Pa. Sewing-machine	Mar. 11, 1873	332	{ 110 111	3	281

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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142, 013	Goodes, E. A., Philadelphia, Pa. Sewing-machine.....	Aug. 19, 1873	552	{ 182 183	4	197
140, 034	Goodfellow, J. T., and F. A. Sabbaton, Troy, N. Y. Gas-purifier.....	June 17, 1873	543	{ 172 173	3	676
139, 782	Goodhart, A., Newville, Pa. Separator for iron and other ores.....	June 10, 1873	324	100	3	650
	Gooding, W. M. (See Walker & Gooding.)					
135, 112	Goodman, S., Natick, Mass. Hat-stretching machine.....	Jan. 21, 1873	566	184	3	81
135, 113	Goodman, S. A., jr., Jamestown, Tex. Compound for fish-baits.....	Jan. 21, 1873	567		3	81
138, 882	Goodrich, A. S., assignor to self, A. Pollock, and G. Van Wageningen, New York, N. Y. Water-gauge and feed-indicator for steam-boilers.....	May 13, 1873	380	119	3	539
144, 532	Goodrich, B., Stratham, N. Y. Road-trimmer.....	Nov. 11, 1873	311	105	4	515
	Goodrich, H. C. (See Barnum & Goodrich.)					
	Same..... (See Barnum, R. S., assignor.)					
134, 744	Goodrich, H. C., Chicago, Ill. Ruffling-attachment for sewing-machines.....	Jan. 14, 1873	237	76	3	40
138, 635	Same..... Tuck-marker for sewing-machines.....	May 6, 1873	148	48	3	510
138, 636	Same..... same.....	May 6, 1873	149	48	3	510
138, 637	Same..... Presser-foot for sewing-machines.....	May 6, 1873	150	48	3	510
138, 638	Goodrich, H. C., and R. Barnum, Chicago, Ill. Hemmer for sewing-machines.....	May 6, 1873	150	48	3	510
136, 650	Goodrich, W. R., Utica, N. Y. Wrought-iron blind-hinge.....	Mar. 11, 1873	278	93	3	277
143, 621	Goodridge, J. M., Norfolk, Va. Tag-fastener.....	Oct. 14, 1873	208	70	4	406
139, 383	Goodsell, L. A., assignor to self and A. J. Ramsdell, New Haven, Conn. Plasterer's float.....	May 27, 1873	841	269	3	597
137, 674	Goodsell, S. C., Westville, Conn. Lathe-chuck.....	Apr. 8, 1873	361	112	3	398
	Goodson, J. E. (See Skinner & Goodson.)					
141, 642	Goodwin, A. J., Brookline, Mass. Machinery for goring shoe-uppers.....	Aug. 12, 1873	218	69	4	161
143, 235	Goodwin, J. E., Brewerton, N. Y. Cam-movement.....	Sept. 30, 1873	601	276	4	356
142, 785	Goodwin, J. M., New York, N. Y. Bridge.....	Sept. 16, 1873	423	143	4	288
135, 906	Goodwin, S. A., assignor to W. D. Taber, Buffalo, N. Y. Condenser for steam-engines.....	Feb. 18, 1873	488	158	3	192
138, 016	Goodwin, W. W., Camden, N. J. Gas-light and pressure indicator.....	Apr. 22, 1873	683	216	3	446
	Goodyear, G. (See Sprague, W. N., assignor.)					
136, 991	Goodyear, G., New York, N. Y. Boot and shoe shank.....	Mar. 18, 1873	572	191	3	310
140, 771	Goodyear, J., Groton, N. Y. Fountain pen.....	July 15, 1873	382	131	4	59
141, 434	Goodyear, J., Yonkers, N. Y. Machine for winding bobbins.....	Aug. 5, 1873	21	6, 7	4	136
141, 435	Goodyear, L., Trumansburgh, N. Y. Door check.....	Aug. 5, 1873	23	7	4	137
	Goodyear, L. F., New Haven, Conn. Tool for cutting metal..... (Extension)	Mar. 29, 1873				
140, 266	Goodyear, M. W., New York, N. Y. Telegraph-sounder.....	June 24, 1873	764	241	3	702
139, 384	Goodyear, R. B., Wilmington, Del., assignor of one-half interest to B. H. Jenks, Philadelphia, Pa. Shuttle-box mechanism for looms.....	May 27, 1873	842	269	3	597
144, 089	Goodyear, R. B., Wilmington, Del., assignor to self and J. Greenhalgh, Philadelphia, Pa. Shuttle-box operating mechanism.....	Oct. 28, 1873	660	217	4	462
	Goodyear Rubber-Head Pencil Company. (See Gray, J., assignor.)					
138, 748	Goolaven, M., Taunton, Mass. Car-coupling.....	May 13, 1873	261	81	3	529
6, 410	Gould, J. C., Albany, N. Y. Landau-sleigh..... (Design)	Feb. 11, 1873			3	157
138, 145	Gordon, C., London, England. Gun-lock.....	Apr. 22, 1873	795	{ 253 254	3	455
138, 146	Same..... Breech-loading ordnance.....	Apr. 22, 1873	795	254	3	455
142, 457	Gordon, G. P., Rahway, N. J. Inking-apparatus.....	Sept. 2, 1873	120	38	4	252
141, 645	Gordon, J., San Francisco, Cal. Spring-joint for watch-cases.....	July 22, 1873	647	218	4	89
140, 822	Gordon, J. F., Rochester, N. Y. Grain-binder.....	July 15, 1873	430	146	4	62
139, 243	Gordon, R. H., sr., Cleveland, Ohio. Railway freight-car.....	May 27, 1873	725	{ 228 229	3	587
135, 541	Gordon, W., assignor of two-thirds interest to A. McCambridge, and T. Kennedy, Philadelphia, Pa. Composition basin-faucets.....	Feb. 4, 1873	138	44	3	138
145, 412	Gordon, W. J., Philadelphia, Pa. Machine for cutting out and stamping up sheet-metal boxes.....	Dec. 9, 1873	335	112	4	625
142, 098	Gore, H. A., Goshen, Ind. Wheel for vehicles.....	Aug. 26, 1873	652	214	4	215
	Gore, J., Brattleborough, Vt. Harvester..... (Extension)	Dec. 27, 1873			4	670
26, 582	Same..... same..... (Disclaimer filed)	Dec. 15, 1873			4	671
	Gotham Manufacturing Company. (See Beck, C., assignor.)					
	Same..... (See Shaw, T., assignor.)					
	Same..... (See Wilkinson, G., assignor)..... (Design)					
142, 099	Gorham, W. B., Boston, Mass. Hand-stamp.....	Aug. 26, 1873	653	215	4	215
134, 745	Gorman, J. J., Cincinnati, Ohio. Paint-brush.....	Jan. 14, 1873	238	77	3	40
139, 887	Same..... same.....	June 17, 1873	424	132	3	666
137, 068	Gorman, T. G., and N. W. Perego, Springfield, Ill. Apparatus for brazing metal tubes.....	Mar. 25, 1873	654	217	3	328
6, 867	Gorman, W., assignor to The Russell and Erwin Manufacturing Company, New Britain, Conn. Lock-escutcheon plate..... (Design)	Sept. 2, 1873			4	241
7, 018	Same..... Butt-hinge..... (Design)	Dec. 9, 1873			4	614
7, 019	Same..... Door-knob rose..... (Design)	Dec. 9, 1873			4	614
7, 020	Same..... Door-knob..... (Design)	Dec. 9, 1873			4	614
7, 021	Same..... Key-hole escutcheon..... (Design)	Dec. 9, 1873			4	614
7, 068	Same..... Knob-rose and escutcheon..... (Design)	Dec. 23, 1873			4	671
	Gorman, W. A. (See Siebe, Gorman & Christy.)					
145, 413	Gormann, C., and J. B. Thiel, Union Hill, N. J. Vehicle.....	Dec. 9, 1873	336	113	4	625
138, 147	Gorrel, T., Warren, assignor of one-half interest to G. J. Hampson, Providence, R. I. Sizing-compound.....	Apr. 22, 1873	706		3	455
142, 335	Gorris, F., Cleveland, Ohio. Lock.....	Sept. 2, 1873	12	4	4	243
138, 392	Gortner, H., Nashport, Ohio. Hand corn-planter.....	Apr. 29, 1873	1, 042	328	3	483
136, 234	Gorton, J., New York, N. Y. Chimney-top.....	Feb. 25, 1873	778	251	3	226
	Gory, E. G. (See Pearson, S., assignor)..... (Reissue)					
138, 148	Gory, E. G., assignor to self and H. T. Niemann, Cincinnati, Ohio. Lock for drawers, &c.....	Apr. 22, 1873	797	254	3	455
5, 644	Gosling, J. W., Cincinnati, Ohio. Step-cover and wheel-fender for carriages. (Reissue)	Nov. 4, 1873	179	60	4	493
135, 330	Goss, C. N., Claremont, N. H. Horse hay-rake.....	Jan. 28, 1873	781	253	3	110
137, 069	Goss, G. D., Boston, Mass. Reclining-chair.....	Mar. 25, 1873	656	{ 217 218	3	328
143, 821	Gosshorn, W., Waterloo, Pa. Flour-bolt.....	Oct. 21, 1873	408	136	4	431
137, 196	Gotham, M., Oil City, Pa. Self-tamping torpedo.....	Mar. 25, 1873	771	254	3	336
	Gotia, B. (See Auguste, B., assignor.)					
140, 772	Gottlieb, A., Chicago, Ill. Iron-roof truss.....	July 15, 1873	383	132	4	59
142, 563	Same..... Fire-proof shutter.....	Sept. 9, 1873	226	73	4	272
139, 504	Gouch, L. A., Yonkers, N. Y. Lamp-post.....	June 3, 1873	53	17	3	613
135, 035	Goudreau, L., Kankakee, Ill. Rain-water switch and reversible valve for cisterna, &c.....	Jan. 21, 1873	507	164	3	76
143, 139	Gould, C. G., Windham, Vt. Gun-cleaner.....	Sept. 23, 1873	715	246	4	333
137, 547	Gould, C. H., Boston, Mass. Carriage-step.....	Apr. 8, 1873	252	77	3	389
141, 219	Gould, E. T., Mont Clair, N. J. Flue for buildings.....	July 29, 1873	625	270	4	111
	Gould, F., et al. (See Fischer, W. E., assignor)..... (Reissue.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 639	Gould, H., Minneapolis, Minn. Belt-lacing gage	May 6, 1873	151	49	3	510
139, 572	Gould, J., Clinton, Pa. Animal-trap	June 3, 1873	110	37	3	618
142, 159	Gould, J. H., assignor of two-thirds interest to H. Holt, Rutland, Ohio. Hoe	Aug. 26, 1873	703	232	4	219
138, 244	Gould, L., Norwich, Conn. Planing-machine	Apr. 29, 1873	909	287	3	473
144, 199	Same	Nov. 4, 1873	84	7	4	480
135, 271	Gould, M. B., assignor to self and S. D. Oakes, Buffalo, N. Y. Flower-pot	Jan. 28, 1873	729	233	3	106
142, 458	Gould, R. J., Newark, N. J. Valve-guide	Sept. 2, 1873	121	39	4	252
144, 844	Gould, R. J., and M. E. Campfield, assignors to R. J. Gould, Newark, N. J. Valve for pumps	Nov. 25, 1873	594	202	4	560
144, 758	Gould, W. B., Montrose, N. J. Stair-rod fastener	Nov. 18, 1873	510	173	4	543
144, 759	Same	Nov. 18, 1873	511	173	4	543
141, 643	Gould, W. H., Manchester, N. H. Dish-drainer	Aug. 12, 1873	290	69	4	101
136, 504	Goulding, J., Worcester, Mass. Lubricating spindle	Mar. 4, 1873	132	43	3	256
136, 719	Same	Mar. 11, 1873	335	111	3	281
134, 660	Gove, A. J., San Francisco, Cal. Track-clearer	Jan. 7, 1873	154	51	3	19
137, 437	Gove, R., Laconia, N. H. Mainspring safety-attachment for watches	Apr. 1, 1873	142	46	3	368
134, 795	Gowdy, J., et al. (See Rider, A. K., assignor.)	Jan. 14, 1873	220	91	3	43
137, 070	Gowen, W., Wausau, Wis. Saw-mill	Mar. 25, 1873	657	218	3	328
135, 494	Gowenlock, W., Susquehanna Depot, Pa. Steam-lubricator	Feb. 4, 1873	99	8	3	130
134, 796	Gowling, O., Boston, Mass. Shirt	Jan. 14, 1873	281	91	3	43
134, 797	Grabner, J., Warsaw, Ind. Flue-blast for steam fire-engine	Jan. 14, 1873	282	91	3	43
145, 645	Grady, P., assignor to J. Cochrane, New York, N. Y. Paper-sizing	Dec. 16, 1873	550	181	4	654
144, 332	Graf, L., Newark, N. J. Machine for heeling boots and gaiters	Nov. 4, 1873	132	44	4	489
139, 001	Graham, D. M., Evansville, Ind. Railway-chair	May 20, 1873	488	154	3	561
136, 720	Graham, E. M., Vernon, La. Cultivator	Mar. 11, 1873	335	111	3	281
138, 494	Graham, J. (See Carlock, W. B., assignor.)					
	Graham, J., New York, N. Y. Artificial curls	Mar. 11, 1873	335	111	3	281
	Graham, J. C., et al. (See McClure, W. B., assignor.)					
145, 862	Graham, J. F., assignor of one-half interest to A. Bettes, Warrensburgh, Mo. Sash-holder	May 6, 1873	92	8	3	499
	Graham, J. L., Carthage, Ill. Plow	Dec. 23, 1873	745	243	4	689
	Graham, J. R. (See Williams, W. H., assignor.)					
	Graham, O. B. (See Pike & Graham.)					
	Graham, R. (See Barsalouse & Graham.)					
143, 978	Graham, W. H., Saint Louis, Mo. Stop-cock boxing	Oct. 28, 1873	563	187	4	454
145, 294	Same	Dec. 9, 1873	234	79	4	617
136, 495	Same	May 6, 1873	23	8	3	499
137, 607	Gramm, C. R., Bainbridge, Pa. Washing implement	May 6, 1873	23	8	3	499
142, 390	Grandy, C. E., assignor to self, Z. B. Grandy, and W. D. Heald, Stafford Springs, Conn. Saw-set	Apr. 8, 1873	303	94	3	393
137, 361	Grandy, C. E., Stafford Springs, Conn. Saw-tooth gage	Sept. 2, 1873	63	21	4	247
	Grandy, C. E. and Z. B., assignors to selves and W. D. Heald, Stafford Springs, Conn. Oiler	Apr. 1, 1873	76	25	3	363
	Grandy, Z. B., et al. (See Grandy, C. E., assignor.)					
	Grandy, Z. B. (See Grandy, C. E. and Z. B.)					
141, 046	Grandy, Z. B. and C. E., assignors to selves and W. D. Heald, Stafford Springs, Conn. Kerosene-heater	July 22, 1873	648	218	4	89
143, 140	Granite Roofing Company. (See Morgan, P. H., assignor.)					
141, 001	Grannie, C. M., and L. M. Fitch, Morrisville, N. Y. Rein-holder	Sept. 23, 1873	716	246	4	333
138, 245	Grant, A. J., Williamstown, N. Y. Fastening for bureau drawers	July 22, 1873	610	205	4	86
	Grant, E. B. (See Frederici, C., assignor.)					
130, 133	Grant, G. B., Cambridge, Mass. Calculating-machine	Apr. 29, 1873	910	287	3	473
136, 153	Grant, J. B. (See McCarthy, E. P., assignor.)					
142, 227	Grant, J. J., Greenfield, Mass. Die for cutting screw-threads	June 24, 1873	655	205	3	693
142, 564	Same	Feb. 25, 1873	718	232	3	221
139, 311	Same	Aug. 26, 1873	759	250	4	223
136, 235	Grant, J. J., assignor to self, S. L. Wiley, and C. P. Russell, Greenfield, Mass. Friction-clutch	Sept. 9, 1873	226	74	4	272
139, 898	Grant, J. W., and C. H. Cook, Providence, R. I. Bracelet	May 27, 1873	786	250	3	592
142, 459	Grant, R. C., Middleport, Ohio. Mechanism for feed nail-plates	Feb. 25, 1873	779	252	3	226
5, 396	Grant, S. W., assignor to A. O. Baker, Providence, R. I. Bracelet	June 17, 1873	425	132	3	666
137, 438	Grantham, J., London, England. Steam-carriage for tramways	Sept. 2, 1873	122	39	4	252
144, 533	Graser, E., Union City, Pa. Pump	May 6, 1873	239	75	3	517
139, 573	Grasler, W. F., Muncy, Pa. Spark-arrester	Apr. 1, 1873	142	46	3	368
140, 193	Graz, H. H., Lexington, Ky. Lawn-seat	Nov. 11, 1873	311	105	4	515
145, 732	Graupner, F. G., Evansville, Ind. Dyeing fabrics	June 3, 1873	111	.....	3	618
	Graves, A., Roscoe, Ill. Clothes-drier	June 24, 1873	706	222	3	697
	Graves, C. G. C. Powers, and O. O. Graves, Waterbury, Vt. Milk-cooler	Dec. 23, 1873	637	208	4	673
	Graves, C. O. (See Graves, Powers & Graves.)					
	Graves, H. P. (See Wolcott, G. T., assignor.)					
	Graves, J. E., et al. (See Reed, G. D., assignor.)					
143, 822	Graves, M. F., Sunbury, Pa. Ice-cream freezer	Oct. 21, 1873	408	136	4	431
140, 361	Graves, R. C., Barnesville, Ohio. Furnace grate-bar	Feb. 11, 1873	383	123	3	169
141, 268	Graves, T. B., Cortlandville, N. Y. Stirrer for maple-sugar	July 1, 1873	23	8	4	10
138, 393	Gray, A. W., assignor to L. A. Y., & A. W. Gray, Middletown, Vt. Link of endless-chains for horse-power	July 29, 1873	873	286	4	115
138, 394	Gray, A. Y., et al. (See Gray, A. W., assignor.)					
142, 014	Gray, G. A., Jr., Hamilton, Ohio. Hydraulic-wheel press	Apr. 29, 1873	1,042	328	3	483
	Same	Apr. 29, 1873	1,043	328	3	483
136, 319	Gray, H., assignor to National Water-wheel Company, Bristol, Conn. Centering-device for lathes	Aug. 19, 1873	554	183	4	197
	Gray, J., Medford, Mass. Sewing-machine	May 17, 1873	.....	.....	3	527
	Gray, J., Medford, Mass., assignor by means assignment to Goodyear Rubber-Head Pencil Company, New York, N. Y. Lead-pencil	Feb. 25, 1873	856	275	3	232
144, 534	Gray, J., Raymond, Miss. Fence	Nov. 11, 1873	312	105	4	515
135, 272	Gray, J. J., Boston, Mass. Card-rack	Jan. 28, 1873	730	234	3	106
139, 002	Gray, J. W., Harrisburgh, Pa. Spark-arrester and extinguisher for locomotives	May 20, 1873	490	155	3	561
140, 362	Gray, L., et al. (See Gray, A. W., assignor.)					
134, 596	Gray, L. N. B., assignor of one-half interest to E. B. Paul, Boston, Mass., and D. A. Reed, New York, N. Y. Sewing-machine table and chair combined	July 1, 1873	23	8	4	10
134, 597	Gray, S. S., Boston, Mass. Machine for joining staves	Jan. 7, 1873	91	29	3	14
145, 414	Same	Jan. 7, 1873	93	30	3	14
145, 941	Same	Dec. 9, 1873	337	113	4	625
142, 460	Same	Dec. 30, 1873	840	273	4	700
	Gray, W. H., assignor to S. A. Woods, Boston, Mass. Planing-machine	Sept. 2, 1873	123	40	4	252

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145, 415	Greacen, J., jr., New York, N. Y. Flexible play-pipe for hose.....	Dec. 9, 1873	338	113	4	625
140, 913	Greacen, S., Rye, N. Y. Eye-glass.....	July 15, 1873	510	172	4	69
139, 783	Great American Malt and Grain Drying Company. (See Morgan, W. F., assignor.)					
139, 784	Grebn, M., New York, N. Y. Toy.....	June 10, 1873	324	101	3	651
138, 017	Same..... Wire cage.....	June 10, 1873	325	101	3	651
141, 996	Greely, B. J., Boston, Mass. Drawers.....	Apr. 22, 1873	684	216	3	446
	Same..... Suspenders.....	Aug. 19, 1873	481	158	4	191
140, 363	Green, A. M., et al. (See Green, C., assignor.)					
	Green, B. F., Syracuse, N. Y. Chair and step-ladder combined.....	July 1, 1873	24	8	4	10
	Green, C. (See Wilson, Green & Wilson)..... (Extension.)					
135, 542	Green, C., assignor to self, S. D. McNeal, and A. M. Grebn, Osseo, Mich. Cheese-skipper extractor.....	Feb. 4, 1873	139	44	3	138
140, 913	Green, C., and W. Wilson, jr., Wilmington, Del. Powder-keg.....	July 15, 1873	510	172	4	69
142, 461	Green, C. E., and J. H. Bodwell, Newark, N. J. Ferrule.....	Sept. 2, 1873	194	40	4	252
142, 691	Green, C. W., Pontiac, Mich. Manufacture of shoes.....	Sept. 9, 1873	330	110	4	280
142, 692	Same..... Same.....	Sept. 9, 1873	330	111	4	280
137, 302	Green, D., Renock, Ohio. Vise.....	Apr. 1, 1873	91	6	3	359
136, 236	Green, F. D., Williamsport, Pa. Dovetailing-machine.....	Feb. 25, 1873	780	252	3	226
136, 505	Same..... Machine for relishing doors, &c.....	Mar. 4, 1873	133	43	3	256
140, 267	Same..... Mitering-machine.....	June 24, 1873	765	242	3	702
142, 015	Same..... Machine for raising panels.....	Aug. 19, 1873	555	{ 183 184 }	{ 4 4 }	{ 197 197 }
135, 543	Green, H. S., Sherbrooke, Canada, assignor of one-half interest to C. H. Weston, Lowell, Mass. Cloth-steaming machine.....	May 30, 1873	140	44	3	138
139, 059	Green, I. B., Gillespie, Ill. Wheel-plow.....	May 30, 1873	540	170	3	505
143, 623	Green, J., Brooklyn, assignor to self and J. Bach, New York, N. Y. Edge-protecting welt for boots and shoes.....	Oct. 14, 1873	209	70	4	406
	Green, J. B. (See Hess, J. W., assignor.)					
137, 836	Green, J. C., Flanders, N. J. Turbine water-wheel.....	Apr. 15, 1873	516	161	3	423
140, 699	Green, J. E., Saint Louis, Mo. Stave-jointer.....	July 8, 1873	318	108	4	45
140, 823	Green, J. F. and S. H., Haverstraw, N. Y. Grindstone.....	July 15, 1873	431	146	4	63
	Green, S. (See Holton, M. G., assignor.)					
	Green, S. H. (See Green, J. F. and S. H.)					
141, 785	Green, T., New York, N. Y. Apparatus for navigating the air.....	Aug. 12, 1873	344	{ 113 114 }	{ 4 4 }	{ 171 171 }
143, 622	Green, W., New Orleans, La. Process of preserving the stubble of sugar-cane from decay.....	Oct. 14, 1873	209		4	406
139, 951	Green, W. V., and J. M. Kintzel, Wellsville, Ohio. Medical compound or catarrh remedy. Greene, A. M. (See Platt, W. K., assignor.)	June 17, 1873	475		3	670
136, 154	Greene, C. W., Jackson, Tenn. Labeling-machine.....	Feb. 25, 1873	719	232	3	221
137, 071	Greene, E. A. (See Foster, J. W., assignor.)					
	Greene, G. S., jr., Mott Haven, N. Y. Cartridge capping and uncapping device.....	Mar. 25, 1873	657	218	3	328
	Greene, H. R. (See Hardy, D. D., assignor.)					
	Greene, J. F., Brooklyn, N. Y. Machinery for disintegrating waste felt fabrics. (Extension).....	Apr. 12, 1873			3	386
	Same..... Obtaining fibers from waste felted fabrics..... (Extension).....	Apr. 11, 1873			3	386
138, 560	Greene, J. S., and T. D. Bradt, Watertown, N. Y. Carpet-stretcher.....	May 6, 1873	84	27	3	504
134, 539	Greene, J. W., Chillicothe, Mo. Animal-trap.....	Jan. 7, 1873	34	11	3	10
	Greene, S. (See Thompson & Greene, assignors.)					
135, 273	Greene, W. A., Medford, Mass. Cooking-stove.....	Jan. 28, 1873	730	234	3	106
	Greene, W. H. (See Thompson & Greene.)					
144, 900	Greene, W. R., Juda, Wis. Spoke-setting machine.....	Nov. 25, 1873	637	217	4	564
	Greenhalgh, J. (See Goodyear, R. B., assignor.)					
145, 564	Greenleaf, A., Brooklyn, N. Y. Culinary tongs.....	Dec. 16, 1873	482	157	4	648
141, 927	Greenleaf, C. H., Franconia, N. H. Annunciator.....	Aug. 19, 1873	481	159	4	191
	Greenleaf, O. S. (See Lawler, M., assignor.)					
143, 236	Greenlee, R. L., Chicago, Ill. Sash and door clamp.....	Sept. 30, 1873	802	276	4	356
5, 569	Greenough, J. J., Syracuse, N. Y. Apparatus for grooming horses..... (Reissue).....	Oct. 7, 1873	144	48	4	392
135, 218	Same..... Gear-cutting machine.....	Jan. 28, 1873	680	219	3	102
142, 336	Same..... Meter for measuring liquids, gases, &c.....	Sept. 2, 1873	12	5	4	243
144, 614	Same..... Mustache-shield for drinking-cups.....	Nov. 18, 1873	389	130	4	533
145, 499	Same..... Gearing.....	Dec. 16, 1873	417	137	4	643
	Greenwalt, A. B., et al. (See Brubaker, A. M., assignor.)					
135, 907	Greenwood, G., Lawrence, Mass. Rotary cutter-head for matching boards.....	Feb. 18, 1873	480	158	3	192
142, 100	Greenwood, J., Rochester, N. Y. Hanger for shafting.....	Aug. 26, 1873	653	215	4	215
145, 942	Same..... Machine for forcing hoops on barrels.....	Dec. 30, 1873	811	274	4	700
143, 570	Greer, R., and W. J. Thomason, Raleigh, N. C. Dumping wagon.....	Oct. 14, 1873	163	54	4	402
140, 773	Greer, S. V., Rocky Hill Station, Ky. Animal-trap and seed-safe combined.....	July 15, 1873	384	132	4	59
	Gregersen, J. A. (See Frantze, Tillesen & Gregersen.)					
139, 889	Gregg, A., Springborough, Ohio. Washing-machine.....	June 17, 1873	425	132	3	666
5, 707	Gregg, W. P., Boston, Mass. Roller-skate..... (Reissue).....	Dec. 23, 1873	822	268	4	688
138, 018	Same..... Same.....	Apr. 22, 1873	685	216	3	446
141, 260	Gregory, C. A., assignor of one-half interest to W. M. Rice, Montreal, Canada. Fire safety line.....	July 29, 1873	874	286	4	115
	Gregory, G. H. (See Hubbell & Gregory.)					
138, 640	Gregory, G. W., Syracuse, N. Y. Truss.....	May 6, 1873	152	49	3	510
144, 975	Gregory, H., jr., Rockland, Me. Elastic anti-friction attachment for vessels' booms.....	Nov. 25, 1873	699	236	4	569
	Grellier, W. (See Kilborn, J., assignor.)					
143, 141	Gretter, V., Richland Township, Pa. Casing-spear.....	Sept. 23, 1873	717	246	4	333
	Gribben, J., et al. (See Shawk, G. W., assignor.)					
138, 149	Gridley, F. R., Saint Paul, Minn., assignor of one-half interest to T. Jordan, Indianapolis, Ind. Spring plate-washer.....	Apr. 22, 1873	797	254	3	456
	Gridley, N. C. (See Harvey, P., assignor.)					
	Gridley, N. C., et al. (See Morrison, J. C., assignor.)					
138, 749	Grier, W. W., Halton, Pa. Roller for window-curtains.....	May 13, 1873	262	82	3	529
136, 651	Griest, J. M., Plainfield, Ind. Attachment for sewing-machines.....	Mar. 11, 1873	278	93	3	277
144, 333	Griest, J. M., Delavan, Ill. Hemmer for sewing-machines.....	Nov. 4, 1873	133	45	4	489
	Griffin, J. (See Clarke, Bonzano & Griffin.)					
	Griffin, J., et al. (See Clark, T. C., assignor.)					
	Griffin, J. J. (See Harris, A., assignor.)					
134, 661	Griffin, M., Brooklyn, N. Y. Cradle.....	Jan. 7, 1873	155	51	3	19
137, 675	Griffin, T. J., Brooklyn, N. Y. Spring cot.....	Apr. 8, 1873	362	112	3	398
137, 197	Griffing, C. S. S., Salem, Ohio. Carriage-spring.....	Mar. 25, 1873	772	255	3	336
136, 595	Griffing, J., assignor to self and B. H. Smith, Ipswich, Mass. Mechanism for heading barrels.....	Mar. 11, 1873	232	78	3	273
140, 364	Griffing, J., Ipswich, Mass. Barrel-transporter.....	July 1, 1873	24	8	4	10
	Griffith, G. S., & Co. (See Conradt, C. J., assignor)..... (Design.)					

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143, 281	Griffith, J., and W. F. Miller, assignors to selves and C. D. B. Elaman, Adamsburg, Pa. Car-coupling	Sept. 30, 1873	841	289	4	359
	Griffith, W. (See Moody, C., assignor.)					
136, 433	Grigg, G. S., Pottsville, Pa. Scroll-sawing machine	Mar. 4, 1873	68	24	3	251
138, 496	Griggs, O. B., Mansfield Centre, Conn. Station-indicator	May 6, 1873	23	8	3	499
135, 544	Grigby, B., and T. C. Braselton, Princeton, Ind. Coffee-pot	Feb. 4, 1873	141	45	3	138
143, 447	Grimes, T. E., Fremont, Ohio. Saw-set	Oct. 7, 1873	43	15	4	384
5, 499	Grimm, J., Darlington Township, Pa. Coal-drilling machine (Reissue)	July 22, 1873	792	259	4	101
138, 082	Grimm, L., and J. Corvin, Magdeburg, Prussia. Liquids for heating, by means of pipes, &c.	Apr. 22, 1873	745		3	451
	Grimmer, H. A. (See Mickels, F., assignor.)					
135, 800	Grimshaw, W. S., Pittsfield, Ill. Wheel-plow	Feb. 11, 1873	383	123	3	169
142, 565	Grinstead, W., Washington, D. C. Strap-fastening for trunks, &c.	Sept. 9, 1873	227	74	4	372
	Griscom, S. E. (See Bullock, M. C., assignor.)					
	Same. (See Larer, D., assignor.)					
145, 863	Griscom, W. M., assignor to Reading Hardware Manufacturing Company, Reading, Pa. Sash-cord guide	Dec. 23, 1873	746	244	4	682
138, 497	Griwald, A. D., Rocky Hill, Conn. Cotton-seed planter	May 6, 1873	23	9	3	499
143, 142	Griwald, C. L., Chester, Mass. Gimlet-handle	Sept. 23, 1873	717	246	4	333
145, 733	Griwald, G. G., New York, N. Y. Umbrella	Dec. 23, 1873	638	208	4	673
136, 596	Griwald, G. W., Factoryville, Pa. Stew-pan	Mar. 11, 1873	232	78	3	273
135, 473	Grochau, A., Du Luth, Minn. Railway-tank feeder	Feb. 4, 1873	74	23	3	133
136, 155	Groff, J. D., and K. H. Wilson, Oxford, Pa. Pad for harness	Feb. 25, 1873	730	232	3	221
134, 327	Groff, W. S., Mahanoy City, Pa. Feather-renovator	Apr. 29, 1873	991	312	3	479
139, 142	Gronberg, O. H., Ferrysburgh, and W. M. Ferry, Grand Haven, Mich. Edging-machine	May 20, 1873	619	193	3	571
143, 071	Grosb, W. B., and S. H. Foreman, Reading, Pa. Ironing-table	Sept. 23, 1873	605	228	4	328
140, 623	Grosjean, F., New York, N. Y. Table dish-stand	July 8, 1873	256	87	4	40
	Gross, E. L., et al. (See Forden, J. M., assignor.)					
139, 143	Gross, E. L., assignor to self, J. M. Forden, J. K. Welter, J. O. Sloan, and J. Rayburn, Springfield, Ill. Seed-dropper	May 20, 1873	620	193	3	571
144, 669	Gross, H., assignor to Hall's Safe and Lock Company, Cincinnati, Ohio. Hinge for safe and vault doors	Nov. 18, 1873	433	147	4	536
144, 670	Same. Permutation-lock	Nov. 18, 1873	434	147	4	536
145, 171	Same. same	Dec. 2, 1873	124	41	4	595
6, 826	Gross, M., and B. B. Zippert, New York, N. Y. Muff (Design)	Aug. 26, 1873			4	212
6, 827	Same. Ladies' fur muff (Design)	Aug. 26, 1873			4	212
	Grosvenor, C. F. (See Tucker, W., assignor.)					
	Grosvenor, J. P., Lowell, Mass. Machine for planing curved surfaces. (Extension)	Dec. 27, 1873			4	671
138, 083	Grote, G. W., Saint Catherine's, Canada. Invalid-bedstead	Apr. 22, 1873	746	236	3	451
140, 914	Grotz, C., assignor to self, D. B. Dennison, J. T. Hackworth, J. G. Hutchison, W. T. Major, and A. Johnston, Ottumwa, Iowa. Rotary steam-engine	July 15, 1873	511	172	4	69
137, 915	Ground, R. B., Edwardsville, assignor by mesne assignment to N. D. Sweeney, Marine, Ill. Plow	Apr. 15, 1873	581	183	3	429
138, 150	Grout, C. P., New York, N. Y. Dentists' tool	Apr. 22, 1873	798	255	3	456
	Grove, C. N. (See Broadbooks, P., assignor.)					
	Grove, W. H. (See Pusey, S. J., assignor.)					
136, 506	Grover, C. B., Cambridge, Mass. Sewing-machine cover	Mar. 4, 1873	134	43	3	256
138, 800	Grover, D. L., Groton, N. Y. Butter-paddle	May 13, 1873	307	95	3	533
140, 497	Same. Bee-hive	July 1, 1873	131	45	4	19
141, 136	Grover, H. C., Nunda, N. Y. Washing-machine	July 22, 1873	730	242	4	96
139, 505	Grover, W. O., Boston, Mass. Hot-air furnace	June 3, 1873	54	17	3	613
134, 540	Groves, G. A., East Clarkson, N. Y. Gang-plow	Jan. 7, 1873	35	11	3	10
140, 498	Groves, J., Ellicott City, Md. Metallic arch for tunnels, &c.	July 1, 1873	132	45	4	19
142, 337	Groves, J. F., Whitefield County, Ga. Truss	Sept. 2, 1873	14	5	4	243
136, 056	Groves, J. R., Hightstown, N. J., assignor to E. H. Ropea, Elizabeth, N. J. Ironing-table	Feb. 18, 1873	612	201	3	201
144, 272	Grove, W. H., and C. M. Sloan, Darien, Kans. Land-roller	Nov. 4, 1873	87	28	4	485
136, 237	Growdon, J., New Enterprise, Pa. Car-coupling	Feb. 25, 1873	782	252	3	226
137, 837	Grubenbecher, H., New York, N. Y. Carving-machine	Apr. 15, 1873	517	161	3	423
139, 952	Grundin, C. F., Boston, Mass. Sofa-bedstead	June 17, 1873	476	150	3	670
142, 568	Grundy, F., Morrisonville, Ill. End-gate for wagons	Sept. 9, 1873	228	74	4	272
140, 700	Grüniger, O., New York, N. Y. Brake-mechanism	July 8, 1873	318	108	4	45
137, 676	Guebard, A., and A. P. Tronchon, Paris, France. Recording-apparatus for vehicles	Apr. 8, 1873	363	112	3	398
136, 434	Guelle, L., Hoboken, N. J. Hoop and train skirt	Mar. 4, 1873	69	24	3	251
	Guest, A. (See Guest, J. H., assignor.)					
139, 953	Guest, J. H., assignor to A. Guest, Brooklyn, N. Y. Electrical thermostat	June 17, 1873	477	150	3	670
143, 344	Same. District and fire-alarm telegraph	Sept. 30, 1873	901	306	4	364
143, 691	Same. Electrical and thermostatic fire-alarm, and circuit therefor	Oct. 14, 1873	272	90	4	411
144, 535	Same. District and fire-alarm telegraph	Nov. 11, 1873	313	105	4	515
				106		
138, 019	Guilder, A. R., Minneapolis, Minn. Middlings-separator	Apr. 22, 1873	686	217	3	446
145, 170	Same. Middlings-purifier	Dec. 2, 1873	122	40, 41	4	505
137, 606	Gullfoyle, W., New York, N. Y. Horse-collar	Apr. 8, 1873	304	94	3	393
133, 474	Gulnot, G., Milton, Fla. Ice-cream freezer	Feb. 4, 1873	74	23	3	133
5, 362	Gulden, J., Key Port, N. J. Soldering-apparatus (Reissue)	Apr. 22, 1873	868	275	3	461
140, 411	Gulick, C. W., New Brunswick, N. J. Iron railway-tie	July 1, 1873	60	21	4	13
140, 365	Gullett, B. D., Amite City, La. Cotton-gin	July 1, 1873	25	9	4	10
136, 057	Gullmann, C., Paterson, N. J. Sewing-machine	Feb. 18, 1873	613	201	3	201
				202		
143, 756	Gum, J., assignor of one-half interest to F. Kane, Marselles, Ill. Car-coupling	Oct. 21, 1873	353	117	4	427
	Gump, C. A., et al. (See Curtner, I., assignor.)					
145, 998	Gundersen, G., Chicago, Ill. Breech-loading fire-arm	Dec. 30, 1873	887	288	4	703
144, 671	Gundlach, E., Hackensack, N. J. Mangle	Nov. 18, 1873	435	147	4	536
138, 395	Gunnaldson, O., Christiansa, Wis. Dumping-wagon	Apr. 29, 1873	1,044	329	3	483
138, 396	Günther, G., New York, N. Y. Bird-cage	Apr. 29, 1873	1,045	329	3	483
134, 881	Günther, H., assignor to self and C. Lupprian, New York, N. Y. Knitting-machine	Jan. 14, 1873	356	113	3	49
144, 976	Gurley, B. B., Minneapolis, Minn. Letter-box	Nov. 25, 1873	700	246	4	569
141, 137	Gurley, J. W., Petersburg, Va. Abdominal supporter	July 22, 1873	730	242	4	96
	Gurley, W., executor. (See Littlejohn, H.) (Extension)					
138, 883	Guscotti, F., assignor of one-half interest to C. W. Smith, New York, N. Y. Channel-opener for boots, &c.	May 13, 1873	381	119	3	539
141, 786	Gustin, J. M., Wilmington, O. Cultivator	Aug. 12, 1873	346	111	4	171
138, 498	Guetin, M., Troy, Pa. Flash-light signal-recorder	May 6, 1873	25	9	3	500
	Guthrie, S. (See Kane, J. F., assignor.)					
	Guthrie, T. H. (See Long, S. W., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
137, 072	Gutzkow, F. (See Meidinger, H., assignor.) Gutzkow, F., San Francisco, Cal. Manufacture of boracic acid.	Mar. 25, 1873	658	218	3	328
145, 646	Guy, G. (See Manuel, E., assignor.) Gwyn, E., et al. (See Wreath, A., assignor.)	Dec. 16, 1873	530	181	4	654
138, 641	Gwynn, H., Baltimore, Md. Carriage-wheel.	May 6, 1873	153	49	3	510
138, 642	Gwynn, S., assignor to the American Metalline Company, New York, N. Y. Journal-box lining.	May 6, 1873	154	49	3	510
138, 643	Same..... Journal-box lining.	May 6, 1873	154	50	3	510
138, 644	Same..... same.	May 6, 1873	155	50	3	510
138, 645	Same..... same.	May 6, 1873	155	50	3	510
138, 466	Same..... same.	May 6, 1873	156	50	3	510
140, 774	Same..... same.	July 15, 1873	385	132	4	59
140, 775	Same..... same.	July 15, 1873	386	132	4	59
137, 362	Haack, J., Hoboken, N. J., and S. Diolot, New York, N. Y. Scarf-ring.	Apr. 1, 1873	77	25	3	363
138, 561	Haag, G. W., Cairo, Pa. Potato-digger.	May 6, 1873	85	27	3	504
144, 334	Haan, H. A. (See Stehlin, C. V. and J., & Haan.) Haarvig, J. A., Chicago, Ill. Waistband fastening for pantaloons, &c.	Nov. 4, 1873	134	45	4	489
144, 273	Haas, D. Y., Hepler, Pa. Machine for shaving leather.	Nov. 4, 1873	87	29	4	485
143, 509	Haas, H., New York, N. Y. Pedal for musical-instruments.	Oct. 7, 1873	93	33	4	388
139, 244	Haas, I., et al. (See Foglesong, W., assignor.) Haberfeld, J. G., Wheeling, W. Va. Door and bit of puddling and boiling furnaces.	May 27, 1873	726	229	3	587
135, 986	Haberstich, P., assignor of one-half interest to C. Mikinas, Dayton, Ohio. Barber's chair.	Feb. 18, 1873	553	182	3	197
142, 228	Hackett, E., Ulysses, Pa. Water-wheel.	Aug. 26, 1873	760	250	4	223
140, 499	Hackett, E. M., New York, N. Y. Closing hatchways.	July 1, 1873	133	45	4	19
133, 036	Hackett, R. (See Whittier, R., assignor.) Hackett, J. T., et al. (See Grotz, C., assignor.)	Jan. 21, 1873	508	164	3	76
144, 845	Haddock, W., Pittsburgh, Pa. Cut-nail machine.	Nov. 25, 1873	596	203	4	560
138, 397	Hadley, A. N., Richmond, Ind. Balanced valve.	Apr. 29, 1873	1,045	329	3	483
140, 035	Hadley, B. H., Brooklyn, N. Y. Machinery for bending the edges of boot and shoe soles.	June 17, 1873	547	173	3	676
143, 237	Same..... Boot and shoe channeling-machine.	Sept. 30, 1873	803	277	4	356
138, 647	Hadley, D. J. (See Crane & Hadley.) Hadley, E., Chicopee Falls, Mass. Egg-beater.	May 6, 1873	157	51	3	510
134, 598	Haering, H., assignor to self and H. Alles, New York, N. Y. Pole-clamp.	Jan. 7, 1873	95	30	3	14
143, 448	Haering, H., and H. Alles, New York, N. Y. Scaffold pole-clamp.	Oct. 7, 1873	41	15	4	384
139, 003	Haertle, A. (See Heckenbach & Haertle.) Hafford, A. T., assignor of one-half interest to F. J. Donovan, Saint Louis, Mo. Submerged force-pump.	May 20, 1873	491	155	3	561
146, 063	Hafner, J. A., Pittsburgh, Pa. Mill-spludle.	Dec. 30, 1873	496	305	4	708
139, 144	Hageman, J., Williamsburgh, Ohio. Wheel for vehicles.	May 20, 1873	621	194	3	571
143, 449	Hagemann, G. A., Copenhagen, Denmark. Mordant for dyeing.	Oct. 7, 1873	45	15	4	384
135, 331	Hagerstrom, A. G., Red Wing, Minn. Horse-power.	Jan. 28, 1873	782	253	3	110
135, 332	Same..... Machine for sawing and splitting wood.	Jan. 28, 1873	783	254	3	110
142, 462	Same..... Threshing-machine.	Sept. 2, 1873	125	41	4	252
142, 693	Hagerty, J. S., Baltimore, Md. Street-lamp.	Sept. 9, 1873	331	111	4	280
145, 172	Hagerty, W., Philadelphia, Pa. Stove-grate.	Dec. 2, 1873	125	41	4	595
142, 160	Hagerty, J., Corry, Pa. Check-runner.	Aug. 26, 1873	704	232	4	219
140, 194	Hague, C. A., Hudson, N. Y. Circulating valve for fire-engines.	July 24, 1873	707	222	3	697
142, 694	Hahn, F. E., assignor to O. C. Ferris and F. B. Miles, Philadelphia, Pa. Boring-mill.	Sept. 9, 1873	331	111	4	281
146, 064	Same..... Work-holding device.	Dec. 30, 1873	946	305	4	708
139, 084	Hahn, T., Stuttgart, Germany. Watchman's time-check.	Apr. 22, 1873	742	236	3	451
135, 333	Haight, H. J., New York, N. Y. Artist's scraper.	Jan. 28, 1873	786	254	3	111
140, 366	Haight, W. H., and T. S. Gladding, Leavenworth, Kans. Roofing composition.	July 1, 1873	26	10	4	10
136, 912	Hail, N. B., et al. (See Ralston, J., assignor.) Haines, C. L., Carmel, Mo. Mop-holder.	Mar. 18, 1873	506	167	3	304
138, 246	Haines, D. E., Uniontown, D. C. Dumping-wagon.	Apr. 29, 1873	914	288	3	473
141, 504	Haines, J. W., Cambridgeport, Mass. Silvered-glass door-knob.	Aug. 5, 1873	94	26	4	142
140, 036	Haines, R. (See Pelham, A., assignor.) Hair, J. H., Galesburgh, Ill. Animal-trap.	June 17, 1873	549	173	3	676
143, 282	Hairton, P. C., Crawfordville, Miss. Wheel for vehicles.	Sept. 30, 1873	841	289	4	359
140, 268	Hairton, P. C., Crawfordville, Miss. Wheel for vehicles.	June 24, 1873	766	242	3	702
136, 156	Hairton, W., sr., Fowler, Ill. Three-horse equalizer.	June 24, 1873	766	242	3	702
137, 363	Hait, C. E. (See Huntley, G. R., assignor.) Hake, E. H., Canfield, Ohio. Trammel for lifting-jacks.	Feb. 25, 1873	720	233	3	221
134, 662	Halbert, W. G., Columbus, Miss. Cultivator.	Jan. 7, 1873	155	51	3	19
137, 363	Haldeman, J. S., assignor to self and H. E. Clark, Kansas City, Mo. Lifting-jack.	Apr. 1, 1873	77	25	3	363
134, 541	Hale, A. W., New York, N. Y. Meat-mincer.	Mar. 15, 1873	36	11	3	244
5, 369	Hale, D. W., Middletown, Conn. Die for forming sewing-machine shuttles.	Jan. 7, 1873	36	11	3	10
138, 884	Hale, E. J., Foxcroft, and C. H. Chandler, Brownsville, Me. Lamp.	Mar. 1, 1873	36	11	3	189
146, 065	Hale, H. F. T., Bay City, Mich. Reservoir-stove.	Apr. 22, 1873	880	278	3	462
146, 066	Hale, H. S., assignor to Hale, Kilburn & Co., Philadelphia, Pa. Picture-frame.	May 13, 1873	263	82	3	529
146, 067	Hale, H. S., Philadelphia, Pa. Chair.	Dec. 30, 1873	947	305	4	708
145, 059	Same..... Car-window shield.	Dec. 30, 1873	948	306	4	709
135, 707	Hale, H. S., assignor to Hale, Kilburn & Co., Philadelphia, Pa. Wooden mat for picture-frames.	Dec. 30, 1873	948	306	4	709
138, 750	Hale, J. H., and A. C. Whitney, Boston, Mass. Feed-water heater.	Dec. 2, 1873	17	7	4	587
136, 913	Hale, Kilburn & Co. (See Hale, H. S., assignor.) Hale, W. P., Lock Haven, Pa. Turbine water-wheel.	Feb. 11, 1873	303	96	3	163
138, 751	Haley, J. (See Bennett, Krebs & Haley.) Haley, J., Pittsburgh, Pa. Glass-press.	May 13, 1873	263	82	3	529
145, 295	Haley, J. B. (See Lowe, H. C., assignor.) Haley, J. J., et al. (See Palmer & Spencer, assignors.)	Mar. 18, 1873	507	168	3	304
140, 915	Hall, A., Perth Amboy, N. J. Furnace-block press.	May 13, 1873	265	82	3	529
141, 711	Hall, A., New York, N. Y. Powder and shot charger for fire-arms.	Dec. 9, 1873	236	79	4	617
138, 247	Hall, A. J., Farmington, N. H., assignor of one-half interest to J. F. Cloutman. Shoe-knife.	July 15, 1873	512	172	4	69
141, 555	Hall, B., Saint Louis, Mo. Railway-switch.	Aug. 12, 1873	276	90	4	165
137, 609	Hall, C., New York, N. Y. Machine for heading bolts.	Apr. 29, 1873	915	288	3	473
138, 801	Hall, C. F., Rockford, Ill. Carriage-spring.	Aug. 5, 1873	125	39	4	145
141, 555	Hall, C. H., Trenton, N. J., and R. Knott, Brooklyn, N. Y. Glove-fastening.	Apr. 1, 1873	304	94	3	393
137, 609	Hall, C. M., Yates City, Ill. Adjustable brace-coupling.	May 13, 1873	308	95	3	533
138, 801	Same..... Stock-feeder.	May 13, 1873	308	95	3	533

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
5, 601	Hall, C. M., and D. E., Uniontown, Ill., said D. E. assignor to said C. M. Hall. Cultiva- tor (Reissue)	Oct. 14, 1873	325	108	4	414
136, 238	Hall, C. S., Rochester, N. Y. Threshing-machine	Feb. 25, 1873	782	253	3	226
	Hall, D. E. (See Hall, C. M. and D. E.) (Reissue)					
	Hall, E. & Co. (See Warner, A., assignor) (Reissue)					
141, 787	Hall, F. E., Boston, Mass. Hose-pipe nozzle	Aug. 12, 1873	348	115	4	171
145, 345	Hall, F. H., Hackensack, N. J. Process of manufacturing artificial marble, and veining the same	Dec. 9, 1873	279		4	620
	Hall, G., et al. (See Thurber, A. E., assignor)					
	Hall, G., assignor of one-half interest to G. Clubb, Joliet, Ill. Medical compound or salve	June 17, 1873	478		3	670
139, 954	Hall, G., Morgantown, W. Va. Hand seed-sower	June 10, 1873	326	101	3	651
139, 955	Hall, H. B., New York, N. Y. Package of caustic soda or alkali	June 17, 1873	478	150	3	670
136, 157	Hall, H. L., Woodbridge, Iowa. Hand corn-husker	Feb. 25, 1873	721	233	3	221
140, 776	Hall, H. P., Akron, N. Y. Barrel-making machinery	July 15, 1873	386	133	4	59
139, 385	Hall, I., assignor to self and Damon, Thomas & Lewis, Boston, Mass. Boot	May 27, 1873	843	269	3	597
	Hall, J., et al. (See Rober, J. B., assignor) (Design)					
142, 567	Hall, J., assignor to L. I. Hall, Quincy, Mass. Stove-pipe for vessels	Sept. 9, 1873	228	74	4	272
145, 734	Hall, J., Watertown, Mass. Toy money-box	Dec. 23, 1873	639	209	4	673
137, 838	Hall, J. D., assignor to M. E. I. Hall, Brooklyn, N. Y. Hot-air furnace	Apr. 15, 1873	518	161	3	423
144, 335	Hall, J. F., Albia, Iowa. Flat-iron heater	Nov. 4, 1873	134	45	4	489
	Hall, J. H. (See Quincey, E. W., assignor)					
135, 801	Hall, J. H., Ansonia, Conn. Bustle	Feb. 11, 1873	384	124	3	169
143, 979	Hall, J. H., Chicago, Ill. Folding-seat	Oct. 23, 1873	564	187	4	454
136, 239	Hall, J. L., Cincinnati, Ohio. Safe-door hinge	Feb. 25, 1873	783	253	3	226
140, 824	Hall, J. R., and C. H. Ellis, said Hall assignor to said Ellis, Salem, Ohio. Meat and } vegetable cutter	July 15, 1873	431	{ 146 } { 147 }	4	63
	Hall, J. S. (See Wall, P., assignor)					
144, 760	Hall, J. S., Pittsburgh, Pa. Plow	Nov. 18, 1873	511	173	4	543
	Hall, L. C., et al. (See Pelham, A., assignor)					
	Hall, L. L. (See Hall, J., assignor)					
	Hall, L. W., et al. (See Cleveland, G. D., assignor)					
	Hall, M. E. J. (See Hall, J. D., assignor)					
145, 657	Hall, M. H., Philadelphia, Pa. Machine for cutting leather for boot and shoe heels	Dec. 16, 1873	551	181	4	654
	Hall, N. C. (See Smith, L. B., assignor)					
141, 644	Hall, N. P., Jancsville, Wis. Music-leaf turner	Aug. 12, 1873	220	70	4	161
	Hall, O. B., 2d. (See Creighton, J. R., assignor) (Reissue)					
140, 500	Hall, P. W., Calvert, Tex. Combination lock	July 1, 1873	133	46	4	19
142, 695	Same.....Permutation lock	Sept. 9, 1873	332	{ 111 } { 112 }	4	281
	Hall, S. G. (See Allen & Hall)					
6, 341	Hall, T., Jersey City, N. J. Show-card for head-nets (Design)	Jan. 14, 1873			3	38
140, 269	Hall, T., Florence, Mass. Vise	June 24, 1873	766	242	3	702
139, 574	Hall, T., & J. Newton, Lawrence, Mass. Mangling or wringing machine	June 3, 1873	112	37	3	618
141, 874	Hall, W., Brookline, Mass. Bolt for safe-doors, &c	Aug. 19, 1873	439	{ 143 } { 144 }	4	188
136, 044	Hall, W. D., Memphis, Tenn. Automatic fan	Feb. 18, 1873	602	198	3	201
135, 114	Hall, W. N., Mexia, Tex. Nails	Jan. 21, 1873	567	184	3	81
138, 885	Same.....Combined adjustable fire-fender, grate, and andiron	May 13, 1873	382	119	3	539
145, 864	Same.....Combination padlock	Dec. 23, 1873	747	244	4	682
145, 865	Same.....Keyhole-guard	Dec. 23, 1873	747	244	4	682
144, 901	Hall, Z., Dennis, Mass. Anchor	Nov. 25, 1873	638	217	4	584
	Hall's Safe and Lock Company. (See Gross, H., assignor)					
138, 648	Halladay, D., Batavia, Ill. Wind-wheel	May 6, 1873	157	51	3	510
143, 143	Hallas, J. G., and W. N. Needen, assignors to the Benedict and Burnham Manufacturing Company, Waterbury, Conn. Wick-raiser	Sept. 23, 1873	718	247	4	333
134, 798	Hallefas, W. J., Brooklyn, N. Y. Gripping-tongs	Jan. 14, 1873	282	91	3	43
136, 240	Haller, E. G., Carlisle, Pa. Fruit-jar	Feb. 25, 1873	784	254	3	227
140, 916	Same.....same	July 15, 1873	514	173	4	69
136, 832	Hallett, R. W., Brooklyn, N. Y. Raising sunken vessels	Mar. 18, 1873	442	146	3	299
138, 398	Halliburton, D. F., Rutherford Station, Tenn. Fertilizer-distributor	Apr. 29, 1873	1, 046	329	3	484
135, 545	Halliday, W. P., Cairo, Ill. Railway ferry-track platform	Feb. 4, 1873	141	45	3	138
	Hallidie, A. S. (See Martin, T. M., assignor)					
145, 999	Hallock, W. R., assignor to self and Pierson & Morehouse, Westfield, N. J. Oil-can	Dec. 30, 1873	889	288	4	704
143, 692	Halsey, E., San José, Cal. Locking-latch for doors	Oct. 14, 1873	273	90	4	411
	Halstead, Couse & Co. (See Halstead & Wheeler, assignors)					
142, 848	Halstead, I. T., Fredonia, N. Y. Ore-washer	Sept. 16, 1873	473	161	4	302
136, 914	Halstead, M., and J. L. Wheeler, Brooklyn, assignors to Halstead, Couse & Co., New York, N. Y. Putting up and preserving cider	Mar. 18, 1873	508	168	3	304
	Halvorsen, H., Nashua, N. H. Lamp (Extension)	Sept. 20, 1873			4	295
137, 135	Halvorsen, T., New York, N. Y. Device for sharpening scissors	Mar. 25, 1873	712	236	3	332
135, 475	Ham, J. T., Liberty, Ind. Excavator	Feb. 4, 1873	75	24	3	133
137, 198	Hamar, A., Philadelphia, Pa. Torpedoes for oil-wells	Mar. 25, 1873	772	255	3	336
137, 439	Same.....Can for transporting nitro-glycerine	Apr. 1, 1873	144	47	3	369
137, 440	Same.....Manufacture of nitro-glycerine	Apr. 1, 1873	144	47	3	369
137, 918	Same.....Torpedo for oil-wells	Apr. 15, 1873	582	183	3	429
135, 425	Hamburjer, E., Detroit, Mich. Combined cradle and rocking-chair	Feb. 4, 1873	30	9	3	130
137, 917	Same.....Extension-table	Apr. 15, 1873	582	183	3	429
134, 599	Hamburger, M., I. J. Siskind, and A. Klein, New York, N. Y. Apparatus for filling, pol- ishing, and varnishing moldings	Jan. 7, 1873	95	31	3	4
	Hamel, D., Holyoke, Mass. Stuff-regulator for paper-machine	Nov. 25, 1873	639	217	4	564
6, 482	Hamer, J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet (Design)	Mar. 4, 1873			3	245
6, 483	Same.....same (Design)	Mar. 4, 1873			3	245
6, 575	Same.....same (Design)	Apr. 8, 1873			3	387
6, 576	Same.....same (Design)	Apr. 8, 1873			3	387
139, 668	Hamil, R. C., Harrisville, Tex. Riding-saddle	June 10, 1873	210	68	3	642
139, 680	Hamilton, D. S., Elmira, N. Y. Road-scraper	June 10, 1873	211	69	3	642
139, 986	Hamilton, F. C., assignor to E. J. Brooks, New York, N. Y. Seal-lock	June 10, 1873	326	101	3	651
	Hamilton, H. (See Vanorman, O., assignor)					
145, 102	Hamilton, H. N., White Plains, N. Y. Fountain pen	Dec. 2, 1873	59	19	4	590
	Hamilton, J. A. (See Rodgers, A. C., assignor)					
146, 068	Hamilton, J. B., Loudon, Tenn. Water-wheel	Dec. 30, 1873	949	306	4	709
144, 977	Hamilton, J. T., Boone County, and E. F. Conner, Decatur, Ind., said Conner assignor to said Hamilton. Lifting-jack	Nov. 25, 1873	700	236	4	569
141, 138	Hamilton, L., Panora, Iowa. Corn-harvester	July 22, 1873	731	243	4	96

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
	Hamilton Steeled-wheel Company. (See Hamilton, W. G., assignor. (Reissue.)					
136, 320	Hamilton, T. F., New Haven, Conn. Corsets	Feb. 25, 1873	857	276	3	232
136, 915	Hamilton, W., assignor to self and J. L. La Moree, Neversink, N. Y. Machine for making ox-shoes	Mar. 18, 1873	509	168	3	304
137, 073	Hamilton, W., Erie, Pa. Steam-lubricator	Mar. 25, 1873	660	219	3	328
140, 270	Same. Same	June 24, 1873	768	242	3	702
5, 298	Hamilton, W. G. (See Steers, T., assignor.) Hamilton, W. G., Ramapo, N. Y., assignor to the Hamilton Steeled-wheel Company. Manufacture of car-wheels	Feb. 25, 1873	894		3	235
144, 536	Hamilton, W. T., Dublin, Ireland. Machinery for cutting dovetails	Nov. 11, 1873	314	{ 106 107 }	4	515
6, 906	Hamlin, R. D. (See Liddell, W., assignor.) Hamm, S., assignor of one-half interest to S. Oppenheimer, Philadelphia, Pa. Toy-target	Oct. 28, 1873			4	452
143, 144	Hamm, S., Philadelphia, Pa. Suspender-buckle	Sept. 23, 1873	719	247	4	333
144, 091	Hamm, S., Philadelphia, assignor of one-half interest to S. Oppenheimer, Philadelphia, Pa. Suspenders	Oct. 28, 1873	662	218	4	462
6, 759	Hamm, W. B., Philadelphia, Pa. Watch-chain charm	July 8, 1873			4	36
	Hammon, H. F. (See Nelson, A. S., assignor.)					
135, 802	Hammond, D., M. Adler, and J. Abbott, Canton, Ohio. Iron bridge	Feb. 11, 1873	364	{ 124 125 }	3	169
138, 649	Hammond, E., Cumberland, Md. Mortising-machine	May 6, 1873	159	51	3	510
138, 020	Hammond, G. B., Putnam, Conn., and J. A. Tucker, Attleborough, Mass. Shuttle-binder for looms	Apr. 22, 1873	688	217	3	447
145, 648	Hammond, J. E., assignor of two-thirds interest to D. P. Gardner and E. Pierce, New Bedford, Mass. Hinged mast for vessels	Dec. 16, 1873	552	181	4	654
134, 799	Hammond, S. T. (See Paige, W. H., assignor.)					
142, 016	Hammond, W. H., Syracuse, Mo. Can for preserving fruits, &c	Jan. 14, 1873	283	92	3	43
144, 761	Same. Eave-trough fastening	Aug. 19, 1873	556	184	4	197
	Same. Wash-boiler	Nov. 18, 1873	512	174	4	543
	Hampson, G. J. (See Gorrell, T., assignor.)					
140, 917	Hampton, I. H. (See Palm, T. F., assignor.) Hanchett, F. P., Nepeskun, Wis. Railway-switch Hanchett, O. R. (See Selden & Hanchett.) Hancock, G. (See Leonard & Hancock.)	July 15, 1873	514	173	4	69
136, 721	Hanctin, J. O., Paris, France. Apparatus for crushing, grinding, and mixing molding-sand, &c	Mar. 11, 1873	336	111	3	281
134, 746	Handren, J. W., Jersey City, N. J. Steam-pump	Jan. 14, 1873	239	77	3	40
135, 426	Same. Same	Feb. 4, 1873	30	9	3	130
140, 271	Handy, T., Springfield, Ill. Self-loading wagon	June 24, 1873	769	243	3	703
139, 575	Hanford, J. M., and J. Wood, Middletown, N. Y. Dumping-car	June 3, 1873	112	37, 38	3	618
	Hanford, T. (See Cooke & Hanford) (Reissue.)					
139, 145	Hankey, A., et al. (See Corser, G. A., assignor.) Hankinson, W. H., New York, N. Y. Carpet-beater	May 20, 1873	621	194	3	571
139, 060	Hanley, M. R. (See Mullin, R. J., assignor.)					
135, 115	Hannay, M. R., Providence, R. I. Detachable boot and shoe tip	May 20, 1873	541	170	3	565
5, 422	Hanna, A., Dover, Ky. Door-check	Jan. 21, 1873	567	185	3	81
145, 416	Hanna, E. S., Pittsburgh, Pa. Paper washer	May 20, 1873	706	232	3	578
141, 047	Hanna, H., Columbus, Ohio. Machine for bending wood	Dec. 9, 1873	332	113	4	625
144, 903	Hanna, W. H., Chico, Cal. Shoemakers' pincers	July 22, 1873	648	218	4	89
139, 576	Same. Shank-laster	Nov. 25, 1873	639	217	4	564
141, 346	Hannah, J. W., Sticklersville, Mo. Washing-machine	June 3, 1873	113	38	3	618
140, 777	Hannau, J., et al. (See Pitrat, M. J., assignor.)	July 29, 1873	947	308	4	121
144, 672	Hanour, P. J., Buffalo, N. Y. Combined water-cooler and show-case	July 15, 1873	388	133	4	59
141, 048	Hansen, C. A., and G. Harley, Guelph, Canada. Button-hole stitching-attachment for sewing-machines	Nov. 18, 1873	436	147	4	537
143, 571	Hansen, M., San Francisco, Cal. Scroll-sawing machine	July 22, 1873	649	219	4	89
142, 626	Hanson, C. N. (See Beach & Hanson.) Hanvey, A., Steubenville, Ohio. Barrel-head	Oct. 14, 1873	164	55	4	402
137, 199	Hapgood, H. L., Athol, Mass. Sandpapering-machine	Sept. 9, 1873	275	90	4	276
135, 219	Hapgood, J. H. (See Chinnock, G. H., assignor.)					
135, 920	Happe, J., and W. Newman, New York, N. Y. Sewing-machine for quilting	Mar. 25, 1873	773	255	3	336
143, 173	Harang, I., Banana Grove Plantation, La. Steam generator	Jan. 28, 1873	631	220	3	102
145, 173	Same. Duplex safety-valve	Jan. 28, 1873	682	220	3	203
136, 573	Harbaugh, C., Eaton, Ohio. Sash-balance	Dec. 2, 1873	126	41	4	595
135, 803	Harbin, J. (See Foster, Baylie & Harbin.)					
137, 074	Hard, H., Akron, Ohio. Spiral spring for furniture	Mar. 4, 1873	135	44	3	256
140, 412	Hard, J. A., Lawrence, Kans. Stud for fastening neck-ties	Feb. 11, 1873	390	125	3	170
139, 061	Same. Meat-chopper	Mar. 25, 1873	661	219	3	329
135, 987	Same. Neck-tie fastener	July 1, 1873	60	21	4	13
145, 500	Hard, P. C., Wadsworth, Ohio. Bed-bottom	Feb. 25, 1873	722	233	3	222
142, 101	Hardaway, T. J., Macon, Ga. Mail-bag	May 20, 1873	542	170	3	565
141, 928	Hardee, W. H. (See Bizzell, W. B., assignor.)					
140, 778	Hardekopf, C. J., Philadelphia, Pa. Kite	Feb. 18, 1873	554	183	3	197
139, 386	Harden, J. H., Philadelphia, Pa. Drawing-board trestle	Dec. 2, 1873	127	42	4	595
134, 882	Hardenbergh, C. M. (See Janney, C., assignor.) Hardenbergh, C. M., A. L. Miner, and W. J. Fender, Minneapolis, Minn. Middlings purifier	May 27, 1873	844	270	3	597
139, 004	Hardenbergh, F. H., Hawley, Pa. Scroll-saw	Jan. 14, 1873	357	114	3	49
145, 500	Hardenbrook, J. J., and S. Belford, Columbus Grove, Ohio. Adjustable step-ladder	May 20, 1873	492	155	3	561
142, 101	Hardie, D. (See Richardson, J. H., assignor.)					
141, 928	Hardie, J. W., New York, N. Y. Stock and die	Dec. 16, 1873	418	137	4	643
140, 778	Harding, D., assignor to R. Kitson, Lowell, Mass. Feed-regulators for cotton openers, &c	Aug. 26, 1873	654	215	4	215
143, 145	Harding, E. and H., Delevan, Minn. Foot-power apparatus	Aug. 19, 1873	483	159	4	191
141, 346	Harding, E. J., Saint Louis, Mo. Abdominal supporter	July 15, 1873	389	134	4	59
145, 649	Harding, G. E., New York, N. Y. Furnace for the manufacture of iron and steel	Sept. 23, 1873	720	{ 247 248 }	4	333
139, 713	Harding, H. (See Harding, E. and H.)					
139, 670	Harding, H., Tuscaloosa, Ala. Railway rail-joint stiffener	Dec. 16, 1873	552	182	4	654
143, 072	Harding, J., Galesburgh, Ill. Shoe-lacings	June 10, 1873	257	81	3	645
141, 436	Harding, W., Brooklyn, N. Y. Composition for filling the grains of wood	June 10, 1873	212		3	642
	Hardy, C. H., assignor to J. Sully, trustee, Boston, Mass. Bench-plane	Sept. 23, 1873	666	228	4	328
	Hardy, D. D., assignor of one half interest to H. R. Greene, Delavan, Ill. Rotary steam-engine	Aug. 5, 1873	23	8	4	137

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 565	Hardy, P. J., New York, N. Y. Bearing for shafting	Dec. 16, 1873	492	158	4	648
145, 866	Harfield, W. H., London, England. Windlass	Dec. 23, 1873	749	244	4	682
5, 614	Harger, D., Des Moines, Iowa. Furnace	Oct. 21, 1873	519	174	4	441
6, 832	Hargrave, J., Cincinnati, Ohio. Tailors' goose	Sept. 2, 1873			4	241
6, 874	Same. Sash-iron handle	Sept. 9, 1873			4	270
135, 908	Hargrave, T. C., Boston, Mass. Steelyard-scales	Feb. 18, 1873	489	158	3	192
142, 627	Harlan, G. W., Cincinnati, Ohio. Carriage-spring	Sept. 9, 1873	276	91	4	276
	Harlan, J. (See Davis, W. H., assignor.)					
	Harlan, J. (See Metcalf, O., assignor.)					
135, 546	Harcus, W., Washington, Mo. Excavating cart	Feb. 4, 1873	143	45	3	139
	Harley, G. (See Hansen & Harley.)					
140, 195	Harlow, E., New York, N. Y. Elevator for hods, &c.	June 24, 1873	707	223	3	697
5, 678	Harlow, J. B., Portland, Me. Sofa-bedstead	Dec. 9, 1873	391	129	4	629
135, 643	Same. Same	Feb. 11, 1873	244	77	3	159
	Harms, A. G. (See Morrison & Harms)					
140, 825	Harnach, W., New York, N. Y. Tassel for canes and umbrellas	July 15, 1873	432	147	4	63
	Harneden, J. W. (See Noble, O. W., assignor.)					
140, 413	Harness, B. R., Schooley's Station, Ohio. Stalk-cutter	July 1, 1873	61	22	4	13
144, 762	Harper, A. W., Philipsburgh, Pa. Spool-case	Nov. 18, 1873	513	174	4	543
136, 508	Harper, C. A., Burlington, N. J. Flour-bolt	Mar. 4, 1873	135	44	3	256
	Harper, H. W. (See Sayre & Shull, assignors)					
134, 663	Harper, J. H., Pittsburgh, Pa. Attaching patterns to their supporting-plates	Jan. 7, 1873	156	51	3	19
141, 049	Harper, R., Glenn Mills, Pa. Metal-planing machine	July 22, 1873	650	219	4	89
143, 146	Harper, W., and W. Smith, Montreal, Canada. Trolling-spoon	Sept. 23, 1873	721	248	4	333
	Harrall, G. S. (See Dunn, W. G., assignor.)					
	Harrass, B. (See Gerike, H., assignor.)					
138, 328	Harrington, D., Southbridge, Mass. Shave for boots and shoes	Apr. 29, 1873	992	312	3	479
144, 537	Harrington, E. P., Volusia, N. Y. Car-brake	Nov. 11, 1873	316	107	4	515
	Harrington, G. (See Edison, T. A., assignor.)					
139, 146	Harrington, G., and G. D. Rollins, Springfield, Mass. Die for paper-collar machinery	May 20, 1873	622	194	3	571
137, 075	Harrington, I., Huntington, assignor to self, W. E. Downs, and T. L. Cornell, Birmingham, Conn. Apparatus for teaching mensuration	Mar. 25, 1873	662	219	3	328
	Harrington, J. P. (See Elliott, Harrington & Davenport.)					
141, 270	Harrington, J. R., Brooklyn, N. Y. Carpet-lining machine	July 29, 1873	874	286	4	115
143, 345	Harrington, J. W., Cincinnati, and J. A. Yingling, Hamilton, Ohio. Pump for driven wells	Sept. 30, 1873	903	307	4	364
136, 159	Harrington, M. W., Homestead, Iowa. Gun-sight	Feb. 25, 1873	722	233	3	222
145, 650	Harris, A., assignor to self and J. J. Griffin, Philadelphia, Pa. Dry gas-meter	Dec. 16, 1873	553	182	4	654
135, 909	Harris, A. M., Columbus, Ga. Stove-grate	Feb. 18, 1873	490	159	3	192
6, 369	Harris, C., and E. Kummer, assignors to C. Harris & Son, Cincinnati, Ohio. Stove. (Design)	Jan. 28, 1873			3	100
6, 370	Same. Stove	Jan. 28, 1873			3	100
6, 371	Same. Same	Jan. 28, 1873			3	100
6, 372	Same. Same	Jan. 28, 1873			3	100
	Harris, C. & Son. (See Harris & Kummer, assignors)					
	Harris, C. C. (See Keeler & Harris.)					
139, 671	Harris, D., Litchfield, Mass., assignor to self and J. Tremlett, Saint Louis, Mo. Boot-stretcher	June 10, 1873	212	69	3	642
	Harris, G. W. (See Carey, W. W., assignor.)					
143, 757	Harris, G. W., assignor to G. W. Gillette, New York, N. Y. Wrench for bung-bushings	Oct. 21, 1873	354	117	4	427
145, 867	Harris, G. W., Lancaster, N. Y. Fireman's extension-ladder	Dec. 23, 1873	751	245	4	682
136, 992	Harris, H., Tidioote, Pa. Extracting tubular casings from oil-wells	Mar. 18, 1873	573	191	3	310
141, 050	Harris, H., Newark, and F. Hewitt, Bloomfield, N. J. Sash-cord fastener	July 22, 1873	651	219	4	89
135, 910	Harris, J., Baltimore, Md. Sectional steam-boiler	Feb. 18, 1873	491	159	3	192
136, 372	Harris, J., New Carlisle, Ind. Turbine water-wheel	Mar. 4, 1873	20	7	3	247
137, 364	Harris, J. B., Ottawa, Ill. Millstone-dressing machine	Apr. 1, 1873	78	25	3	363
	Harris, J. C. (See Smith & Harris)					
137, 610	Harris, J. F., and E. D. Childs, Charlestown, Mass. Child's chair	Apr. 8, 1873	305	94, 95	3	393
138, 021	Harris, J. P., Greensborough, Ga. Millstone-dress	Apr. 22, 1873	688	217	3	447
	Harris, J. R. (See Barickson & Harris.)					
139, 956	Harris, L. W., Oriskany Falls, N. Y. Self-acting switch	June 17, 1873	479	150	3	670
	Harris, M. (See Gilberts & Harris.)					
141, 556	Harris, S., Philadelphia, Pa. Weighing-scales	Aug. 5, 1873	126	40	4	145
5, 397	Harris, S. W., Hudson, N. Y., assignor of part interest to B. Ray, M. Martin, and J. W. Hoysradt. Furnace for smelting iron and other ores	May 6, 1873	240	75	3	517
142, 463	Harris, S. W., assignor to T. F. Miner, Albany, N. Y. Cinder-plate for blast-furnaces	Sept. 2, 1873	127	42	4	252
142, 464	Harris, S. W., Albany, assignor to B. Ray, Hudson, and L. Jagger and T. F. Miner, Albany, N. Y. Blast-furnace for smelting iron and other ores	Sept. 2, 1873	128	42	4	252
134, 664	Harris, T., and P. Dunn, Coté Saint Paul, Canada. Hammer-roll device for forming horseshoe-nails	Jan. 7, 1873	158	52	3	19
145, 296	Harris, W., Danville, Vt. Stereoscopic camera	Dec. 9, 1873	236	79	4	617
145, 297	Harris, W., Rochester, N. Y. Spool-stand	Dec. 9, 1873	237	80	4	617
	Harris, W. A. (See Babbitt & Harris.)					
	Harris, W. A. (See Babbitt, G. R., assignor.)					
136, 597	Harris, W. A., Providence, R. I. Drip-collecting device	Mar. 11, 1873	233	79	3	273
	Harris, W. S., et al. (See Sinclair, J. D., assignor)					
146, 069	Harris, W. S., Trenton, N. J. Portable cradle	Dec. 30, 1873	950	307	4	709
6, 658	Harrison, B. J., New York, N. Y. Chair-frame	May 20, 1873			3	559
141, 271	Same. Folding chair	July 29, 1873	875	286	4	115
	Harrison, C. (See Clark, M. S., assignor.)					
	Harrison, J., jr., Philadelphia, Pa. Steam boiler	Oct. 4, 1873			4	353
138, 151	Harrison, J., East Hampton, Conn. Door-bell	Apr. 22, 1873	799	255	3	456
139, 147	Same. Bell-ringing	May 20, 1873	623	195	3	571
141, 139	Same. Furnace for melting metals	July 22, 1873	732	243	4	96
141, 788	Harrison, J., New York, N. Y. Sign	Aug. 12, 1873	349	115	4	171
143, 147	Harrison, J. D., Middletown, Ohio. Wheel-plow	Sept. 23, 1873	721	242	4	333
143, 758	Harrison, J. W., Niles, Mich. Dumping-platform for railway-cars	Oct. 21, 1873	354	118	4	427
144, 336	Harrison, R. J., assignor of one-half interest to J. Q. Williams, Raleigh, N. C. Wash-boiler	Nov. 4, 1873	135	45	4	489
	Harrison, T. J. (See Perkins, S. R., assignor.)					
136, 993	Harrison, W., Chicago, Ill. Apparatus for shearing horses	Mar. 18, 1873	574	191	3	310
139, 787	Harrison, W., assignor of one-half interest to H. C. Prewitt, Linneus, Mo. Harvester	June 10, 1873	327	102	3	651
138, 248	Harach, G., Chicago, Ill. Tnyere	Apr. 29, 1873	915	289	3	473
144, 538	Harsen, W., Green Point, N. Y. Steering-propeller	Nov. 11, 1873	317	108	4	515
	Hart, B. E. (See Shively, T., assignor.)					
	Hart, Bliven & Mead Manufacturing Co. (See Fogelstrand, O. F., assignor) (Design)					

Alphabetical list of patentees for the year 1873, &c.—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Hart, Bliven & Mead Manufacturing Company. (See Jones, H. K., assignor). (Reissue.)					
143, 566	Hart, G., Tarrytown, N. Y. Machine for removing snow from roadways	Dec. 16, 1873	483	158	4	648
143, 148	Hart, G. B., Buffalo Township, Iowa. Shoe fastening	Sept. 23, 1873	722	248	4	333
	Hart, G. E. (See Logan & Hart.)					
	Hart, H. B. (See Marchant & Hart.)					
144, 092	Hart, H. C., Unionville, Conn. Saw-set	Oct. 28, 1873	662	218	4	463
144, 673	Hart, I., Cincinnati, Ohio. Inking apparatus	Nov. 18, 1873	437	148	4	537
	Hart, J., et al. (See Picking & Hopkins, assignors.)					
137, 839	Hart, J., Kekoskee, Wis. Coffee-roaster	Apr. 15, 1873	519	162	3	423
146, 070	Hart, J., assignor to S. H. Jenkins, N. B. Brown, and J. C. Beiden, Philadelphia, Pa. Spoon	Dec. 30, 1873	951	307	4	709
135, 708	Hart, R. B., Salado, Tex. Wash-boiler attachment	Feb. 11, 1873	303	96	3	163
144, 452	Hart, S., Fulton, N. Y. Grain-drill	Nov. 11, 1873	243	82	4	510
142, 017	Hart, W., Philadelphia, Pa. Self braking, lowering, and hoisting apparatus	Aug. 19, 1873	556	184	4	197
	Hart, W. D., et al. (See Bristol, H. C., assignor.)					
130, 464	Hart, W. H., New Britain, Conn. Sheet-metal hinge	June 3, 1873	19	6	3	610
143, 283	Hart, W. H., Lowell, Mass., assignor of one-half interest to A. Colburn, Nashua, N. H.	Sept. 30, 1873	842	290	4	359
	Lounge					
	Hartford Carpet Company. (See Fisher, J., assignor). (Design.)					
	Same. (See Heinicke, O., assignor). (Design.)					
	Same. (See Horan, H., assignor). (Design.)					
	Same. (See Malkin, L. G., assignor). (Design.)					
	Same. (See Ney, E. J., assignor). (Design.)					
	Same. (See Nordman, H., assignor). (Design.)					
	Same. (See Smith, J. H., assignor). (Design.)					
	Hartford Eyelet Company. (See Sandfear, W. R., assignor). (Reissue.)					
143, 238	Harting, C., Washington, D. C. Carpet-fastener	Sept. 30, 1873	806	277	4	356
	Hartley, W. H. (See Borton & Hartley.)					
143, 572	Hartley, W. H., Philadelphia, Pa. Horse hay-rake	Oct. 14, 1873	164	55	4	402
135, 221	Hartman, B. F., Charlestown, Pa. Sash-balance	Jan. 28, 1873	622	220	3	263
137, 365	Hartman, J., jr., Philadelphia, Pa. Screw-propeller	Apr. 1, 1873	79	26	3	363
145, 651	Hartman, J. J., Saint Louis, Mo. Adjustable reclining-chair	Dec. 16, 1873	553	182	4	654
141, 002	Hartman, J. M., assignor to Taws & Hartman, Philadelphia, Pa. Metallurgic gas-furnace	July 22, 1873	611	206	4	86
134, 800	Hartman, S. B., Lancaster, Pa. Wash-boiler attachment	Jan. 14, 1873	283	92	3	43
136, 373	Hartmann, F., Chicago, Ill. Street-lamp	Mar. 4, 1873	21	7	3	247
137, 918	Harts, P. N., French Grove, Ill. Corn-husking glove	Apr. 15, 1873	523	183	3	429
5, 558	Hartshorn, S., New York, N. Y. Shade fixture. (Reissue.)	Sept. 2, 1873	201	65	4	258
137, 677	Hartzell, G., Philadelphia, Pa. Bed-lounge	Apr. 8, 1873	364	113	3	398
143, 284	Hartzell, H. H., Holden, Mo. Harness trace-buckle	Sept. 30, 1873	843	290	4	359
	Hartzell, J. D. (See Brooks & Hartzell.)					
138, 802	Hartzell, J. D., Ozawkie, Kans. Washing-machine	May 13, 1873	309	95	3	533
134, 801	Harvey, C. W., Buffalo, N. Y. Railway-car axle-box	Jan. 14, 1873	284	92	3	43
139, 148	Harvey, J., assignor to self and M. Ford, Philadelphia, Pa., and W. Harvey, New York, N. Y. Machine for bending pipe-stems	May 20, 1873	624	195	3	571
136, 321	Harvey, J. T., Murrsville, Pa. Grinding-mill	Feb. 25, 1873	857	276	3	232
140, 918	Harvey, P., assignor to N. C. Gridley, Chicago, Ill. Water-supply valve	July 15, 1873	515	173	4	69
	Harvey, W., et al. (See Harvey, J., assignor.)					
	Harway, J. W. (See Hodges, J. W., assignor.)					
6, 875	Harwood, G. W., Troy, and R. Wood, assignors to the Henry I. Scymour Chair Manufactory, West Troy, N. Y. Chair. (Design.)	Sept. 9, 1873			4	270
	Harwood, G. S., et al. (See Morrison, C. F., assignor.)					
6, 868	Harwood, W. A., Brooklyn, N. Y., assignor to the Merriam Manufacturing Company, Durham, Conn. Toy rail-car. (Design.)	Sept. 2, 1873			4	241
144, 026	Harwood, W. A., Brooklyn, N. Y. Toy horn	Oct. 28, 1873	607	201	4	458
138, 329	Hasbrook, F., Stokes' Mound, Mo. Wheel-plow	Apr. 29, 1873	992	312	3	479
144, 453	Same. same	Nov. 11, 1873	244	82	4	510
	Haseltine, J. (See Snow & Haseltine.)					
138, 022	Haskell, E., Dover, N. H. Folding book-case	Apr. 22, 1873	689	218	3	447
	Haskell, H. M., et al. (See Root, J. B., assignor). (Reissue.)					
136, 374	Haskell, J. E., Baltimore, Md. Dovetailing-machine	Mar. 4, 1873	21	7	3	247
	Haskell, W. H. (See Tingley, C. B. F., assignor). (Reissue.)					
143, 239	Haskins, C. C., New Albany, Ind., assignor of one-half interest to J. Ferrier, Louisville, Ky. Earth-closet	Sept. 30, 1873	806	277	4	356
136, 241	Haskins, J. F., Fitchburgh, Mass. Vapor-engine	Feb. 25, 1873	785	254	3	227
137, 200	Same. same	Mar. 25, 1873	775	256	3	336
137, 441	Same. Crank-shaft eccentric	Apr. 1, 1873	145	47	3	369
145, 175	Same. Boiler for vaporizing volatile fluids	Dec. 2, 1873	128	42	4	595
146, 000	Same. Sewing-machine attachment for making button-holes	Dec. 30, 1873	889	288 } 289 }	4	704
135, 427	Hastings, E. B., Palmer, and W. E. Nichols and W. L. Merritt, Templeton, Mass., said Hastings and Nichols assignors to said Merritt. Looms for weaving slats, window-shades, &c	Feb. 4, 1873	32	9	3	130
135, 428	Hastings, E. B., Palmer, and J. Desper, Barre, Mass. Hat-pressing machine	Feb. 4, 1873	33	10	3	130
139, 312	Hastings, G. S., jr., assignor to self and E. N. Pierce, Plainville, Conn. Envelope-opener	Dec. 23, 1873	726	250	3	592
145, 798	Hastings, G. S., assignor of two-thirds interest to C. B. Stephens and E. N. Pierce, Plainville, Conn. Toy pistol or gun	May 27, 1873	692	227	4	678
146, 001	Hastings, R. E., Philadelphia, Pa. Manufacture of gold-leaf for bookbinders' use	Dec. 30, 1873	890		4	704
	Hatch, B. W. (See Raynard and Hatch, B. W. and W. P.)					
137, 303	Hatch, G. W., assignor to Lyon and Fellows Manufacturing Company, Brooklyn, N. Y. Gas-burner	Apr. 1, 1873	21	7	3	359
142, 102	Hatch, H., Jefferson, Me. Reciprocating churn	Aug. 26, 1873	655	215	4	215
	Hatch, W. P. (See Raynard and Hatch, B. W. and W. P.)					
143, 759	Hatfield, A. L., Clyde, Ohio. Pump	Oct. 21, 1873	355	118	4	427
140, 701	Hatfield, G. W., assignor to self and Dixie Oil Company, Nashville, Tenn. Saponifying apparatus	July 8, 1873	320	108	4	46
143, 240	Hatfull, R., Deptford, England, assignor to D. L. Evans, New York, N. Y. Composition for preventing incrustations in steam-boilers	Sept. 30, 1873	807		4	356
134, 883	Hathaway, A., Freetown, Mass. Paper-ruling machine	Jan. 14, 1873	358	114	3	49
143, 693	Same. Base-burning stove	Oct. 14, 1873	274	90, 91	4	411
	Hathaway, M. D., et al. (See Moore, S., assignor.)					
	Hatlinger, J. J. (See Miller, W., assignor.)					
	Haughey, M. (See Craig & Haughey.)					
	Hauu, A. H. (See Kernodle & Hauu.)				3	671
43, 624	Havasy, L., Hoboken, N. J. Child's carriage	Oct. 14, 1873	210	71	4	406

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 678	Havell, G., assignor to Stevens, Roberts & Havell, Newark, N. J. Skate heel-plates	Apr. 8, 1873	365	113	3	308
136, 598	Haven, E. W., Brandon, Vt. Knife-scourer	Mar. 11, 1873	234	79	3	273
140, 624	Havens, A. F., Brooklyn, N. Y. Apparatus for charging gas-retorts	July 8, 1873	257	87	4	40
142, 849	Haver, W. W., assignor to self, J. Atwell, Schuyler, and W. Gates, Frankfort, N. Y. Car-coupling	Sept. 16, 1873	473	161	4	303
138, 249	Haverstick, L., Manor Township, Pa. Horse hay-fork	Apr. 29, 1873	916	289	3	473
144, 846	Same. Cultivator	Nov. 25, 1873	597	203	4	560
	Hawes, C. L. (See Whealen, C., assignor.)					
	Hawes, L. P., et al. (See Clough, T., assignor.)					
	Hawes, L. P. (See Maxim & Hawes.)					
134, 884	Hawkins, F. A., Noblesville, Ind. Hand corn-planter	Jan. 14, 1873	359	114	3	49
136, 322	Hawkins, G. C., Boston, Mass. Machine for burnishing the soles of boots and shoes	Feb. 25, 1873	858	276	3	232
145, 501	Hawkins, G. C., Boston, Mass., assignor to The Shoe Machine Manufacturing Company, New Haven, Conn. Machine for buffing boots and shoes	Dec. 16, 1873	418	137	4	643
145, 943	Hawkins, G. C., assignor to Morris & Ireland, Boston, Mass. Machine for burnishing heels, &c	Dec. 30, 1873	842	274	4	700
144, 763	Hawkins, J. V., Clayton, Mich. Paper-holder shelf	Nov. 18, 1873	514	174	4	543
140, 919	Hawkins, J. F., Hannibal, Mo. Milk-cooler	July 15, 1873	516	173	4	69
137, 136	Hawkins, J. T., assignor of one-half interest to G. R. Holt, Salisbury, Vt. Machine for making spool-blanks	Mar. 25, 1873	712	236 237	3	332
143, 073	Hawkins, J. T., Salisbury, Vt. Tool for making button-molds	Sept. 23, 1873	666	229	4	329
	Hawkins, L. D. (See Webster, J. and J. H., assignors.)					
135, 911	Hawkins, L. P., assignor to N. Coombs, Lynn, Mass. Heel nailing and shaving machine	Feb. 18, 1873	492	159	3	192
137, 304	Hawkins, L. P., assignor to W. F. Morgan and B. Dore, Lynn, Mass. Machinery for finishing the heels of boots and shoes	Apr. 1, 1873	22	7	3	359
141, 712	Hawkins, L. P., assignor to Morgan & Dore, Lynn, Mass. Machinery for finishing the heels of boots and shoes	Aug. 12, 1873	277	91	4	165
140, 037	Hawkins, S., Chillicothe, Mo. Washing-machine	June 17, 1873	550	173 174	3	677
140, 625	Hawks, M. L., Kinderhook, Mich. Washing-machine	July 8, 1873	258	87	4	41
145, 799	Same. same	Dec. 23, 1873	693	227	4	678
136, 509	Hawley, B. R., Normal, Ill. Furnace and furnace-door	Mar. 4, 1873	136	44, 45	3	256
136, 510	Same. Furnace and steam-generator for heating, &c.	Mar. 4, 1873	137	45	3	256
140, 367	Hawley, H. Q., Albany, N. Y. Rotary fluid-motor	July 1, 1873	26	9	4	10
135, 709	Hawley, J. M., Alma, Ill. Hand corn-sheller	Feb. 11, 1873	304	96	3	164
143, 901	Hawley, S. F., assignor to self and J. M. Whitton, Sandy Hill, N. Y. Clothes-pounder	Oct. 21, 1873	475	160	4	437
134, 747	Haworth, G. D., Decatur, Ill. Corn-planter	Jan. 14, 1873	239	77	3	40
	Haworth, J., et al. (See Schofield, J., assignor.)					
134, 825	Haws, A. I., Johnstown, Pa., and J. A. Vaughn, Cuyahoga Falls, said Vaughn assignor to said Haws. Apparatus for making tuyeres for Bessemer converters	Jan. 14, 1873	360	115	3	49
137, 548	Hawson, S., Jersey City, N. J., and T. Sweeney, Brooklyn, N. Y. Inkstand	Apr. 8, 1873	252	77	3	389
141, 505	Hawthorn, W. A., and E. E. Scott, Carson City, Nev. Window-fastener	Aug. 5, 1873	85	26	4	142
	Hay & Co. (See Gaskill, H. C., assignor.)					
140, 196	Hay, A. T., Burlington, Iowa. Electrical protection for boilers	June 24, 1873	708	223	3	697
	Hay, G. R., Cleveland, Ohio. Machine for cutting out wooden ware (Extension)	Aug. 9, 1873			4	134
	Hay, S. F. (See Goodchild & Hay.)					
137, 442	Haycock, S. H., Ottawa, Canada. Projectile	Apr. 1, 1873	146	47	3	369
139, 577	Hayden, C. M., Hanover, assignor to self and Z. M. Lane, East Abington, Mass. Sole-pressing machine	June 3, 1873	114	38	3	618
	Hayden, H. W., Waterbury, Conn. Machine for making kettles (Extension)	Mar. 8, 1873			3	271
	Same. Brass kettle (Extension)	Mar. 8, 1873			3	272
6, 595	Hayden, N., Essex, Conn. Coffin-handle (Design)	Apr. 22, 1873			3	444
	Hayes, E. B., et al. (See P'anders, J. P., assignor.)					
5, 650	Hayes, G., New York, N. Y. Skylight (Reissue)	Nov. 11, 1873	363	123	4	519
5, 693	Same. same (Reissue)	Dec. 23, 1873	605	264	4	686
139, 672	Hayes, G., Lawrenceburgh, Ind. Corn-planter	June 10, 1873	214	69	3	642
143, 149	Hayes, G., New York, N. Y. Skylight	Sept. 23, 1873	723	249	4	333
143, 150	Same. same	Sept. 23, 1873	724	249	4	333
143, 151	Same. same	Sept. 23, 1873	724	249	4	334
143, 152	Same. Skylight cover	Sept. 23, 1873	725	249	4	334
143, 153	Same. Skylight-turret and conservatory	Sept. 23, 1873	725	250	4	334
144, 539	Hayes, G. E., assignor to Buffalo Dental Manufacturing Company, Buffalo, N. Y. Rack for dental tools	Nov. 11, 1873	318	108	4	515
136, 375	Hayes, J. R., Washington, D. C., assignor of two-thirds interest to F. C. Hooton and J. Rutter, West Chester, Pa. Manufacture of fuel from coal-waste	Mar. 4, 1873	23		3	247
138, 562	Hayes, J. V., Buffalo, N. Y. Hydrant	May 6, 1873	86	27	3	504
135, 644	Haynes, C. E., Boston, assignor to self and I. Gardner, 2d, Hingham, Mass. Tool for cutting pipes	Feb. 11, 1873	246	77, 78	3	159
138, 803	Haynes, C. E., assignor to self and W. H. Henderson, Boston, Mass. Clothes wringer	May 13, 1873	309	96	3	533
	Haynes, E. (See Robins, W. B., assignor.)					
136, 994	Haynes, E. K., Boston, Mass. Lantern	Mar. 18, 1873	575	192	3	310
141, 200	Same. same	Nov. 4, 1873	26	7	4	480
	Haynes, H. (See Robins, W. B., assignor.)					
	Haynes, J., Hollis, Me. Wood-saw frame (Extension)	Aug. 9, 1873			4	108
6, 974	Haynes, W. A., Everett, assignor to self and S. Badger, Charlestown, Mass. Match-safe (Design)	Nov. 4, 1873			4	478
5, 451	Hays, C., Waukesha, Wis., assignor to Kip Manufacturing Company. Step-ladder (Reissue)	June 17, 1873	619	195	3	682
137, 919	Hays, M., Binghamton, N. Y. Nut-lock	Apr. 15, 1873	584	184	3	429
142, 161	Hayward, D. E., Malden, Mass. Rubber sole for boots and shoes	Aug. 26, 1873	704	232	4	219
6, 509	Hayward, S., Boston, Mass., assignor to J. Estey & Co., Brattleborough, Vt. Organ-case (Design)	Mar. 18, 1873			3	297
6, 510	Same. Organ-case (Design)	Mar. 18, 1873			3	297
6, 511	Same. same (Design)	Mar. 18, 1873			3	297
6, 679	Same. same (Design)	May 27, 1873			3	297
6, 680	Same. Ends of an organ-case (Design)	May 27, 1873			3	586
6, 828	Same. Chair (Design)	Aug. 26, 1873			4	212
143, 823	Hazard, A. P., North Bridgewater, Mass. Implement for edge-trimming soles	Oct. 21, 1873	408	136	4	431
	Hazard, T. H. (See Moris, H. C., assignor.)					
145, 298	Hazletine, J. N., Baltimore, Md. Child's carriage	Dec. 9, 1873	237	80	4	617
	Hazletine, D. W. (See Cummings, G. W., assignor.)					
137, 920	Hazletine, E. T., and C. Park, assignors to R. D. Hazletine, Warren, Pa. Clamp for paper-cutting machines	Apr. 15, 1873	584	184	3	429
	Hazletine, R. D., (See Hazletine & Park, assignors.)					

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143, 573	Hazlett, H. K., Saint Louis, Mo. Bung.....	Oct. 14, 1873	165	55	4	402
	Head, J. (See Schemioth, C., assignor.)					
6, 355	Head, A., assignor to McCallum, Crease & Sloan, Philadelphia, Pa. Carpet... (Design)	Jan. 21, 1873			3	70
6, 356	Same.....	Jan. 21, 1873			3	70
6, 582	Same.....	Apr. 15, 1873			3	417
6, 553	Same.....	May 20, 1873			3	558
6, 554	Same.....	May 20, 1873			3	558
6, 713	Same.....	June 24, 1873			3	691
6, 714	Same.....	June 24, 1873			3	691
6, 715	Same.....	June 24, 1873			3	691
6, 716	Same.....	June 24, 1873			3	691
6, 717	Same.....	June 24, 1873			3	691
6, 718	Same.....	June 24, 1873			3	691
6, 719	Same.....	June 24, 1873			3	691
6, 720	Same.....	June 24, 1873			3	691
	Heald, W. D., et al. (See Grandy, C. E., assignor.)					
	Heald, W. D. (See Grandy, Z. B. & C. E., assignors.)					
6, 411	Healey, J. I., Brooklyn, N. Y. Fence..... (Design)	Feb. 11, 1873			3	157
139, 890	Same..... Hydrant and fire-plug.....	June 17, 1873	496	133	3	666
	Healy, B. S., Cohocton, N. Y. Self-acting brake..... (Extension)	Aug. 16, 1873			4	158
139, 005	Healy, P. H., assignor of one-half interest to W. H. Bryant, Chicago, Ill. Machine for forming railway coupling-links.....	May 20, 1873	493	155	3	561
137, 679	Hearne, J. C., and D. Adams, Pleasant Hill, Mo. Extensible ladder.....	Apr. 8, 1873	365	113	3	398
138, 886	Heath, E., San Francisco, Cal. Work-box.....	May 13, 1873	383	120	3	539
138, 887	Heath, J. S., London, England. Breech-loading fire-arm.....	May 13, 1873	383	120	3	539
	Heath, M. (See Piper, R. U., assignor.)					
	Heatherington, R. (See Hipkins, S. jr., assignor.)					
139, 788	Heatley, J., Harrisburgh, Pa. Puddling-furnace.....	June 10, 1873	328	102	3	651
137, 305	Heaton, D., Providence, R. I. Lacing-stud.....	Apr. 1, 1873	23	7	3	359
145, 417	Hebard, A. K., Cambridge, Mass. Piano-forte action.....	Dec. 9, 1873	340	114	4	625
136, 995	Hebb, T., Great Mills, Md. Rat-trap.....	Mar. 18, 1873	577	192	3	310
134, 600	Hebbard, A., New York. Stopper for volatile-salts bottles.....	Jan. 7, 1873	99	31	3	15
144, 093	Heberling, J., Mount Pleasant, Ohio, assignor of one-half interest to C. L. McCoy, Wheeling, W. Va. Whip-socket.....	Oct. 28, 1873	663	218	4	463
136, 435	Heckenbach, J. A., Mayville, Wis. Metronome.....	Mar. 4, 1873	71	25	3	251
140, 038	Heckenbach, J. A., and A. Haerte, Mayville, Wis. Last-block fastening.....	June 17, 1873	551	174	3	677
137, 549	Hedenburg, J. W., Chicago, Ill. Bale-tie.....	Apr. 8, 1873	253	78	3	389
	Hedges, H. C., et al. (See Essick, S. V., assignor.)					
	Hedges, I. A., Saint Louis, Mo. Mill for grinding cane, &c..... (Extension)	Feb. 1, 1873			3	70
	Hedges, I. E., et al. (See Lindsley, W. D., assignor.)					
136, 160	Hedley, W., Medina, N. Y. Composition for artificial stone.....	Feb. 25, 1873	723		3	222
134, 542	Heegler, G., San Francisco, Cal. Hanging door.....	Jan. 7, 1873	36	12	3	10
141, 347	Heer, D., assignor to H. D. Hirst, Philadelphia, Pa. Lathe.....	July 29, 1873	948	308	4	121
141, 769	Hoermans, T., Mattoon, Ill. Coffee-roaster.....	Aug. 12, 1873	349	115	4	171
138, 399	Hoffley, W. H., assignor of one-half interest to C. A. Mitchell, Rochester, Ind. Quilting-attachment for sewing-machines.....	Apr. 29, 1873	1,047	330	3	484
138, 152	Hoffron, C. M., Rochester, N. Y. Combined rule, square, and bevel.....	Apr. 22, 1873	800	255	3	456
141, 029	Hogeler, E. C., and F. W. Matthiessen, La Salle, Ill. Sheet-metal roofing.....	Aug. 19, 1873	433	160	4	191
144, 904	Same..... Furnace for desulphurizing ores.....	Nov. 25, 1873	640	218	4	564
134, 543	Heidt, A. P., assignor to self and J. H. Hubbell, New York, N. Y. Automatic fan.....	Jan. 7, 1873	37	12	3	10
134, 665	Helges, J. M., York, Pa. Cultivator.....	Jan. 7, 1873	158	52	3	19
144, 094	Hales, F., New York, N. Y. Fastening for pocket-books.....	Oct. 28, 1873	664	219	4	463
138, 888	Heim, G. M., Brownsville, Ind. Reciprocating churn.....	May 13, 1873	384	120	3	539
	Heim, J. (See Keller, P., assignor.)					
6, 771	Heimbach, B. F., Allentown, Pa. Burial-casket..... (Design)	July 15, 1873			4	57
6, 772	Same..... Burial-case..... (Design)	July 15, 1873			4	57
	Heine, A., et al. (See Huntley, W. W., assignor)					
143, 241	Heinig, F. E., Louisville, Ky. Dinner-bucket.....	Sept. 30, 1873	808	277	4	356
6, 416	Heinigke, O., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet..... (Design)	Feb. 18, 1873			3	189
6, 417	Same.....	Feb. 18, 1873			3	189
6, 418	Same.....	Feb. 18, 1873			3	189
6, 419	Same.....	Feb. 18, 1873			3	189
6, 420	Same.....	Feb. 18, 1873			3	189
6, 421	Same.....	Feb. 18, 1873			3	189
6, 422	Same.....	Feb. 18, 1873			3	189
6, 423	Same.....	Feb. 18, 1873			3	189
6, 424	Same.....	Feb. 18, 1873			3	189
6, 513	Same.....	Mar. 25, 1873			3	325
6, 514	Same.....	Mar. 25, 1873			3	325
6, 515	Same.....	Mar. 25, 1873			3	325
6, 516	Same.....	Mar. 25, 1873			3	325
6, 517	Same.....	Mar. 25, 1873			3	325
6, 625	Same.....	May 6, 1873			3	497
6, 909	Same.....	Oct. 7, 1873			4	380
6, 910	Same.....	Oct. 7, 1873			4	380
6, 911	Same.....	Oct. 7, 1872			4	380
6, 912	Same.....	Oct. 7, 1873			4	380
6, 913	Same.....	Oct. 7, 1873			4	380
6, 914	Same.....	Oct. 7, 1873			4	380
6, 915	Same.....	Oct. 7, 1873			4	380
6, 916	Same.....	Oct. 7, 1873			4	380
6, 917	Same.....	Oct. 7, 1873			4	380
6, 918	Same.....	Oct. 7, 1873			4	380
6, 919	Same.....	Oct. 7, 1873			4	380
6, 920	Same.....	Oct. 7, 1873			4	380
6, 921	Same.....	Oct. 7, 1873			4	380
6, 922	Same.....	Oct. 7, 1873			4	380
6, 923	Same.....	Oct. 7, 1873			4	380
6, 924	Same.....	Oct. 7, 1873			4	380
6, 925	Same.....	Oct. 7, 1873			4	380
6, 926	Same.....	Oct. 7, 1873			4	380
6, 927	Same.....	Oct. 7, 1873			4	380
6, 928	Same.....	Oct. 7, 1873			4	380
6, 929	Same.....	Oct. 7, 1873			4	380

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6, 930	Heinigke, O., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet..... (Design).....	Oct. 7, 1873			4	380
6, 931	Same..... same..... (Design).....	Oct. 7, 1873			4	380
7, 051	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 052	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 053	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 054	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 055	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 056	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 057	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 058	Same..... same..... (Design).....	Dec. 16, 1873			4	641
7, 059	Same..... same..... (Design).....	Dec. 16, 1873			4	641
	Heinisch, R., Newark, N. J. Tailors' shears..... (Extension).....	Sept. 20, 1873			4	296
143, 902	Heins, L., Brunswick, Ga. Treadle.....	Oct. 21, 1873	476	160	4	437
144, 540	Heisler, C., Saint Louis, Mo. Electrical water-gage, alarm, and register.....	Nov. 11, 1873	319	108	4	515
144, 095	Heissenbittel, W., Brooklyn, N. Y. Foot-warmer.....	Oct. 28, 1873	664	219	4	463
	Heister, T. S. (See Vedder & Heister)..... (Design).....					
	Same..... (See Vedder, Ritchie & Heister)..... (Design).....					
143, 410	Heitkamp, L., New York, N. Y. Press for holding books.....	Oct. 7, 1873	11	4	4	381
134, 886	Held, C. W., jr., and A. M. Bangh, Brooklyn, N. Y. Pedal attachment for pianos.....	Jan. 14, 1873	361	115	3	49
138, 330	Helfrich, D. W., Corry, Pa. Washing-machine.....	Apr. 29, 1873	993	312	3	479
138, 023	Heller, D. C., Reading, Pa. Composition pavement.....	Apr. 23, 1873	689	218	3	447
	Helm, A. (See Helm, J. and A.).....					
138, 085	Helm, J., assignor to self and C. Timm, Hochheim, Tex. Cultivator.....	Apr. 22, 1873	749	237	3	452
139, 062	Same..... Cotton-worm destroyer.....	May 20, 1873	542	171	3	565
144, 615	Helm, J. and A., Washington, D. C. Match-safe.....	Nov. 18, 1873	390	131	4	533
143, 010	Helm, J. H., Pittsburgh, Pa. Machine for bending truck sides for railway-cars.....	Sept. 23, 1873	613	208 209	4	324
	Helmer, A. M. (See Foote, A. D., assignor.).....					
5, 424	Helms, C. H., Poughkeepsie, N. Y., assignor by mesne assignment to J. W. Brooks, trustee. Machinery for trimming the heels of boots and shoes..... (Reissue).....	May 27, 1873	905	292	3	602
	Helwig, C. D. (See Myers, D. B., assignor.).....					
135, 804	Hemenway, C. F., assignor of two-thirds interest to J. H. B. Beattie and A. A. Powers, New London, Ohio. Cloth-measure.....	Feb. 11, 1873	391	196	3	170
136, 242	Hemenway, S. W., Lansing, Iowa. Railway-train indicator.....	Feb. 25, 1873	786	254	3	227
139, 006	Same..... Auger-handle.....	May 20, 1873	494	156	3	561
145, 800	Hempel, H. A., Saint Joseph, Mo. Printers' furniture.....	Mar. 18, 1873	693	227	4	678
136, 996	Hempell, G. W., Millville, N. J. Fruit-jar.....	Dec. 24, 1873	578	192	3	310
143, 074	Hempstead, B., Little Rock, Ark. Cotton-gin.....	Sept. 23, 1873	607	229	4	329
	Henckley and Egery Iron Company. (See Howard, O. S., assignor.).....					
6, 540	Hendberg, M., Boston, Mass. Jewelry case..... (Design).....	Apr. 1, 1873			3	356
	Henderson, J. M., et al. (See Smith, J. H., assignor.).....					
139, 245	Henderson, T., and W. G. Wright, Hamilton, Canada. Sewing-machine.....	May 27, 1873	727	229 230	3	587
145, 103	Henderson, T. M., and F. L. McDonald, Omaha, Nebr. Machine for facing cylinders.....	Dec. 2, 1873	59	19	4	590
	Henderson, W. H. (See Haynes, C. E., assignor.).....					
141, 790	Henderson, W. M., Philadelphia, Pa. Hydraulic railroad-car brake.....	Aug. 12, 1873	351	115	4	171
143, 989	Same..... Hydraulic or air-car brake.....	Oct. 28, 1873	565	187	4	454
135, 334	Hendricks, N., Jersey City, N. J. Telegraph-insulator.....	Jan. 28, 1873	786	254	3	111
137, 366	Hendrickson, D. W., Red Bank, N. J. Blast-furnace.....	Apr. 1, 1873	80	26	3	363
139, 891	Same..... Blast and cupola furnace.....	June 17, 1873	427	133	3	666
140, 134	Hendrickson, E. M., Brooklyn, N. Y. Burglar-alarm.....	June 24, 1873	655	206	3	693
	Hendrickson, S. C., et al. (See Pope, F. L., assignor.)..... (Reissue).....					
143, 694	Hendrickson, S. C., Brooklyn, N. Y. Electric railway-signal.....	Oct. 14, 1873	275	91	4	411
143, 903	Same..... Track-circuit for electric railway-signals.....	Oct. 21, 1873	476	160	4	437
	Hendly, J., San Francisco, Cal. Double-friction coupling..... (Extension).....	Oct. 11, 1873			4	379
5, 335	Same..... same..... (Reissue).....	Mar. 25, 1873	846	277	3	342
140, 414	Same..... Engine-governor.....	July 1, 1873	62	22	4	13
136, 511	Hencage, R., Buffalo, N. Y. Ozone-generator.....	Mar. 4, 1873	139	45	3	257
136, 512	Same..... same.....	Mar. 4, 1873	141	46	3	257
140, 702	Henegan, E. E., Downsville, Wis. Bee-hive.....	July 8, 1873	321	109	4	46
143, 450	Same..... Corn-planter.....	Oct. 7, 1873	46	16	4	384
139, 465	Henika, H., and M. F. Carder, Kalamazoo, Mich. Burial-casket.....	June 3, 1873	19	6	3	610
134, 666	Henis, C. F., Baltimore, Md. Saw-swaging device.....	Jan. 7, 1873	159	52	3	19
134, 667	Same..... Saw-swaging machine.....	Jan. 7, 1873	160	53	3	19
139, 149	Same..... Saw-filing machine.....	May 20, 1873	625	195	3	571
140, 501	Hennaman, J. T., Baltimore, Md. Cigar-machine.....	July 1, 1873	135	46	4	19
138, 086	Henning, R., assignor to self and J. D. Caton, Ottawa, Ill. Paper-flo.....	Apr. 22, 1873	750	237	3	452
138, 889	Same..... Telegraph cut-out and switch.....	May 13, 1873	385	120	3	539
141, 437	Hennion, A. G., Buffalo, N. Y. Cemented slate-roofing.....	Aug. 5, 1873	24		4	137
134, 668	Henrichs, P., Erie, Pa. Baby's chair.....	Jan. 7, 1873	161	53	3	19
138, 804	Henry, A., Richmond, Ind. Balanced valve for steam-engines.....	May 13, 1873	310	96	3	533
145, 944	Henry, A., Edinburgh, Scotland. Breech-loading fire-arm.....	Dec. 30, 1873	844	274	4	700
	Henry, A. B. (See Kopping & Weideman, assignors.).....					
134, 669	Henry, C. J., Tunkhannock, Pa., and C. J. Wood, Brewerton, N. Y. Thread-cutter for sewing-machines.....	Jan. 7, 1873	162	53	3	19
138, 153	Henry, C. J., and C. J. Wood, Tunkhannock, Pa. Thread-cutter for sewing-machines.....	Apr. 22, 1873	801	255	3	456
	Henry, J. D. (See Skaats, W. W., assignor.).....					
137, 443	Henry, J. J., Baltimore, Md. Spindle-step.....	Apr. 1, 1873	147	48	3	369
	Henry, M. (See Henry, S. and M.).....					
145, 868	Henry, S. and M., Chenoa, Ill. Curtain-fixture.....	Dec. 23, 1873	752	245	4	682
142, 229	Hensgen, J., and E. Kruger, deceased, said Hensgen administrator to said Kruger. Carriage-window.....	Aug. 26, 1873	761	250	4	223
135, 805	Henson, F. W., Philadelphia, Pa. Washing-machine.....	Feb. 11, 1873	392	126	3	170
139, 150	Henszey, M., jr., Philadelphia, Pa. Pipe-coupling for railway-cars.....	May 20, 1873	628	195	3	571
	Henwood, E. (See Holman, J. F. L., assignor.).....					
141, 140	Herbig, T., Jasper, Ind. Stump-extractor.....	July 22, 1873	734	243	4	96
139, 466	Herboth, F., Newark, N. J. Device for traversing card and other cylinders.....	June 3, 1873	20	6	3	610
	Herchelrode, C. (See Hill, J. W., assignor.).....					
136, 513	Hering, H., Philadelphia, Pa. Fruit-jar.....	Mar. 4, 1873	143	46	3	257
	Hermann, I. (See Ball, G. M., assignor.).....					
134, 987	Herman, L., Detroit, Mich. Wrought-iron column.....	Jan. 21, 1873	460	147	3	72
137, 444	Hernance, J. F., assignor to H. P. Ostrom and A. C. Andrews, New Haven, Conn. Packing for piston-rods.....	Apr. 1, 1873	148	48	3	369

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
5, 554	Herrmann, R. M., assignor by mesne assignment to J. B. Wilkinson, Troy, N. Y. Cook- ing-stove. (Reissue.)	Aug. 26, 1873	844	279	4	230
145, 567	Herrmann, D., New York, assignor to C. H. Smith, Brooklyn, N. Y. Telegraph-transmitter Herrmann, H. O. (See Zwicker, O., assignor.)	Dec. 16, 1873	484	158	4	648
143, 695	Herrick, C., Pittsburgh, Pa. Scrubbing-brush.	Oct. 14, 1873	276	91	4	411
141, 557	Herr, A., Georgetown, D. C. Middlings-purifier.	Aug. 5, 1873	127	49	4	145
6, 626	Herr, M. L. (See Iske, A., assignor.)					
6, 627	Herriet, J., assignor to D. W. Bruce, New York, N. Y. Type. (Design.)	May 6, 1873			3	497
142, 628	Same. (Design.)	May 6, 1873			3	497
135, 547	Herriman, A. A., Greensborough, N. C. Turbine water-wheel.	Sept. 9, 1873	277	91	4	276
145, 869	Herring, A. J., Mauch Chunk, Pa. Riding-stirrup.	Feb. 4, 1873	143	46	3	139
138, 331	Same. Stirrup.	Dec. 23, 1873	753	245	4	682
146, 002	Herring, R. N., Chew's Landing, N. J. Ironing-board.	Apr. 29, 1873	994	313	3	479
140, 415	Herrlot, W. H., Brimfield, Ill. Portable elevator and dumper.	Dec. 30, 1873	891	289	4	704
138, 154	Herrmann, A., New York, N. Y. Dress-protector.	July 1, 1873	63	22	4	113
136, 514	Herron, A. C., assignor to self and D. Whittemore, Boston, Mass. Elevator.	Apr. 22, 1873	802	256	3	456
141, 051	Herron, R. B. (See Snell, O., assignor.)					
135, 548	Herron, W. M., assignor to self and J. J. McDermott, Allegheny, Pa. Cigar-tip.	Mar. 4, 1873	144	46	3	257
139, 151	Hersey, C. H., Boston, Mass. Hoisting-machine.	July 22, 1873	651	219	4	90
145, 801	Hersey, T., Bangor, Me. Moccasin.	Feb. 4, 1873	144	46	3	139
139, 151	Hershey, B., Erie, Pa. Chain-machine.	May 20, 1873	626	196	3	571
139, 892	Hersome, C., Boston, Mass. Gaiter-boot.	Dec. 23, 1873	694	227	4	678
141, 141	Hervé, C. F., et al. (See Hook, A. H., assignor.)					
5, 234	Hervé, C. F. (See Shaw & Tracy, assignors.)					
140, 920	Herveux, C., Islington, England. Tanning-apparatus.	June 17, 1873	428	133	3	666
141, 141	Hervey, H. W. B., Philadelphia, Pa. Combined refrigerator and water-cooler.	July 22, 1873	735	243	4	96
140, 920	Herzberg, A., assignor of one-half interest to I. Herzberg, Philadelphia, Pa. Umbrella- frame, runner, and notch. (Reissue.)	Jan. 14, 1873	435	138	3	54
136, 243	Herzberg, A. & L., Philadelphia, Pa. Manufacture of umbrella-notches.	July 15, 1873	517	174	4	69
145, 652	Herzberg, I. (See Herzberg, A., assignor.)					
145, 652	Herzberg, I. (See Herzberg, A. & L.)					
141, 052	Herzog, A., New York, N. Y. Extension-table.	Feb. 25, 1873	787	254	3	227
139, 152	Hess, J. W., assignor to self and J. B. Green, Montandon, Pa. Car-coupling.	Dec. 16, 1873	554	182	4	654
139, 152	Heston, E. G. (See Fox & Heston.)					
139, 673	Heston, W., Akron, Ohio. Packing for piston-rods and valve-stems.	July 22, 1873	652	220	4	90
141, 713	Hettinger A., assignor to G. W. Edwards and J. M. Patterson, Philadelphia, Pa. Cigar- trimmer.	May 20, 1873	628	196	3	572
139, 506	Heublein, F. W., Hartford, Conn. Folding table.	June 10, 1873	215	69	3	642
135, 549	Heughebaert, F. L., Rochester, N. Y. Feeder for printing-presses.	Aug. 12, 1873	278	91	4	166
135, 549	Hewitt, E. A., Philadelphia, Pa. Ice-creeper.	June 3, 1873	55	18	3	613
141, 348	Hewitt, H. W., assignor to H. Miller, Cincinnati, Ohio. Ticket-punch.	Feb. 4, 1873	145	46	3	139
141, 348	Hewitt, C., Trenton, N. J. Machine for moving iron at the rolls. (Extension.)	June 7, 1873			3	608
141, 348	Hewitt, E. A., Groton, Conn. Rotary churn.	July 29, 1873	919	308	4	121
5, 302	Hewitt, F. (See Harris & Hewitt.)					
5, 357	Hewitt, H. J. (See Braidwood & Hewitt.)					
5, 358	Hewitt, J. (See Madden & Dodsworth, assignors.) (Reissue.)					
134, 887	Same. (See Young, Hewitt & Mooney.)					
135, 116	Hewitt, J., Pittsburgh, Pa. Sad and fluting iron. (Reissue.)	Mar. 4, 1873	203	67	3	261
135, 335	Same. Smoothing and fluting iron. (Reissue.)	Apr. 15, 1873	657	206	3	435
137, 201	Same. Fluting-iron. (Reissue.)	Apr. 15, 1873	658	206	3	435
137, 445	Same. Smoothing and fluting iron. (Reissue.)	June 3, 1873	186	60	3	624
145, 945	Hewitt, J., New York, N. Y. Sad-iron and crimping-shoe.	Jan. 14, 1873	362	115	3	49
145, 945	Same. Sad and fluting iron.	Jan. 21, 1873	568	185	3	81
145, 945	Hewitt, J., Albany, N. Y. Smoothing and fluting iron and holder.	Jan. 28, 1873	787	255	3	111
145, 945	Same. Sad-iron crimper.	Feb. 4, 1873	146	46	3	139
145, 945	Hewitt, J., Pittsburgh, Pa. Sad-iron.	Mar. 25, 1873	776	256	3	337
145, 945	Same. Sad and fluting iron.	Apr. 1, 1873	148	48	3	369
145, 945	Hewitt, T. B., Williamstown, N. J., assignor of one-half interest to J. F. Bodine. Tool for holding glass bottles.	Dec. 30, 1873	845	275	4	700
145, 945	Heyer, A., Philadelphia, Pa. Lounge.	Dec. 9, 1873	341	114	4	625
145, 945	Heyman, M. H., Oshkosh, Wis. Water-wheel.	Dec. 9, 1873	280	93	4	620
144, 027	Heymann, J., Boston, Mass. Desk-cover.	Oct. 28, 1873	608	201	4	458
141, 714	Heyse, A., Terre Haute, Ind. Knob-latch.	Aug. 12, 1873	279	91	4	166
134, 545	Heywood Brothers & Co. (See Heywood & Horton, assignors.)					
134, 802	Same. (See Heywood, L., assignor.)					
135, 117	Same. (See Howe, M. V., assignor.) (Reissue.)					
134, 544	Same. (See Teal, D. E., assignor.) (Reissue.)					
134, 545	Heywood, L., assignor to Heywood Brothers & Co., Gardner, Mass. Chair.	Jan. 7, 1873	38	12	3	10
134, 802	Heywood, L., assignor to self and E. T. Watkins, Gardner, Mass. Whip-stock.	Jan. 14, 1873	286	93	3	43
135, 117	Heywood, L., assignor to Heywood Brothers & Co., Gardner, Mass. Cradle.	Jan. 21, 1873	569	185	3	81
134, 544	Heywood, L., and E. E. Horton, assignors to Heywood Brothers & Co., Gardner, Mass. Chair-frame.					
139, 387	Heywood, S. L., Minneapolis, Minn. Machine for dressing hoops.	May 27, 1873	846	270	3	597
144, 096	Hiatt, N., Plum Hollow, Iowa. Eyelet for harness-traces.	Oct. 28, 1873	685	219	4	463
145, 568	Hibbard, G. E., Fond du Lac, Wis. Heating air and supplying boilers therewith.	Dec. 16, 1873	485	155	4	648
141, 349	Hibberd, G., Wheeling, W. Va. Ejector.	July 29, 1873	950	309	4	121
146, 071	Hibbs, P., Knobnoster, Mo. Washing-machine.	Dec. 30, 1873	951	307	4	709
145, 104	Hickman, E., Red Bluff, Cal. Gate.	Dec. 2, 1873	60	19	4	590
136, 058	Hickman, F., Reading, Pa. Slate-cleaner.	Feb. 18, 1873	615	202	3	202
145, 299	Same. Harness-loop.	Dec. 9, 1873	248	80	4	617
140, 272	Hickok, J. L. (See Terry C., assignor.)					
143, 625	Hickok, W. O., Harrisburgh, Pa. Ruling-pen.	June 24, 1873	771	243	3	703
134, 803	Hicks, C. D., Bowling Green, Ohio. Refrigerator and cooler.	Oct. 14, 1873	210	71	4	406
143, 075	Hicks, C. S. (See Palmberg, A. J., assignor.)					
137, 840	Hicks, J. M., Summit, N. J. Tubular steam-generator.	Jan. 14, 1873	296	93	3	43
5, 305	Hicks, J. S., Roslyn, N. Y. Indexing-book.	Sept. 23, 1873	668	230	4	329
5, 564	Hicks, O. H., Baltimore, Md. Manufacturing matches.	Apr. 15, 1873	520		3	423
143, 824	Hicks, W. C., New York, N. Y. Sewing-machine. (Extension.)	Apr. 12, 1873			3	356
5, 384	Hicks, W. C., Summit, N. J. Sewing-machine. (Reissue.)	Mar. 4, 1873	205	68	3	262
143, 824	Same. breech-loading fire-arm. (Reissue.)	Sept. 9, 1873	387	130	4	285
5, 384	Same. steam-pumping engine.	Oct. 21, 1873	409	137	4	431
5, 384	Hicks, W. S., New York, N. Y. Pencil-case. (Reissue.)	Apr. 29, 1873	1, 115	352	3	489
5, 384	Hield, T. (See Goldthorp & Hield.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr g	Vol.	Page.
142, 930	Hier, J. P. (See La Du, D., assignor.)					
137, 302	Hiers, J., assignor to self and J. J. Fox, West Manayunk, Pa. Car-coupling	Aug. 26, 1873	762	251	4	224
141, 920	Hiesland, D., Pughtown, Pa. Carriage-jack	Mar. 25, 1873	777	256	3	337
138, 155	Higbee, E. W., Northampton, Mass. Truss	July 29, 1873	826	270	4	111
142, 338	Higgins, J., Manchester, England. Dyeing with aniline black	Apr. 22, 1873	803		3	456
143, 760	Higgins, C. J., Indianapolis, Ind. Dissected map	Sept. 2, 1873	14	5	4	243
	Same..... School-desk	Oct. 21, 1873	355	118	4	427
	Higgins, E. (See Holtz, J., assignor.)					
	Higgins, F. (See Canis & Higgins.)					
134, 748	Higgins, J. B., Boston, Mass. Shawl-strap	Jan. 14, 1873	240	78	3	40
	Higgins, J. C. (See Brower & Higgins.)					
134, 607	Higgins, J. C., Millstone, N. J. Manger for horses	Jan. 7, 1873	98	31	3	15
137, 367	Higgins, L. J., Mount Desert, Me. Door-spring	Apr. 1, 1873	80	26	3	363
139, 957	Higgins, S., assignor of one-half interest of C. H. Bucknam, Portland, Me. Lounge and bedstead combined	June 17, 1873	480	151	3	670
137, 368	Higgins, W. C., North Blandford, Mass. Basket	Apr. 1, 1873	81	26	3	363
140, 703	Highfield, J., Centreville, Ind. Dumping-wagon	July 8, 1873	322	109	4	46
146, 072	Hight, H. A., sr., Fort Wayne, Ind. Spring bed-bottom	Dec. 30, 1873	952	307	4	709
144, 616	Highton, W., Malden, Mass. Hot-air register	Nov. 18, 1873	390	131	4	533
5, 452	Higley, A., Cleveland, Ohio, assignor to Higley Car-Journal Company. Car-truck. (Reissue)	June 17, 1873	620	195	3	622
5, 453	Same..... Car axle-box (Reissue)	June 17, 1873	621	195	3	622
	Higley Car-Journal Company. (See Higley, A., assignor.) (Reissue)					
	Hilderbrann, W. H. (See Sievers, F., assignor.)					
	Hildreth, H. A. (See Nonrse, L. S., assignor.) (Reissue)					
	Hildreth, J. D., et al. (See Disney, M., assignor.)					
140, 135	Hildreth, R. S., Laurens, N. Y. Reading-gage	June 24, 1873	657	206	3	693
143, 904	Hilgenreiner, A., New York, N. Y. Registering attachment for printing-presses	Oct. 21, 1873	477	161	4	437
	Hill, A. B. (See McHarg & Hill.)					
	Same..... (See White, H. J., assignor.) (Reissue)					
	Hill, A. S., et al. (See Root, J. B., assignor.) (Reissue)					
134, 882	Hill, D. C., Windham, Conn. Guide for winding-machines	Jan. 14, 1873	362	115	3	49
144, 028	Hill, D. H., South Chester, Pa. Billiard-table leveler	Oct. 28, 1873	609	201	4	458
142, 911	Hill, E. A., East Cambridge, Mass. Manufacture and vulcanization of rubber for making brush-backs, &c	Sept. 16, 1873	522	177 } 178 }	4	307
142, 913	Hill, E. A., East Cambridge, Mass. Brush-machine	Sept. 16, 1873	524	178	4	307
142, 391	Hill, E. B., and E. Van Valkenburg, Grand Rapids, Mich. Spring bed-bottom	Sept. 2, 1873	65	21	4	247
138, 156	Hill, H., Cabin Creek, W. Va. Canal	Apr. 22, 1873	804	256	3	456
141, 350	Hill, H. H., and G. M. Sargent, Moline, Ill. Car axle-box	July 29, 1873	951	309	4	121
145, 105	Hill, H. W., assignor of one-half interest to C. P. Housum, Decatur, Ill. Hog-tongs	Dec. 2, 1873	61	20	4	590
	Hill, J., trustee. (See Knowlton, A., assignor.) (Reissue)					
142, 850	Hill, J. H., Boone, Iowa. Washing-machine	Sept. 16, 1873	474	161	4	303
137, 931	Hill, J. W., Dayton, Ohio. Automatic grain-weigher	Apr. 15, 1873	585	184	3	429
140, 826	Hill, J. W., Jefferson, Iowa. Weighing-attachment for wagons	July 15, 1873	433	147	4	63
141, 272	Same..... Combined brake and propelling mechanism for cars	July 29, 1873	876	287	4	115
142, 912	Hill, J. W., assignor to self and C. Herchelrode, Dayton, Ohio. Machine for turning wheels	Sept. 16, 1873	523	178	4	307
144, 541	Hill, J. W., assignor of one-half interest to C. Herchelrode, Dayton, Ohio. Automatic grain-weigher	Nov. 11, 1873	320	108	4	516
	Hill, P. (See Weyand & Hill.)					
140, 921	Hill, R. A., Chicago, Ill. Machine for making stereotype molds	July 15, 1873	518	174	4	69
142, 162	Hill, S. D., Downsville, Cal. Candlestick	Aug. 26, 1873	705	233	4	219
141, 558	Hill, S. G., Muscatine, Iowa, assignor of one-half interest to F. Yore, Saint Louis, Mo. Means of elevating and depressing propellers	Aug. 5, 1873	129	40	4	146
142, 568	Hill, W. B., Battle Creek, Mich. Tool-handle	Sept. 9, 1873	229	75	4	272
	Hill, W. G., et al. (See Samuels, J., assignor.)					
137, 076	Hill, W. H., Fulton, N. Y. Bolt-cutter	Mar. 25, 1873	664	220	3	328
141, 351	Hill, W. H., Worcester, Mass. Bolt-cutter	July 29, 1873	952		4	121
139, 714	Hill, W. J., Fayetteville, Tenn. Peach-cutter	June 10, 1873	257	81	3	645
138, 250	Hille, F., Brentford, England. Treatment of sewage	Apr. 29, 1873	917	289	3	473
145, 870	Hille, F., Lyons, Iowa. Lamp extinguisher	Dec. 23, 1873	754	246	4	682
144, 097	Hille, P., Union, N. J. Faucet	Oct. 28, 1873	666	219	4	463
	Hillebrand, L., et al. (See Liebrich, C., assignor.) (Reissue)					
	Hillerick, J. F. (See Bell & Hillerick.)					
144, 978	Hills, G. W., Dodge Centre, Minn. Circular harrow	Nov. 25, 1873	701	237	4	569
141, 273	Hills, H. C., assignor to self and W. Polan, Pinckney, and G. Mills, Highland, Mich. Pruning-shears	July 29, 1873	876	287	4	115
137, 203	Hilton, C., Lockport, N. Y. Combined register and stove-pipe thimble	Mar. 25, 1873	777	256	3	337
141, 274	Hilton, J., New York, N. Y. Disinfectant compound	July 29, 1873	877		4	115
	Hiltz, A. W. (See Scott & Hiltz.)					
137, 369	Hincheer, H. A., Hustonville, Ky. Churn	Apr. 1, 1873	81	27	3	363
139, 153	Hinchman, J. C., Brooklyn, N. Y. Automatic time-printing machine	May 20, 1873	629	196 } 197 }	3	572
139, 154	Same..... same	May 20, 1873	631	197	3	572
141, 352	Hinchman, J. C., Summit, N. J. Electro-magnetic date-time printer and stamp	July 29, 1873	953	309 } 310 } 311 }	4	121
142, 786	Hinckley, E., San Francisco, Cal. Work-box	Sept. 16, 1873	424	143	4	298
135, 645	Hinckley, E. L., Bath, Me. Steam-radiator		247	78	3	159
134, 889	Hinckley, G. A., Pit Hole, Pa. Mechanism for effecting rotary motion for oil-well drills	Jan. 14, 1873	363	116	3	49
135, 988	Same..... Mechanism for operating and feeding oil-well drills	Feb. 18, 1873	555	183	3	197
135, 912	Hinckley, J. B., Nacogdoches County, Texas. Cultivator	Feb. 18, 1873	493	159	3	192
137, 922	Hinckley, J. D., Adrian, Mich. Driving gear for hand-cars	Apr. 15, 1873	586	184	3	429
140, 039	Same..... Hand-car	June 17, 1873	551	174	3	677
136, 161	Hinden, M. J., assignor to C. B. Palmer, Detroit, Mich. Hatchway-guard	Feb. 25, 1873	724	234	3	222
144, 454	Hinden, M. J., assignor to self and A. Freund, Detroit, Mich. Box-opener	Nov. 11, 1873	244	83	5	510
140, 368	Hindle, R. B., Saint Louis, Mo. Side-stick for printers' galleys	July 1, 1873	28	9	4	10
140, 369	Same..... Book-support	July 1, 1873	29	10	4	10
136, 376	Hindman, S. B., assignor of one-half interest to Matthews Brothers, Richmond, Ind. Wheel for vehicles	Mar. 4, 1873	24	8	3	247
187, 370	Hinds, J., Hindsburgh, N. Y. Bean-harvester	Apr. 1, 1873	82	27	3	364
135, 336	Hinds, R. P., Chicago, Ill. Counting-register	Jan. 28, 1873	788	255	3	111
145, 502	Hinds, W. H. H., Ayer, Mass. Candlestick	Dec. 16, 1873	420	138	4	643
	Hine, M. (See Parmelee, L., assignor.)					
137, 446	Hine, M., assignor to C. Corwles & Co., New Haven, Conn. Dash-rail for child's carriage	Apr. 1, 1873	149	48	3	369

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr g.	Vol.	Page.
143, 154	Hine, M., New Haven, Conn. Machine for threading bolts	Sept. 23, 1873	796	250	4	334
140, 704	Hines, A. F., Washington, D. C. Butter-printing machine	July 8, 1873	323	109	4	46
	Hines, H. K. (See Giblin, J., assignor.)					
138, 024	Hinkel, S., Goodville, Pa. Clothes-pounder	Apr. 22, 1873	690	218	3	447
140, 502	Hinkle, P., San Francisco, Cal. Hydraulic hoisting-apparatus	July 1, 1873	136	47	4	19
139, 578	Hinkley, G. M., Milwaukee, Wis., and A. Rodgers, Muskegon, Mich. Machine for moving logs	June 3, 1873	115	39	3	618
139, 246	Hinkley, H. R., Milton Junction, Wis. Rolling-mill	May 27, 1873	728	230	3	587
134, 888	Hinman, C., Akron, Ohio. Animal-poke	Jan. 21, 1873	461	147	3	72
139, 893	Same	June 17, 1873	429	133	3	666
138, 400	Hinman, W. W., assignor of part interest to S. B. Hunter and J. Gibbs, Elkhart, Ill. Dumping-platform	Apr. 29, 1873	1,049	330	3	484
143, 696	Hinman, W. W., assignor to W. T. Wylie, Elkhart, Ill. Draught equalizer	Oct. 14, 1873	277	91	4	411
140, 626	Hinners, E. H., New York, N. Y. Cutter-head for molding	July 8, 1873	259	88	4	41
	Hinrichs, G. F. A. (See Kleemann, C. A., assignor.) (Reissue.)					
	Same (See Staehlen, W., assignor.)					
	Hinsdale, J. W., et al. (See Underwood, J. B., assignor.)					
134, 546	Hinsdill, H. M., Grand Rapids, Mich. Memorandum-book	Jan. 7, 1873	39	13	3	10
135, 551	Hinton, J. H., Wayne County, Ohio. Lifting-jack	Feb. 4, 1873	147	47	3	139
142, 465	Hinzey, J., assignor to Nicholl, Burr & Co., Peoria, Ill. Smut-mill	Sept. 2, 1873	129	42	4	252
134, 804	Hipkins, S., jr., assignor of one-half interest to R. Heatherington, Wheeling, W. Va. Coal-boring machine	Jan. 14, 1873	287	93, 94	3	43
134, 805	Same. Bit for boring coal, &c.	Jan. 14, 1873	291	94	3	43
140, 370	Hipkins, S., jr., assignor of one-half interest to R. Heatherington, South Wheeling, W. Va. Boring-bit	July 1, 1873	29	10	4	10
140, 416	Hipkiss, S., Charlestown, Mass. Dash-board bag	July 1, 1873	63	22	4	13
141, 791	Hirons, W., and J. D. Moore, Grinnell, Iowa. Sewing-machine	Aug. 12, 1873	352	116	4	171
145, 347	Hirsch, H., Middlesex County, England. Construction of vessels	Dec. 9, 1873	280	94	4	620
	Hirst, H. D. (See Heer, D., assignor.)					
140, 705	Hisley, J. P., assignor of one-half interest to H. L. Duguid, Syracuse, N. Y. Thill-holder	July 8, 1873	324	110	4	46
139, 507	Hitchcock, A., New York, N. Y. Drawing-board	June 3, 1873	56	18	3	613
145, 653	Hitchcock, C., assignor to self and W. J. Clark, Milldale, Conn. Coffee-urn	Dec. 16, 1873	554	183	4	654
	Hitchcock, H. W., et al. (See Townsend, G. W., assignor.)					
	Hitchcock, J., trustee. (See Perrine, A. T., assignor.)					
	Same (See Talpey, J. A., assignor.)					
137, 447	Hitchcock, J., Springfield, Mass. Sewer inlet-trap	Apr. 1, 1873	149	49	3	369
145, 871	Hitchcock, M. T., Springfield, Mass. Car-ventilator	Dec. 23, 1873	754	246	4	682
134, 547	Hitchcock, R., Watertown, N. Y. Lamp	Jan. 7, 1873	39	13	3	10
142, 103	Same	Aug. 26, 1873	656	216	4	215
145, 176	Same	Dec. 2, 1873	129	42	4	595
137, 448	Hitchings, C. F., New York, N. Y. Boiler stand and heater	Apr. 1, 1873	150	49	3	369
145, 654	Same. Boiler for warming buildings	Dec. 16, 1873	555	183	4	654
140, 040	Hite, J. B., Guyandotte, W. Va. Tanning-compound	June 17, 1873	552	177	3	677
135, 552	Hitt, J. E., Bement, Ill. Car-coupling	Feb. 4, 1873	147	47	3	139
	Hittinger, M. (See Rawson, G. W., assignor.)					
134, 548	Hoadley, J. C., Lawrence, Mass. Check-valve	Jan. 7, 1873	41	13	3	10
143, 574	Same. Dead-light for steam-boilers	Oct. 14, 1873	166	56	4	402
144, 098	Same. Governor for steam-engines	Oct. 24, 1873	666	220	4	463
141, 875	Hoadley, T., Toulon, Ill. Three-horse equalizer	Aug. 19, 1873	440	144	4	188
143, 076	Hoag, J., San Ramon Valley, Cal. Wind-mill	Sept. 23, 1873	669	230	4	329
143, 575	Hoagland, A. A., and W. Mickel, Oneonta, N. Y. Mortar-mixer	Oct. 14, 1873	167	56	4	402
142, 392	Hoar, W., Floyd, Iowa. Spring-hinge	Sept. 2, 1873	65	21	4	247
	Hoard, J. W. (See Bush, C. G., assignor.)					
	Same (Reissue.)					
138, 087	Hobart, G. W., Lowell, assignor to self, J. B. Melvin, Tewkesbury, and J. H. Pinder, Lowell, Mass. Thill-coupling	Apr. 22, 1873	750	237	3	453
135, 913	Hobbs, A. C., Bridgeport, Conn. Cartridge-loading machine	Feb. 18, 1873	494	160	3	192
137, 773	Same. Machine for winding wads	Apr. 15, 1873	462	144	3	419
143, 981	Same. Machine for interlocking cartridge-shells with bullets	Oct. 28, 1873	565	188	4	454
137, 680	Hobbs, A. M., Washington, D. C. Apparatus for cleaning privies and sinks	Apr. 8, 1873	366	113	3	396
6, 587	Hobbs, J., Bellaire, Ohio. Glass dishes and nappies (Design)	Apr. 15, 1873			3	417
6, 975	Hobbs, J., assignor to self and Belmont Glass-Works, Bellaire, Ohio. Goblet, &c. (Design)	Nov. 4, 1873			4	478
6, 976	Same. Goblet, &c. (Design)	Nov. 4, 1873			4	478
6, 804	Hobbs, J. H., Wheeling, W. Va. Glass goblet (Design)	Aug. 19, 1873			4	186
6, 805	Same. Glass dish (Design)	Aug. 19, 1873			4	185
139, 508	Hobbs, T. V., Chicago, Ill. Work-basket	June 3, 1873	56	18	3	613
134, 670	Hobson, R. G., Houlika, Miss. Plow	Jan. 7, 1873	163	53	3	19
139, 958	Hobson, W., Sandwich, Mass. Nursing-bottle	June 17, 1873	480	151	3	671
144, 274	Hochhausen, W., New York, N. Y. Self-closing telegraph-key	Nov. 4, 1873	88	29	4	485
	Hockensmith & Cooney. (See Cooney, W., assignor.)					
140, 041	Hockensmith, W. H., Bridgeport, Conn. Shuttle for sewing-machines	June 17, 1873	552	174	3	677
138, 088	Hodgdon, W., North Craftsbury, Vt. Milk-cooler	Apr. 22, 1873	751	238	3	452
142, 914	Hodge, C. A., Knoxville, Tenn. Piston-packing	Sept. 16, 1873	525	178 } 179 }	4	307
145, 410	Hodges, A. J., Peoria, Ill. Harvester-dropper	Dec. 9, 1873	342	114	4	625
	Hodges Edge-Trimming and Setting Machine Association. (See Hodges, S. H., assignor.)					
134, 806	Hodges, J. C., Morristown, Tenn. Hydraulic engine	Jan. 14, 1873	292	94	3	43
143, 761	Hodges, J. W., New York, assignor to self and J. W. Harway, Bay Side, N. Y. Steam-trap	Oct. 21, 1873	356	118	4	427
146, 073	Hodges, J. W., New York, assignor to J. W. Harway, Bay Side, N. Y. Valve for steam-pipes	Dec. 30, 1873	953	308	4	709
	Hodges, P. F. (See Bayliss, Brown & Lomont, assignors.)					
142, 231	Hodges, P. F., assignor of nine-twelfths interest to E. Bayliss, J. O. Brown, and F. T. Lomont, Massillon, Ohio. Harvester	Aug. 26, 1873	763	251	4	224
	Hodges, S. H. (See Maloy, J. W., assignor.)					
	Hodges, S. H., et al. (See Maloy, J. W., assignor.)					
136, 916	Hodges, S. H., assignor to The Hodges Edge-Trimming and Setting Machine Association, Lynn, Mass. Attachment for heel trimming and burnishing machines	Mar. 18, 1873	509	168	3	304
	Hodgins, J. C. (See Dilworth & Hodgins.) (Reissue.)					
130, 313	Hodgson, E. M., Stanhope, N. J. Washing-machine	May 27, 1873	787	250	3	592
141, 792	Hodgson, H. E., Knoxville, Tenn. Organ free-reed	Aug. 12, 1873	354	116	4	181
	Hoe, R. & Co. (See Mead, T. H., assignor.)					
	Hoe, R. M., New York, N. Y. Feeding paper to printing-presses (Extension)	Aug. 23, 1873			4	185
	Hoe, R. M., West Farms, N. Y. Machine for printing railway and other tickets. (Extension)	Mar. 8, 1873			3	244

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Hoff, E. C., et al. (See Spencer, J. C., assignor.)					
143, 285	Hoffler, P. J., Philadelphia, Pa. Clock and watch key	Sept. 30, 1873	843	290	4	360
135, 914	Hoffman, A. D., assignor of one-half interest to N. Friedman, Chicago, Ill. Door-spring	Feb. 18, 1873	495	160	3	192
141, 876	Hoffman, A. D., assignor by mesne assignment of part interest to N. Friedman and A. Liebenstein, Chicago, Ill. Combination-lock	Aug. 19, 1873	441	144	4	188
142, 393	Hoffman, J., Toledo, Ohio. Corpse-cooler	Sept. 2, 1873	65	22	4	247
143, 825	Hoffman, J., Belvidere, N. J. Safety-valve	Oct. 21, 1873	410	137	4	432
140, 503	Hoffman, N. (See Ellis, Hoffman & Lee)					
	Hoffmann, J., Waterbury, Conn. Automatic rope-skipper	July 1, 1873	138	47	4	19
	Hoffmark, B. (See Schpakowsky, A., assignor.)					
145, 177	Hoffmeyer, A. B., and J. Schmidt, Copenhagen, Denmark. Rotary plow	Dec. 2, 1873	131	43	4	596
134, 929	Hoffmire, J. E., New Brunswick, N. J. Velocipede	Jan. 21, 1873	462	148	3	72
135, 274	Hofmann, M., Darlington, Wis. Extension-table	Jan. 28, 1873	731	235	3	106
137, 841	Hofstatter, A. G., New York, N. Y. Door-bolt	Apr. 15, 1873	580	162	3	423
137, 923	Hofstatter, D. F., and W. H. Shaw, New London, Ohio. Swage for forming horseshoes	Apr. 15, 1873	587	185	3	429
142, 104	Hogan, J., South Boston, Mass. Car-axle box	Aug. 26, 1873	659	216	4	215
138, 563	Hogg, T., Washington, D. C. Blast-governor for grain-separator	May 6, 1873	87	28	3	504
6, 357	Hogg, W. J., assignor to W. Hogg, jr., Philadelphia, Pa. Carpet	Jan. 21, 1873				70
144, 979	Hoggson, S. J., assignor to American Enamel Decorating Company, New Haven, Conn. Apparatus for printing upon and decorating enameled surfaces	Nov. 25, 1873	702	237	4	769
136, 722	Hogue, S. C., Oskaloosa, Iowa. Composite-roofing	Mar. 11, 1873	337		3	981
136, 059	Hohorst, F., New York, N. Y. Sling for raising animals	Feb. 18, 1873	616	202	3	202
141, 930	Holbrook, A., Providence, R. I. Mallet	Aug. 19, 1873	485	160	4	191
	Holbrook, H. H. (See Walker & Holbrook.)					
142, 787	Holbrook, O. R., Staffordville, Conn. Cloth-measuring device	Sept. 16, 1873	424	143	4	298
	Holcomb, A. P. (See Huntley & Holcomb.)					
	Holcomb, A. P., et al. (See Huntley, W. W., assignor.)					
138, 089	Holdam, W. H., Crab Orchard, Ky. Churn	Apr. 22, 1873	752	238	3	452
	Holden, E., et al. (See Lones, Vernon & Holden.)					
	Holden, L. L., et al. (See Rogers, E. F., assignor.)					
	Holden, S. B., et al. (See Rogers, E. F., assignor.)					
145, 946	Holderman, L., New Paris, Ind. Washing-machine	Dec. 30, 1873	846	275	4	700
138, 090	Holdsworth, S., Maspeth, assignor to self and J. Black, Brooklyn, N. Y. Loom for weaving wire	Apr. 22, 1873	753	238	3	452
	Holihan, T. (See Neville, J., assignor.)					
	Holland, A. C. (See Hollen & Holland.)					
	Holland, C. (See Frear, G. A., assignor.)					
135, 118	Holland, J., Cincinnati, Ohio. Writing-pen	Jan. 21, 1873	569	185	3	81
	Holland, W. (See Cox & Holland.)					
143, 982	Hollely, J., Brooklyn, assignor of one-half interest to H. E. Towle, New York, N. Y. Automatic fastening for sashes, &c.	Oct. 28, 1873	567	188	4	455
136, 723	Hollenback, A. J., North Bangor, N. Y. Combined latch and lock	Mar. 11, 1873	337	112	3	291
137, 842	Hollen, F., and A. C. Holland, Marion, Ill. Corn sheller	Apr. 15, 1873	521	162	3	423
142, 629	Hollenweger, F. J., New Rochelle, assignor to self, J. Martin, and C. F. Spaulding, New York, N. Y. Rotary engine	Sept. 9, 1873	277	91	4	276
136, 997	Holler, B., Brooklyn, N. Y. Camera-stand	Mar. 18, 1873	579	193	3	310
	Holley, A. L. (See Moore, George & Holley.)					
5, 317	Holley, A. L., Brooklyn, N. Y. Stopper for ingot-molds	Mar. 11, 1873	406	134	3	287
5, 318	Same. Ingot-mold	Mar. 11, 1873	407	135	3	287
	Holley, M. Y. (See Wright, Holley & Miles.)					
6, 956	Hollis, J. O., Boston, Mass. Door-knob	Oct. 14, 1873			4	401
135, 915	Hollis, S. P., and H. B. Chess, Pittsburgh, Pa. Machine for cutting nails	Feb. 18, 1873	495	161	3	192
143, 346	Hollingsworth, J., New York, N. Y. Middlings-purifier	Sept. 30, 1873	903	307	4	364
140, 042	Hollingsworth, R. J., assignor to L. McMurray, Baltimore, Md. Soldering-tool	June 17, 1873	553	175	3	677
139, 388	Hollister, J. F., Plano, Ill. Machine for cutting and punching leather straps	May 27, 1873	848	271	3	597
	Hollmann, G. H. (See Nicoll & Hollmann.)					
	Holloway, E. S. (See Fawcett, E. W., assignor.)					
140, 627	Holloway, W., Buffalo, N. Y. Button-fastening	July 8, 1873	259	88	4	41
138, 650	Holley, E. P., Lockport, N. Y. Fluting-machine	May 6, 1873	160	52	3	510
142, 232	Holly, H. W., Brooklyn, N. Y. Canvas-stretcher	Aug. 26, 1873	765	251	4	224
144, 764	Holly, H. W., Brooklyn, assignor to L. A. Jocelyn, Yonkers, N. Y. Rubber for slates and blackboards	Nov. 18, 1873	514	174	4	543
145, 947	Holly, J. H., and J. F. Robertson, Warwick, N. Y. Pitman	Dec. 30, 1873	847	275	4	700
143, 347	Holman, D. S., Philadelphia, Pa. Marking-pen	Sept. 30, 1873	905	307	4	364
	Holman, G., et al. (See Enos, J. A., assignor.)					
144, 542	Holman, H. W., Waterloo, Iowa. Dried-fruit loosener	Nov. 11, 1873	321	109	4	516
143, 011	Holman, J. F. L., assignor of one-half interest to E. Henwood, Hamilton, Canada. Car-coupling	Sept. 23, 1873	614	209	4	325
	Holmes, A. M. (See Hopkins, H. L., assignor.)					
	Holmes, B. (See Holmes, E. and B.)					
135, 989	Holmes, B., et al. (See Wilde, H., assignor)	Feb. 18, 1873	556	184	3	197
142, 696	Holmes, B., New York, N. Y. Bed-bottom	Sept. 9, 1873	334	112	4	281
	Holmes, C. P., Havana, N. Y. Rotary pump					
	Holmes, E. (See Cowles, E., assignor)					
	Holmes, E., et al. (See Wilde, H., assignor)					
141, 003	Holmes, E. and B., Buffalo, N. Y. Machine for jointing staves	July 22, 1873	612	207	4	86
139, 674	Holmes, E. S., Grand Rapids, Mich. Cap setting and extracting device	June 10, 1873	215	70	3	642
142, 697	Holmes, F. M., Boston, Mass. Clamp	Sept. 9, 1873	335	112	4	281
141, 053	Holmes, F. P., North Bridgewater, Mass. Game-board	July 22, 1873	652	220	4	90
142, 339	Holmes, H. A., Epsom, N. H. Machine for sawing clapboards	Sept. 2, 1873	15	6	4	243
143, 348	Holmes, J., Evanston, Ill., assignor of one-half interest to G. Walker, Salt Lake, Utah. Coupling for gas and water pipes	Sept. 30, 1873	905	308	4	364
141, 506	Holmes, J. A., Philadelphia, Pa. Casting steel ingots	Aug. 5, 1873	85	27	4	142
	Holmes, J. F. (See Jones J., assignor.)					
	Holmes, J. H. (See Bull, J. D., assignor.)					
	Holmes, J. H. (See Perkins, R. W., assignor.)					
	Same. same					
5, 343	Holmes, K. W., Winona, Minn., and A. Albright, Newark, N. J., said Holmes assignor to said Albright. Coating wood with rubber, gutta-percha, &c.	Apr. 1, 1873	226		3	375
142, 233	Holmes, N. L., assignor of one-half interest to C. H. De Groat, Fond du Lac, Wis. Skein and box for vehicle wheels	Aug. 26, 1873	766	251	4	224
142, 018	Holmes, S., Philadelphia, Pa. Machine for bending and twisting metal bars	Aug. 19, 1873	557	184 } 185 }	4	197
139, 789	Holmes, S., and W. M. Bowron, Philadelphia, Pa. Iron-ship building	June 10, 1873	330	102	3	651
135, 806	Holmes, T., Brooklyn, N. Y. Carbureting-apparatus	Feb. 11, 1873	393	126	3	170

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 948	Holmes, T. J., Malden, Mass. Shirt button or stud	Dec. 30, 1873	847	275	4	700
	Holmes, W. (See Crandall, J. W., assignor.)					
136, 833	Holroyd, J., Washington, D. C. Hooks and eyes for tackle-blocks	Mar. 18, 1873	443	147	3	299
140, 628	Holley, J. H., Butler, Ga. Blasting-plug	July 8, 1873	259	88	4	41
138, 157	Holt, G. L., and J. C. Marshall, assignors to E. H. & A. A. Buckland, Springfield, Mass. Breech-loading fire-arm	Apr. 22, 1873	805	256	3	456
	Holt, G. R. (See Hawkins, J. T., assignor.)					
5, 555	Holt, H., Brooklyn, N. Y., assignor by means assignment to Socombe Manufacturing Company, New York, N. Y. Hand-stamp	Aug. 26, 1873	849	280	4	231
140, 136	Holt, N. J., Howell, and J. Leach, Detroit, Mich. Clamp	June 24, 1873	657	206	3	693
136, 515	Holte, A. K., Chicago, Ill. Fire-proof building	Mar. 4, 1873	145	47	3	257
136, 834	Holton, M. G., assignor of one-half interest to S. Green, Rochester, N. Y. Fish-spawn hatchers	Mar. 18, 1873	443	147	3	299
136, 323	Holton, S., Middlebury, Vt. Dressing-machine	Feb. 25, 1873	259	276	3	252
139, 247	Holtz, C., assignor to J. H. Vornbrock, Saint Louis, Mo. Self-rocking cradle	May 27, 1873	729	230	3	587
141, 793	Holtz, J., assignor of one-half interest to E. Higgins, Baltimore, Md. Match-box	Aug. 12, 1873	354	116	4	171
	Holzer, E. R. (See Holzer, J. & E. R.)					
139, 389	Holzer, J. & E. R., Philadelphia, Pa. Settee	May 27, 1873	850	{ 271 272 }	3	597
141, 645	Home, J. K., Almonte, Canada. Pattern for pipe-elbows	Aug. 12, 1873	221	70	4	161
	Homelius, P. (See Allison & Homelius.)					
137, 643	Hood, C., Seneca Falls, N. Y. Cooking-apparatus	Apr. 15, 1873	521	{ 162 163 }	3	424
	Hood, G. E. (See Kilder & Hood.)					
	Same... (See Kilder, J. H., assignor.)					
	Hood, H. C., et al. (See Allen, C. L., assignor.)					
134, 990	Hood, H. P., Indianapolis, Ind. Washer for nut-fastenings	Jan. 21, 1873	463	148	3	72
135, 553	Hood, H. P., Indianapolis, Ind., and W. Coombs, Bangor, Me. Nut-lock	Feb. 4, 1873	148	47	3	139
142, 630	Hood, H. P., assignor of one-half interest to N. B. Cooper, Indianapolis, Ind. Burglar-alarm	Sept. 9, 1873	279	91	4	276
136, 516	Hood, J. H., Danville, N. Y. Roofing	Mar. 4, 1873	145	47	3	257
	Hood, J. L., et al. (See Allen, C. L., assignor.)					
	Hood, T., et al. (See Hunter, R. F., assignor.)					
141, 353	Hook, A. H., assignor to C. F. Hervé, C. C. Tracy, and W. A. Shaw, New York, N. Y. Mold for casting stench-traps	July 29, 1873	955	311	4	121
145, 735	Hooper, C. A., San Francisco, Cal. Manufacture of cigar-boxes from redwood	Dec. 23, 1873	640	.....	4	673
138, 025	Hooper, R., Baltimore, Md. Steam-generator	Apr. 22, 1873	691	218	3	447
139, 390	Hooper, W., Ticonderoga, N. Y. Ore-washer	May 27, 1873	850	272	3	598
	Hooper, W. E. & Sons. (See Milstead, A. J., assignor.)					
	Hooper, W. T. (See Masterman & Hooper.)					
	Hoosier Drill Company. (See Ingels & Mount, assignors.)					
139, 790	Hooton, F. C., et al. (See Hayes, J. R., assignor.)					
5, 556	Hoover, J., Lancaster, Pa. Washing-machine	June 10, 1873	330	102	3	651
	Hope, E. T., Philadelphia, Pa., assignor to S. I. Thursby, Brooklyn, N. Y. Elevator. (Reissue)	Aug. 26, 1873	849	280	4	231
142, 394	Hope, J. G., Wichita, Kans. Projectile	Sept. 2, 1873	66	22	4	247
143, 762	Hopkin, W., jr., Philadelphia, Pa. Cooking-range	Oct. 21, 1873	356	119	4	427
	Hopkins and Dickinson Manufacturing Company. (See Collins, J., assignor.)					
136, 724	Hopkins, C. H., Lyndonville, Vt. Cylinder-cock for locomotives, &c.	Mar. 11, 1873	338	112	3	281
139, 791	Hopkins, D. A., Jersey City, N. J. Attachment to car-axle boxes	June 10, 1873	331	103	3	651
145, 655	Hopkins, E. R., Newark, N. J., assignor of three-fourths interest to N. P. Threadwell, New York, N. Y. Manufacture of illuminating-gas	Dec. 16, 1873	556	183	4	654
139, 579	Hopkins, G. M., Albion, N. Y. Gas-regulator for vulcanizers	June 3, 1873	116	39	3	618
143, 012	Hopkins, H. H., Norwich, Conn. Breech-loading fire-arm	Sept. 23, 1873	615	209	4	325
145, 178	Hopkins, H. L., assignor of one-half interest to A. M. Holmes, Morrisville, N. Y. Safety-pocket	Dec. 2, 1873	132	43	4	596
141, 438	Hopkins, J., Akron, Ohio. Animal-poke	Aug. 5, 1873	25	8	4	137
142, 019	Hopkins, P. H., Brooklyn, N. Y. Machine for cutting, rubbing and drilling stone	Aug. 19, 1873	559	185	4	198
144, 099	Hopkins, L. D., Milford, Kans. Sower, planter, and cultivator	Oct. 28, 1873	667	220	4	463
	Hopkins, W. (See Picking & Hopkins.)					
	Hopkins, W. A., et al. (See McGregor & Vall, assignors)					
143, 242	Hopkins, W. P., Lawrence, Mass. Gear-cutting attachment to lathes	Sept. 30, 1873	808	278	4	356
136, 998	Hoppenan, H., Kansas City, Mo. Breech-loading fire-arm	Mar. 18, 1873	580	193	3	310
137, 924	Hopping, E. C., assignor of one-half interest to E. A. Ely, Madison, N. J. Mechanical movement	Apr. 15, 1873	587	185	3	429
145, 872	Hopping, E. C., Madison, N. J. Mowing-machine	Dec. 23, 1873	755	246	4	682
5, 219	Hopson, G., Bridgeport, Conn. Manufacture of spring-heads	Jan. 7, 1873	209	67	3	25
143, 576	Same... Carriage-spring	Oct. 14, 1873	168	56	4	403
6, 425	Horan, H., Newark, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Feb. 18, 1873	.....	.....	3	189
6, 426	Same... Carpet	Feb. 18, 1873	.....	.....	3	189
6, 427	Same... same	Feb. 18, 1873	.....	.....	3	189
6, 428	Same... same	Feb. 18, 1873	.....	.....	3	189
6, 518	Same... same	Mar. 25, 1873	.....	.....	3	325
6, 519	Same... same	Mar. 25, 1873	.....	.....	3	325
6, 520	Same... same	Mar. 25, 1873	.....	.....	3	325
6, 596	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 597	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 598	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 599	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 600	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 601	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 602	Same... same	Apr. 22, 1873	.....	.....	3	444
6, 932	Horan, H., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Oct. 7, 1873	.....	.....	4	380
7, 025	Same... same	Dec. 9, 1873	.....	.....	4	614
7, 026	Same... same	Dec. 9, 1873	.....	.....	4	614
7, 027	Same... same	Dec. 9, 1873	.....	.....	4	614
7, 028	Same... same	Dec. 9, 1873	.....	.....	4	614
7, 029	Same... same	Dec. 9, 1873	.....	.....	4	614
7, 030	Same... same	Dec. 9, 1873	.....	.....	4	614
7, 031	Same... same	Dec. 9, 1873	4	614
7, 032	Same... same	Dec. 9, 1873	4	614
7, 033	Same... same	Dec. 9, 1873	4	614

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7,060	Horan, H., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet.....	Dec. 16, 1873			4	641
7,061	Same.....	Dec. 16, 1873			4	641
142, 105	Horne, A. A., Mount Morris, N. Y. Adjustable stay-spring for vehicles.....	Aug. 26, 1873	659	216	4	215
144, 202	Horney S., Richmond, Ind. Scraper.....	Nov. 4, 1873	27	8	4	480
141, 439	Hornfager, W. C., and M. Fitz Gibbons, New York, N. Y. Oyster-dredge.....	Aug. 5, 1873	26	8	4	137
139, 391	Horr, O. W., Chicopee Falls, Mass. Toy pistol.....	May 27, 1873	852	273	3	598
144, 980	Horton, C. B., Waterloo, N. Y. Grain-scourer.....	Nov. 25, 1873	703	237	4	569
142, 163	Hortou, E., Windsor Locks, Conn. Chuck.....	Aug. 26, 1873	706	233	4	219
144, 100	Same..... Screw-threading machine.....	Oct. 28, 1873	668	220 221	4	463
	Horton, E. E. (See Hoywood & Horton).....	Jan. 7, 1873	38	12	3	10
	Horton, J. (See Jewett, G. H., assignor.)					
	Horton, J. M. (See Chapman, E. C., assignor.)					
144, 674	Horton, P. B., San Francisco, Cal. Blackboard-rubber.....	Nov. 18, 1873	438	148	4	537
6, 521	Hoskin, R., assignor to C. M. Bailey, New York, N. Y. Carpet..... (Design).....	Mar. 25, 1873			3	325
139, 715	Hoskins, W. J., and A. D. Rowe, Essex, N. Y. Relisher and wedge-cutter.....	June 10, 1873	258	81	3	645
135, 807	Hoskins, W. T., Livia, Ky. Ditching-machine.....	Feb. 11, 1873	393	127	3	170
	Hosmer, F. H. (See Kelsey & Hosmer.)					
	Hosmer, J. A. (See Kelsey & Hosmer.)					
136, 436	Hosmer, T., Sandusky, Ohio. Life-preserving float.....	Mar. 4, 1873	72	25	3	251
	Hotchkiss, B., New Haven, Conn. Trip-hammer..... (Extension).....	June 14, 1873			3	640
	Hotchkiss, E. H. (See Gladney, R., assignor.)					
138, 251	Hotchkiss, J., and P. N. Woliston, Springfield, Ohio. Brick-machine.....	Apr. 29, 1873	919	289 290 291	3	473
135, 275	Hotchkiss, T., Stratford, Conn. Paper-bag machine.....	Jan. 28, 1873	732	235 236	3	106
143, 155	Hothersall, J., New York, N. Y. Carpet-beater.....	Sept. 23, 1873	727	250	4	334
138, 158	Houck, G. O., Springfield, Ohio. Corn-planter.....	Apr. 22, 1873	806	257	3	456
139, 894	Houck, G. O., and C. E. Sawyer, Springfield, Ohio. Brick-machine.....	June 17, 1873	430	134	3	666
145, 060	Hough, E., Brooklyn, N. Y. Machine for heading hair.....	Dec. 2, 1873	18	7	4	587
	Hough, J. (See Swickard, J. W., assignor.)					
144, 847	Hough, W. S., Galt, assignor to self and S. Cornell, Widder Station, Canada. Bee-hive.....	Nov. 25, 1873	598	203	4	560
	Houghtaling, W. (See George & Houghtaling.)					
	Houghton, C. (See Wightman, J. C., assignor.)					
144, 455	Houghton, W., Great Grimsby, England. Grain-cleaner.....	Nov. 11, 1873	245	83	4	510
145, 569	Houling, T., Ipswich, Mass. Spinning-mule.....	Dec. 16, 1873	485	159	4	648
136, 917	Houpt, J., Springtown, Pa. Condensing-apparatus for steam-engines.....	Mar. 18, 1873	511	169	3	304
136, 918	Same..... Jet condenser for steam-engines.....	Mar. 18, 1873	513	169	3	304
144, 203	Same..... Condensing-apparatus for marine steam-engines.....	Nov. 4, 1873	28	8, 9	4	480
136, 599	House, H. A., Bridgeport, Conn. Garter.....	Mar. 11, 1873	234	79	3	273
135, 026	Same..... Bundling kindling wood and other substances.....	Apr. 22, 1873	692	219	3	447
135, 027	Same..... Machine for bundling kindling wood and other substances.....	Apr. 23, 1873	695	220	3	447
143, 213	Same..... Wood-compressor.....	Sept. 30, 1873	809	278	4	356
145, 570	House, J. A., assignor to Wheeler and Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine.....	Dec. 16, 1873	486	159 160	4	619
	House, J. E. (See Congdon & House.)					
137, 306	House, M. W., assignor to the Cleveland Non-explosive Lamp Company, Cleveland, Ohio. Shade-holder.....	Apr. 1, 1873	23	7	3	359
141, 223	House, M. W., Cleveland, Ohio. Shade-holder for lamps.....	July 29, 1873	828	271	4	111
	Same..... Can for oils and other liquids.....	July 29, 1873	829	271	4	111
141, 224	House, P. C., West Randolph, Vt. Wheel for vehicles.....	Aug. 12, 1873	280	91	4	166
141, 715	House, W., Aurora, Ind. Corn-planter.....	Oct. 21, 1873	478	161	4	437
143, 905	Houser, S. R., Upper Sandusky, Ohio. Machine for punching and shearing.....	Oct. 7, 1873	94	33	4	388
143, 510	Houston, E. J., Nacoochee, Ga. Flooring-tongs.....	Feb. 18, 1873	497	161	3	192
135, 916	Houston, E. J., assignor of one-half interest to E. T. Starr, Nacoochee, Ga. Mortising-machine.....	Feb. 18, 1873	497	161	3	192
135, 917	Houston, L., Smithville, N. J. Mortising-machine.....	Jan. 28, 1873	789	255	3	111
135, 337	Housum, C. P. (See Hill, H. W., assignor.)					
142, 466	Houts, A., deceased, by E. Houts, administrator, Salona, Pa. Railway-gate.....	Sept. 2, 1873	130	42	4	252
	Houts, E., administrator. (See Houts, A.)					
	How, M. (See Bond, H., assignor.)					
140, 922	How, W. S., Cincinnati, Ohio. Toy-catapults.....	July 15, 1873	519	174 175	4	70
	Howard, A. et al. (See Culmer, J. W., assignor.)					
139, 792	Howard, B., assignor to self and T. Watkins, Saint Clair, Pa. Fire and burglar-proof safe.....	June 10, 1873	331	103	3	651
137, 844	Howard, A. F., assignor to Z. Parmenter and A. H. Walker, Waltham, Mass. Crayon-holder.....	Apr. 15, 1873	522	163	3	494
	Howard, C. (See Howard, L. & C.)					
135, 710	Howard, C., New York, N. Y. Paddle-mechanism for boat.....	Feb. 11, 1873	305	96	3	164
	Howard, C. & Co. (See Brooks, J., assignor.)					
144, 905	Howard, C. A., Pontiac, Mich. Nut-lock.....	Nov. 25, 1873	641	218	4	564
136, 725	Howard, C. C., Lowndesborough, Ala. Cotton-press.....	Mar. 11, 1873	339	112	3	281
136, 919	Howard, C. H., Batavia, N. Y. Composition sidewalk.....	Mar. 18, 1873	514		3	305
	Howard, C. L., et al. (See Milroy, J. W., assignor.)					
140, 043	Howard, D. S., Drury's Bluff, Va. Combined roller and irrigator.....	June 17, 1873	554	175	3	677
5, 306	Howard, E., Flushing, and W. H. Jackson, Brooklyn, N. Y., assignors by mesne assignment to H. E. Townsend, C. P. Brigham, and G. W. Simmons, Boston, Mass. Sewing-machine for working button-holes..... (Reissue).....	Mar. 4, 1873	208	68 69	3	262
5, 336	Same..... Sewing-machine for making button-holes..... (Reissue).....	Mar. 25, 1873	846	278	3	342
	Howard, E. I. (See Tesseymann & Howard.)					
142, 395	Howard, F. E., Geneseo, N. Y. Car-coupling.....	Sept. 2, 1873	67	22	4	247
139, 392	Howard, G. C., and J. Dainty, deceased, by A. J. Dainty, administratrix, assignors to G. C. Howard, Philadelphia, Pa. Plate-printing press.....	May 27, 1873	853	273	3	598
136, 060	Howard, J. L., Hartford, Conn. Spittoon.....	Feb. 18, 1873	616	202	3	202
143, 411	Same..... Railway-car lamp.....	Oct. 7, 1873	12	4	4	382
136, 726	Howard, J. W., Greenville, Ala. Subsoil-plow.....	Mar. 11, 1873	340	112	3	281
135, 338	Howard, L. & C., Watkins, N. Y. Machines for twisting oakum.....	Jan. 28, 1873	791	256	3	111
139, 314	Howard, M. B., Ellsworth, Nev. Apparatus for separating quicksilver from amalgam.....	May 27, 1873	787	251	3	592
5, 402	Howard, O. B., Deering, assignor of one-half interest to O. P. Shepherd, Portland, Me. Razor-strop..... (Reissue).....	May 13, 1873	455	143	3	545
141, 221	Howard, O. S., assignor to self and Henckley and Egery Iron Company, Bangor, Me. Device for centering piston-heads.....	July 29, 1873	827	270	4	111

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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5, 240	Howard, W. T., Baltimore, Md., assignor to H. G. Leisenring. Broiler..... (Reissue)	Jan. 21, 1873	633	207	3	86
137, 550	Howard, W. T., Baltimore, Md. Machine for raising oyster-dredges.....	Apr. 8, 1873	253	78	3	389
	Howarth, F. A. (See Fox & Howarth.)					
137, 204	Howdon, R. J., Cincinnati, Ohio. Casting bottoms on sheet-metal vessels.....	Mar. 25, 1873	778	257	3	337
134, 671	Howe, G. W., Vineland, N. J. Separator for thrashing-machines.....	Jan. 7, 1873	163	54	3	19
141, 222	Same..... Reversible plow.....	July 29, 1873	828	270	4	111
136, 727	Howe, J., Milford, Mass., assignor to the Shoe-Machinery Manufacturing Company, Conn. Cylinder for sole-buffing machines.....	Mar. 11, 1873	341	113	3	282
145, 802	Howe, L., Oshtemo, Mich. Construction of cisterns.....	Dec. 23, 1873	694	228	4	678
	Howe, M. G., et al. (See Richardson, J. D., assignor.)					
5, 419	Howe, M. V., assignor to Heywood Brothers & Co., Gardner, Mass. Tilting-chair.. (Re-issue)	May 20, 1873	703	{ 220 221	3	578
	Howe, R., and Company. (See Chaput, L. G., assignor.)					
	Howe, T., Cambridgeport, Mass. Bedstead-slat..... (Extension)	Sept. 27, 1873			4	322
143, 763	Howe, W. B., Troy, N. Y. Car axle-box.....	Oct. 21, 1873	357	119	4	427
	Howe, W. H. I. (See Wright, J. W., assignor.)					
136, 920	Howe, W. H. I., New York, N. Y. Sealed can.....	Mar. 18, 1873	515	169	3	305
137, 661	Howell, C. H., assignor of one-half interest to H. D. Howell, Middletown, Del. Jump-seat for wagons.....	Apr. 8, 1873	366	114	3	398
5, 414	Howell, E., Ashtabula, Ohio. Hemmer for sewing-machines..... (Reissue)	May 20, 1873	697	219	3	577
142, 569	Howell, G. W., Covington, Ky. Cut-off for cisterns.....	Sept. 9, 1873	230	75	4	272
	Howell, H. D. (See Howell, C. H., assignor.)					
	Howell, J. (See Mayel & Howell.)					
	Howell, J. M. (See Tadlock, J. S., assignor.)					
	Howell, T. P. (See Oliver, C. P., assignor.)					
135, 429	Howes, C. F., Philadelphia, Pa., assignor to self and R. W. Howes, Boston, Mass. Telegraph-pole.....		35	10	3	130
145, 873	Howes, F. M., Somerville, Mass. Means for chocking and securing boats.....	Dec. 23, 1873	756	247	4	683
	Howes, R. W. (See Howes, C. F., assignor.)					
134, 602	Howitt, E. A., White Water, Wis. Chromatic printing-press attachment.....	Jan. 7, 1873	99	32	3	15
139, 155	Same..... Inking attachment for chromatic printing.....	May 20, 1873	634	198	3	572
144, 456	Howland, E., Hammon, N. J. Wine-press.....	Nov. 11, 1873	246	83	4	510
	Howland, G. (See Falser & Howland.)..... (Disclaimer)					
	Same..... same..... (Extension)					
135, 554	Howland, G., Brunswick, N. Y. Coal-scuttle.....	Feb. 4, 1873	149	47, 48	3	139
136, 999	Same..... Combined sloop-pail and commode.....	Mar. 18, 1873	581	193	3	310
138, 159	Same..... Water-proof plastic cement for roofing.....	Apr. 22, 1873	807		3	456
142, 234	Howland, H. C., and T. L. Moore, Oxford, N. Y. Hay-loader.....	Aug. 26, 1873	766	252	4	224
	Howlett, F. (See Clayton & Howlett.)					
	Howley, B., et al. (See Brown, W. F., assignor.)					
135, 430	Howson, H., assignor to S. B. Rowley, Philadelphia, Pa. Fruit-jar.....	Feb. 4, 1873	35	10	3	130
7, 071	Hoyer, R., New York, N. Y. Harness-trimming..... (Design)	Dec. 23, 1873			4	671
138, 564	Howland, W., Newcastle, Pa. Reverberatory furnace.....	May 6, 1873	88	28	3	504
144, 675	Same..... Fire-plate.....	Nov. 18, 1873	438	148	4	537
	Hoysradt, J. W., et al. (See Harris, S. W., assignor.)..... (Reissue)					
141, 507	Hoyt, A. S., Winona, Minn. Grain-binder.....	Aug. 5, 1873	86	27	4	142
135, 808	Hoyt, E., Stamford, Conn. Washing-machine.....	Feb. 11, 1873	393	127	3	170
144, 906	Same..... Bed-bottom.....	Nov. 25, 1873	642	218	4	564
136, 517	Hoyt, F. A., assignor of two-thirds interest to G. A. Little and Dean, Smith & Co., La Crosse, Wis. Machine for dressing mill-stones.....	Mar. 4, 1873	146	47	3	257
140, 197	Hoyt, F. T., Brooklyn, N. Y. Pantalon.....	June 24, 1873	710	223	3	697
142, 788	Hoyt, H. L., Norwalk, Conn. Valve for steam-engines.....	Sept. 16, 1873	435	143	4	298
	Hoyt, J. (See Kirby, S. R., assignor.)					
6, 760	Hoyt, J. W., Springfield, Mass. Railway-station..... (Design)	July 8, 1873			4	36
	Hoyt, R. E. (See Leonard, J. D., assignor.)					
	Hoyt, W. R. (See Coffin, F. E., assignor.)					
140, 827	Hubard, D., Ashland, Wis. Last-block fastener.....	July 15, 1873	434	147	4	63
141, 225	Hubbard, C. W., Pittsburgh, Pa. Saw-buckle.....	July 29, 1873	830	271	4	111
135, 555	Hubbard, E. C., Green Bay, Wis. Propeller for vessels.....	Feb. 4, 1873	149	48	3	139
134, 672	Hubbard, E. R., assignor to self and G. Farr, New York, N. Y. Brick-machine.....	Jan. 7, 1873	164	54	3	19
138, 401	Hubbard, F., and E. B. Severance, assignors to the Merriam Manufacturing Company, Durham, Conn. Toy.....	Apr. 29, 1873	1,049	330	3	484
136, 728	Hubbard, G. M., assignor to W. and E. T. Fitch, New Haven, Conn. Snap-hook.....	Mar. 11, 1873	342	113	3	282
143, 013	Hubbard, G. W., Philadelphia, Pa. Elevator.....	Sept. 23, 1873	616	209	4	325
	Hubbard, J. H. (See Daniels & Hubbard.)					
	Hubbard, M. G. (See Crook, C., assignor.)..... (Reissue)					
	Hubbard, M. G., Syracuse, N. Y. Harvesting-machine..... (Extension)	May 10, 1873			3	497
135, 809	Same..... Metallic washer.....	Feb. 11, 1873	394	127	3	170
	Hubbard, N. (See Loretz, A. J. L., assignor.)					
	Hubbell, A. F., et al. (See Burt, J., assignor.)..... (Reissue)					
	Hubbell, A. S. (See Hubbell, H. S. and A. S.)..... (Design)					
6, 977	Hubbell, H. S. and A. S., Buffalo, N. Y. Stove..... (Design)	Nov. 4, 1873			4	478
6, 978	Same..... same..... (Design)	Nov. 4, 1873			4	478
	Hubbell, J. H. (See Heidt, A. P., assignor.)					
143, 412	Hubbell, N. C., assignor to J. Johnson, A. Whitney, Hartford, and A. Corban, Plainville, Conn. Machine for making metal screws.....	Oct. 7, 1873	13	4, 5, 6	4	382
144, 848	Hubbell, T. K., and G. H. Gregory, Wilton, Conn. Self-closing railway-switch.....	Nov. 25, 1873	599	204	4	560
137, 205	Hubbell, W. L., Brooklyn, N. Y. Sad-iron.....	Mar. 25, 1873	779	257	3	337
141, 034	Same..... same.....	July 22, 1873	653	220	4	90
	Hubbs, J. A. (See Parker, J., assignor.)					
145, 420	Huber, B., Boston, Mass. Lithographic-press.....	Dec. 9, 1873	343	114	4	625
145, 196	Huber, G. W., and A. E. Flickinger, Norwalk, Ohio. Bench-plane.....	Dec. 2, 1873	61	20	4	590
141, 275	Huber, S., Danville, Pa. Railway-rail chair.....	July 29, 1873	877	287	4	115
136, 600	Hubing, C., Philadelphia, Pa. Water and beer cooler.....	Mar. 11, 1873	235	80	3	273
135, 037	Hübner, R., New York, N. Y. Machine for turning wooden heels.....	Jan. 21, 1873	509	164	3	76
135, 038	Same..... Machine for finishing wooden heels for shoes.....	Jan. 21, 1873	510	{ 164 165	3	76
134, 603	Huch, E. H., Brunswick, Germany. Coffee-pot.....	Jan. 7, 1873	99	32	3	15
139, 315	Hucks, J. G., San Francisco, Cal. Medical compound or ointment.....	May 27, 1873	788		3	592
135, 556	Hudner, F., and J. R. Little, New York, N. Y. Ice-crusher.....	Feb. 4, 1873	150	48	3	139
5, 520	Hudnut, T., Terre Haute, Ind. Hominy-mill..... (Reissue)	Aug. 5, 1873	185	59	4	150
145, 107	Hudson, A. J., Camden, Tenn. Churn-dasher.....	Dec. 2, 1873	62	20	4	590
137, 551	Hudson, C. H., Clinton, Mass. Loom shuttle-guard.....	Apr. 8, 1873	255	78	3	389
	Hudson, H. (See Gibbs, L., assignor.)					

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	Hudson, J. C. (See Odell & Hudson.)					
140, 504	Hudson, J. F., East Cambridge, Mass. Railway-car basket	July 1, 1873	138	47	4	19
134, 402	Hudson, J. L., Cumming, Ga. Wagon-standard	Apr. 29, 1873	1,050	331	3	484
142, 020	Same. Railway-rail joint	Aug. 19, 1873	560	185	4	198
140, 137	Hudson, W., Clyde Mills, Mich. Quilting-frame	June 24, 1873	658	267	3	693
136, 729	Hudson, W. S., Paterson, N. J. Locomotive	Mar. 11, 1873	342	113	3	282
135, 222	Huerne, P., San Francisco, Cal. Filter	Jan. 28, 1873	684	220	3	203
	Huettemann, F. (See Cramer, A., assignor.)					
	Hufeland P. (See Schrag & Hufeland.) (Reissue.)					
136, 122	Hufeland P., New York, N. Y. Lead-pencil	Feb. 18, 1873	671	219	3	205
142, 631	Huff, D. L., Bay City, Mich. Clothes-reel	Sept. 9, 1873	279	92	4	276
	Huff, J. J. (See Huff, L. C., assignor.)					
140, 417	Huff, L. C., assignor of one-half interest to J. J. Huff, Sonina, Ala. Protecting mask for bee-keepers	July 1, 1873	64	23	4	13
136, 061	Huffman, A., assignor to M. H. Merriman, Rochester, N. Y. Blind-hinge	Feb. 18, 1873	617	203	3	202
138, 403	Huffman, J. D., assignor of one-half interest to C. M. Thompson, London, Ohio. Broadcast-seeder	Apr. 29, 1873	1,050	331	3	484
140, 273	Huffman, O., Lucieville, Nebr. Portable fence	June 24, 1873	771	243	3	703
142, 235	Huffman, W., Millgrove, Ind. Railway-rail chair	Aug. 26, 1873	767	252	4	224
135, 537	Huffman, W. C., Toledo, Ohio. Combined seat and desk for railway-cars	Feb. 4, 1873	151	48	3	139
142, 396	Hug, D., New York, N. Y., assignor to self and W. H. Speer, Jersey City, N. J. Breach-loading fire-arm	Sept. 2, 1873	68	22	4	248
136, 162	Hugg, J. S., Camden, N. J., and J. T. Stewart, assignors to J. T. Stewart, Philadelphia, Pa. Ruffler for sewing-machines	Feb. 25, 1873	724	234	3	222
138, 499	Huggett, J., Eastbourne, and J. A. Huggett, Clapham, England. Roll for rolling iron for horseshoe-nails	May 6, 1873	26	9	3	500
	Huggett, J. A. (See Huggett, J. & J. A.)					
145, 421	Huggins, J., Birmingham, England. Machine for making metallic tubing	Dec. 9, 1873	344	115	4	625
146, 003	Huggins, R. L., Bethel, Ohio. Mole-trap	Dec. 30, 1873	892	229	4	704
144, 457	Hughes, A., Brampton Ash, England. Lifting-finger for harvesters	Nov. 11, 1873	247	83	4	510
142, 340	Hughes, A. E., Louisville, Ky., assignor of one-eighth interest to E. Ford, New Albany, Ind. Chemical fire-extinguisher	Sept. 2, 1873	16	6	4	243
140, 505	Hughes, D. W., Mexico, Mo. Sulky-plow	July 1, 1873	139	48	4	19
134, 651	Hughes, H., assignor of one-third interest to W. S. Kellogg, Pekin, Ill. Brick-machine	May 6, 1873	161	52	3	511
5, 622	Hughes, J., Newark, N. J. Harness-pad. (Reissue.)	Oct. 28, 1873	737	246	4	468
5, 629	Same. same. (Reissue.)	Oct. 28, 1873	738	246	4	469
5, 541	Hughes, J., New Berne, N. C. Dumping-car. (Reissue.)	Aug. 19, 1873	619	204	4	202
140, 779	Same. same.	July 15, 1873	389	134	4	59
142, 021	Same. same.	Aug. 19, 1873	560	185	4	198
142, 851	Hughes, J., Scranton, Pa. Locomotive smoke-stack	Sept. 16, 1873	474	161	4	303
144, 275	Same. Spark-arrester	Nov. 4, 1873	88	29	4	485
138, 332	Hughes, J. M., and A. J. Mapee, Independence, Mo. Corn-crib	Apr. 29, 1873	994	313	3	479
136, 244	Hughes, M. J., New York, N. Y. Stereotype-block holder	Feb. 25, 1873	787	255	3	227
145, 170	Same. Blocking stereotype plates in casting	Dec. 2, 1873	132	43	4	596
139, 716	Hughes, R. J., Ryncar, Ind. Railway-crossing	June 10, 1873	229	81	3	645
135, 711	Hughes, S., Jersey City Heights, N. J. Lantern	Feb. 11, 1873	305	97	3	164
	Hughes, T. E. (See Townsend, Hughes & Keith.)					
	Hughes, W. H. (See Latta & Hughes.)					
5, 602	Hughes, W. L. B., et al. (See Class, W. F., assignor.)					
	Hughes, W. W., Philadelphia, Pa. Malt-dryer. (Reissue.)	Oct. 14, 1873	326	108	4	415
	Hughes, A. C., et al. (See Thomas, O. F., assignor.)					
144, 204	Hugou, J. E., Richmond, Ind. Governor for steam-engines	Nov. 4, 1873	32	9	4	480
144, 205	Same. Governor	Nov. 4, 1873	33	9	4	480
5, 559	Hugunin, R. B., New York, N. Y. Sash-holder. (Reissue.)	Sept. 2, 1873	202	65	4	258
137, 682	Same. Sash-holder	Apr. 8, 1873	367	114	3	398
137, 552	Hulbert, E. J., and A. N. N. Anbin, Portland, Me. Elevated arch railway	Apr. 8, 1873	256	78, 79	3	369
137, 206	Hulet, F., Berea, Ohio. Washing-machine	Mar. 25, 1873	779	257	3	337
	Hulett, T., et al. (See Borden, T., assignor.)					
134, 807	Hulings, M., Emlenton, and W. J. Innis, Oil City, Pa. Hanger for walking-beams for oil-wells	Jan. 4, 1873	293	94	3	44
139, 467	Hull, A. C., Saint Louis, Mo., and J. S. Brown, Mount Pleasant, D. C., assignors of one-third interest to I. H. Sturgeon, Saint Louis, Mo. Nut-lock	June 3, 1873	21	7	3	610
5, 651	Hull, D. C., Westfield, Mass. Manufacture of whip-stocks. (Reissue.)	Nov. 11, 1873	365	123	4	519
135, 476	Hull, F. A., Beloit, Wis. Device for burning petroleum	Feb. 4, 1873	78	24	3	133
142, 106	Hull, L., Charlestown, assignor to Tucker Manufacturing Company, Boston, Mass. Lamp-bracket	Aug. 26, 1873	660	216	4	215
142, 107	Same. Extension chandelier	Aug. 26, 1873	660	217	4	215
143, 765	Hull, L., Charlestown, Mass. Gasolier extension	Oct. 21, 1873	360	119	4	428
	Hull, T. (See Thomas, N., assignor.)					
143, 764	Hull, W., Fort Wayne, Ind. Gate-hinge	Oct. 21, 1873	359	119	4	428
142, 236	Hulse, A. C., Palmyra, Ill. Pruning-knife	Aug. 26, 1873	768	252	4	224
142, 915	Hulse, A. C., and J. S. Crum, Palmyra, Ill. Pruning implement	Sept. 16, 1873	525	179	4	507
	Hulse, W. M. (See King & Hulse.)					
136, 513	Homans, W., Cambridge, Mass. Electro-magnetic annunciator	Mar. 4, 1873	149	48	3	257
141, 716	Hume, G. H., assignor to L. C. Crittenden, G. H. Hume, and C. W. Carr, Paola, Kans. Tree-protector	Aug. 12, 1873	281	92	4	166
140, 506	Hummel, J. F., Cincinnati, Ohio. Combined wall-protector and towel-rack	July 1, 1873	140	48	4	20
142, 467	Hummer, H. A., Frenchtown, N. J. Cooking-stove	Sept. 2, 1873	131	43	4	253
136, 062	Humphrey, A. M., Broadhead, Wis. Gang-plow	Feb. 18, 1873	618	203	3	202
	Humphrey, D. H. (See Humphrey, W. H., assignor.)					
137, 137	Humphrey, G. W., Pompey, N. Y., assignor to self and J. M. Taylor, New York, N. Y. Encasing caustic alkali	Mar. 25, 1873	714	237	3	332
141, 055	Humphrey, R., Unionville, Conn. Die for punching washers	July 22, 1873	654	220	4	90
142, 698	Humphrey, W. H., assignor to W. H. and D. H. Humphrey, Lanasingburgh, N. Y. Journal-packing rack	Sept. 9, 1873	535	112	4	281
134, 991	Humphreys, J. W., La Fayette, Ind. Ditching-machine	Jan. 21, 1873	463	148	3	72
145, 736	Humphreys, J. W., Oxford, Ind. Ditching-machine	Dec. 23, 1873	641	209	4	673
	Humphries, J., & Sons. (See Smith, H., assignor.) (Design.)					
6, 522	Humphries, J., Kidderminster, England. Carpet. (Design.)	Mar. 25, 1873			3	325
136, 835	Hungerford, E. B., Corning, N. Y. Mold for making glass-blind slats	Mar. 18, 1873	444	147	3	299
142, 468	Hungerford, F., Rochester, assignor to A. C. Stearns, Corning, N. Y. Oil-burning boiler-furnace	Sept. 2, 1873	132	43	4	253
138, 890	Hunsinger, F., Morrisania, N. Y. Axle and axle-box for vehicles	May 13, 1873	386	121	3	539
135, 539	Hunt, C. D., Fairhaven, Mass. Metal-coating tacks, nails, &c	Jan. 28, 1873	791		3	111

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Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 706	Hunt, C. F., Brooklyn, N. Y., assignor to self and E. P. Emmeluth, Mount Vernon, N. Y. Cork-extractor	July 8, 1873	325	110	4	46
136, 652	Hunt, D. M., Southampton Mills, Pa. Hand-car	Mar. 11, 1873	279	93	3	277
135, 340	Hunt, F. B., assignor to E. R. and W. N. Matthews, Richmond, Ind. Screw-driver	Jan. 28, 1873	792	256	3	111
137, 000	Hunt, F. R., Leavenworth, Kans. Package band and fastener	Mar. 18, 1873	581	193	3	310
142, 469	Hunt, F. W., East Orange, N. J. Refrigerator	Sept. 2, 1873	133	43	4	253
137, 683	Hunt, G., Wawayanda, N. J. Barrel-cover	Apr. 8, 1873	368	114	3	398
137, 774	Hunt, G., New York, N. Y. Broom-protector	Apr. 15, 1873	463	145	3	419
142, 789	Hunt, G., Chicago, Ill. Reversible plunio for watches	Sept. 16, 1873	426	144	4	298
139, 156	Hunt, G. A., Newburgh, N. Y. Printing-press	May 20, 1873	635	198	3	572
136, 163	Hunt, G. S., Sacramento, Cal. Anti-friction metal	Feb. 25, 1873	725	.....	3	222
142, 470	Hunt, J., assignor of one-half interest to J. Foulke, Richmond, Ind. Vise	Sept. 2, 1873	134	44	4	253
142, 237	Hunt, J. C., Sioux City, Iowa. Apparatus for steaming grain	Aug. 28, 1873	768	253	4	224
138, 652	Hunt, L., Buffalo, N. Y., assignor of one-half interest to M. M. Drake. Steering-apparatus for vessels	May 6, 1873	162	52	3	511
138, 252	Hunt, M. A., Cincinnati, Ohio. Bed-bottom	Apr. 29, 1873	920	290	3	474
137, 207	Hunter, A., and C. E. Whitmore, Quincy, Ill. Middlings-purifier	Mar. 25, 1873	780	257	3	337
137, 449	Same. Middlings receiver, cooler, and duster	Apr. 1, 1873	151	49	3	369
142, 022	Same. Middlings-purifier	Aug. 19, 1873	561	186	4	198
142, 023	Same. same	Aug. 19, 1873	562	186	4	198
144, 392	Same. same	Nov. 11, 1873	194	66	4	506
138, 253	Hunter, B., Philadelphia, Pa. Grave-mound cover	Apr. 29, 1873	921	290	3	474
140, 828	Hunter, C. D., et al. (See Springer, W. A., assignor.) Inhaler	July 15, 1873	434	148	4	63
141, 646	Hunter, C. D., and E. S. Woods, Marlborough, Mass. same	Aug. 12, 1873	221	70	4	161
137, 001	Hunter, D. J., assignor to I. Amos, Boston, Mass. Brick-machine	Mar. 18, 1873	582	194	3	310
139, 316	Hunter, E., Norwich, Conn. Snow-shovel	May 27, 1873	789	251	3	592
143, 766	Hunter, E., and D. Van Sickle, Chicago, Ill. Wardrobe bedstead					
	Hunter, G. J. (See Davis, D. P., assignor.) (Reissue.)					
143, 766	Hunter, G. W., assignor of part interest to W. F. Stone, H. M. Baker, and J. H. Vermilye, Washington, D. C. Sewing-machine	Oct. 21, 1873	361	120	4	428
145, 348	Hunter, G. W., assignor of part interest to H. M. Baker, W. F. Stone, J. H. Vermilye, and G. H. Platt, Washington, D. C. Shuttle for sewing-machines	Dec. 9, 1873	282	94	4	620
141, 056	Hunter, H. J., and J. Rice, Scioto, Ohio. Truss-bridge	July 22, 1873	654	221	4	90
138, 752	Hunter, J., and H. M. Clayton, Ashland, Pa. Bag-holder	May 13, 1873	267	82	3	529
136, 245	Hunter, J. T., and D. L. H. Mitchell, Forest, Miss. Plow	Feb. 25, 1873	788	255	3	227
142, 790	Hunter, O. D., Plymouth, Conn. Core for casting metals	Sept. 16, 1873	426	.....	4	299
138, 891	Hunter, R. F., Staunton, Va., assignor to self and A. F. Randall, assignors in part to T. Hood and O. F. Presbrey, Washington, D. C. Revenue-stamp	May 13, 1873	386	121	3	539
	Hunter, S. B., et al. (See Hinman, W. W., assignor.)					
134, 749	Hunter, W. S., Stanstead, Canada. Railway-rail	Jan. 14, 1873	241	78	3	40
	Huntington, F. A. (See Swingle, A., assignor.)					
	Same. (See Swingle & Huntington.)					
143, 626	Huntington, F. A., San Francisco, Cal. Divided-nut device for feed-screws	Oct. 14, 1873	211	71	4	406
	Huntington, G. S. (See Morton, J., assignor.)					
143, 627	Huntington, M. H., Watertown, N. Y. Cosmetic-bottle	Oct. 14, 1873	212	71	4	406
	Huntington, S. S. (See Warriner, F., assignor.)					
137, 002	Huntington, T. S., Baltimore, Md. Gathering-attachments for sewing-machines	Mar. 18, 1873	583	194	3	310
137, 003	Same. Ruffing-attachments for sewing-machines	Mar. 18, 1873	583	194	3	310
143, 906	Huntley, A. D., Smyrna Mills, assignor of one-half interest to B. F. Nickerson, New Limerick, Me. Reciprocating-churn	Oct. 21, 1873	479	161	4	437
142, 852	Huntley, G. R., assignor to self and C. E. Hait, Hubbardstown, Mich. Neck-yoke holder	Sept. 16, 1873	475	162	4	303
144, 676	Huntley, H. H., assignor to Comstock, Castle & Co., Quincy, Ill.	Nov. 18, 1873	439	148	4	537
143, 014	Huntley, W. W., assignor to W. W. Huntley, A. P. Holcomb, and A. Heine, Silver Creek, N. Y. Screen for middlings-purifiers	Sept. 23, 1873	617	210	4	325
135, 810	Huntley, W. W., and A. P. Holcomb, Silver Creek, N. Y. Middlings-purifier	Feb. 11, 1873	395	127	3	170
	Same. Process of purifying middlings	Feb. 11, 1873	396	128	3	170
135, 811	Huntoon, E. C. (See Huntoon, L., assignor.)					
	Huntoon, H. P. (See Brown, J. R., assignor.)					
135, 223	Huntoon, L., assignor to self and E. C. Huntoon, Natick, Mass. Compound steam-engine	Jan. 28, 1873	684	221	3	303
136, 981	Hunziker, G., Summit, Miss. Distilling-apparatus	Mar. 18, 1873	515	170	3	265
136, 892	Hunzinger, G., New York, N. Y. Folding-chair	May 13, 1873	387	121	3	539
145, 949	Hurd, C. T., Victoria, Tex. Insect-destroying attachment for cultivators	Dec. 30, 1873	848	276	4	700
5, 454	Hurd, J. M., Auburn, N. Y. Bag-machine	June 17, 1873	622	195	3	682
	Hurlbut, R. H. (See Moore & Hurlbut.)					
135, 119	Hurley, J. C., Cincinnati, Ohio. Wheel for vehicles	Jan. 21, 1873	570	186	3	81
139, 383	Hurst, C., Philadelphia, Pa. Stereotype-plate holder	May 27, 1873	854	273	3	598
140, 198	Hurst, G. W., Avon, Ohio. Reversible harrow-teeth	June 24, 1873	710	223	3	697
142, 853	Hussey, I., Ironton, Ohio. Brush washboard and roller	Sept. 16, 1873	475	162	4	303
140, 579	Huston, G. M., Zanesville, Ohio. Egg-carrier	July 8, 1873	217	73	4	37
140, 586	Same. same	July 8, 1873	218	73	4	37
143, 826	Hutchins, C., assignor to self and A. Large, Aubrey, Kans. Corn-planter	Oct. 21, 1873	411	137	4	432
135, 812	Hutchins, J., Portsmouth, Ohio. Combined mill-stone tram and level	Feb. 11, 1873	397	128	3	170
144, 458	Hutchinson, C. H., Concord, N. H. Balanced slide-valve	Nov. 11, 1873	248	84	4	510
144, 907	Hutchinson, E., New York, N. Y. Bird-cage	Nov. 25, 1873	642	219	4	564
141, 559	Hutchinson, E. L., Auburn, N. Y. Corn-sheller	Aug. 5, 1873	130	41	4	146
	Hutchinson, H. M. (See Morrison & Hutchinson.)					
134, 890	Hutchinson, H. R., Empire Iron Works, Ky. Lubricating compound	Jan. 14, 1873	364	.....	3	49
142, 471	Hutchinson, R. A., Bergen, N. J. Grate-bar	Sept. 2, 1873	135	44	4	253
6, 343	Hutchison, J., Newark, N. J., assignor to T. Potter, Sons & Co., Philadelphia, Pa. Oil-cloth	Jan. 21, 1873	.....	.....	3	70
6, 344	Same. same (Design)	Jan. 21, 1873	.....	.....	3	70
6, 345	Same. same (Design)	Jan. 21, 1873	.....	.....	3	70
6, 346	Same. same (Design)	Jan. 21, 1873	.....	.....	3	70
6, 347	Same. same (Design)	Jan. 21, 1873	.....	.....	3	70
6, 812	Same. same (Case A. Design)	Aug. 19, 1873	.....	.....	4	185
6, 813	Same. same (Case C. Design)	Aug. 19, 1873	.....	.....	4	185
6, 814	Same. same (Case F. Design)	Aug. 19, 1873	.....	.....	4	185
6, 815	Same. same (Case G. Design)	Aug. 19, 1873	.....	.....	4	185
6, 816	Same. same (Case E. Design)	Aug. 19, 1873	.....	.....	4	185
6, 817	Same. same (Case B. Design)	Aug. 19, 1873	.....	.....	4	185
6, 818	Same. same (Case D. Design)	Aug. 19, 1873	.....	.....	4	185
	Hutchison, J. A. (See Rogers, C., assignor.)					
	Hutchison, J. G., et al. (See Grotz, C., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Hutton, D. W. J., et al. (See Johnson, G. F., assignor.)					
140, 418	Hutton, R., Holyoke, Mass. Bolt-guide for paper-machines	July 1, 1873	64	23	4	13
	Hyatt, E. A. L. (See Hyatt, T., assignor.)					
135, 918	Hyatt, I. S. & J. W., Albany, N. Y. Toilet-comb	Feb. 18, 1873	497	162	3	192
	Hyatt, J. W. (See Hyatt, I. S. & J. W.)					
138, 254	Hyatt, J. W., Albany, N. Y. Manufacturing pyroxyline articles	Apr. 29, 1873	922	291	3	474
6, 957	Hyatt, L. L., New Brunswick, N. J. Rubber boot (Design)	Oct. 14, 1873			4	401
140, 829	Hyatt, L. L., and J. H. Canfield, New Brunswick, N. J. Rubber shoes	July 15, 1873	435	148	4	63
135, 120	Hyatt, T., New York, N. Y. Vault-light	Jan. 21, 1873	571	186	3	81
136, 519	Same. Vault-cover	Mar. 4, 1873	150	48	3	257
140, 707	Same. Ridge and furrow sidewalk-plate	July 8, 1873	325	110	4	46
140, 703	Hyatt, T., Atchison, Kans. Ridge and furrow sidewalk-plate	July 8, 1873	326	110	4	46
140, 709	Same. Illuminating vault-cover	July 8, 1873	326	111	4	46
142, 472	Hyatt, T., New York, N. Y. Illuminating-roofing	Sept. 2, 1873	136	44	4	253
142, 473	Same. same	Sept. 2, 1873	136	44	4	253
142, 474	Same. Wall for buildings	Sept. 2, 1873	137	45	4	253
142, 475	Same. Building-block	Sept. 2, 1873	137	45	4	253
142, 476	Same. Fire-proof safe	Sept. 2, 1873	138	45	4	253
143, 156	Same. Fire-proof shutter	Sept. 23, 1873	727	250	4	334
143, 157	Same. same	Sept. 23, 1873	728	251	4	334
145, 180	Same. Fire-proof column	Dec. 2, 1873	133	43	4	596
145, 181	Same. Fire-proof floor and roof	Dec. 2, 1873	134	44	4	596
145, 182	Same. Fire-proof illuminating-tile	Dec. 2, 1873	135	44	4	596
145, 183	Hyatt, T., assignor to E. A. L. Hyatt, New York, N. Y. Illuminating-door	Dec. 2, 1873	136	44	4	596
145, 184	Same. Metallic hatchway-door	Dec. 2, 1873	136	44	4	596
145, 185	Same. Flexible sheet-metal illuminating-plate	Dec. 2, 1873	137	45	4	596
145, 186	Same. Ventilating illuminating roofing-plate	Dec. 2, 1873	137	45	4	596
145, 187	Same. Illuminating vault-cover	Dec. 2, 1873	138	45	4	596
145, 188	Same. same	Dec. 2, 1873	139	46	4	596
145, 189	Same. same	Dec. 2, 1873	139	46	4	596
145, 190	Same. same	Dec. 2, 1873	140	46	4	596
145, 191	Same. same	Dec. 2, 1873	141	46	4	596
145, 192	Same. same	Dec. 2, 1873	141	47	4	597
145, 193	Same. same	Dec. 2, 1873	142	47	4	597
145, 194	Same. same	Dec. 2, 1873	143	47	4	597
145, 195	Same. same	Dec. 2, 1873	143	47	4	597
145, 196	Same. same	Dec. 2, 1873	144	48	4	597
145, 197	Same. same	Dec. 2, 1873	145	48	4	597
145, 198	Same. same	Dec. 2, 1873	145	48	4	597
145, 199	Same. same	Dec. 2, 1873	146	48, 49	4	597
145, 200	Same. same	Dec. 2, 1873	147	49	4	597
145, 201	Same. same	Dec. 2, 1873	147	49, 50	4	597
145, 202	Same. same	Dec. 2, 1873	148	50	4	597
145, 203	Same. Non-condensing illuminating vault-cover	Dec. 2, 1873	148	50	4	597
145, 204	Same. same	Dec. 2, 1873	149	50	4	597
145, 205	Same. same	Dec. 2, 1873	149	51	4	597
145, 206	Same. same	Dec. 2, 1873	150	51	4	597
145, 207	Same. Elevating vault-cover	Dec. 2, 1873	151	51	4	597
145, 208	Same. Flexible illuminating vault-plate	Dec. 2, 1873	152	52	4	597
145, 209	Same. Illuminating ventilating step	Dec. 2, 1873	152	52	4	597
140, 419	Hyde, A., assignor of one-half interest to J. W. Trafton, Springfield, Mass. Belt-fastener	July 1, 1873	65	23	4	13
590	Hyde, I., Oakland, assignor to O. J. Backus, San Francisco, Cal. Combined water-wheel and sewing-machine (Reissue)	Oct. 7, 1873	145	48	4	392
143, 907	Hyde, J. P., New York, N. Y. Stench-trap	Oct. 21, 1873	480	161	4	431
136, 730	Hyde, J. R., Troy, N. Y. Reservoir cooking-stove	Mar. 11, 1873	343	113, 114	3	282
140, 044	Same. Cooking-stove	June 17, 1873	554	175	3	677
138, 404	Hyde, O., Oakland, Cal. Traction-wheel	Apr. 29, 1873	1,051	331	3	484
136, 653	Hyman, J., assignor to self and S. Sherrerd, Belvidere, N. J. Attachment to carpenters' squares	Mar. 11, 1873	280	94	3	277
	Hynes, M. T. (See Connor & Hynes.)					
	Hyslop, T. (See Snyder, F. H., assignor.)					
	Iddings, H. A. (See West, I. M., assignor.)					
144, 981	Ide, A. L., Springfield, Ill. Steam-radiator	Nov. 25, 1873	704	238	4	570
136, 731	Iden, H., et al. (See Clough, T., assignor.)					
6, 989	Idly, G. C., Burlingame, Kans. Door-check	Mar. 11, 1873	345	114	3	282
6, 990	Ilenburg, H., assignor to D. W. Bruce, New York, N. Y. Printing-type (Design)	Nov. 11, 1873			4	504
144, 337	Illfelder, J., New York, N. Y. Combined lead-pencil and rubber-eraser (Design)	Nov. 4, 1873	137	46	4	489
7, 069	Illinois Manufacturing Company. (See Cross, J. E., assignor.)					
7, 070	Ilaley, S. A., Brooklyn, N. Y. Canister for tea, coffee, &c. (Design)	Dec. 23, 1873			4	671
	Same. same (Design)	Dec. 23, 1873			4	671
	Imbs, J. F. (See Bleckman, F., assignor.)					
	Imhof, H. (See Payne & Imhof.)					
137, 925	Imhof, H., Lockport, N. Y. Table-leaf support	Apr. 15, 1873	588	185	3	429
144, 543	Inlay, W. L., Philadelphia, Pa. Apparatus for the manufacture of hydrogen-gas	Nov. 11, 1873	322	109	4	516
	Imperial Meter Company. (See De Castro & Burton, assignors.)					
	Same. (See Telling & Johnson, assignors.)					
146, 074	India Rubber Comb Company. (See Ropes, D. N., assignor.)					
135, 813	Ingalls, J. K., Starkey, N. Y. Illuminating vault-cover	Dec. 30, 1873	953	308	4	709
	Ingels, J. and W. R. Mount, assignors to Hoosier Drill Company, Milton, Ind. Corn-planter	Feb. 11, 1873	298	128	3	170
	Ingersoll, A. M., et al. (See Quartorman, J., assignor.)					
144, 982	Ingersoll, P. C., Green Point, N. Y. Hand-power baling-press	Nov. 25, 1873	705	238	4	570
140, 830	Ingersoll, S., Stamford, Conn. Hose-coupling	July 15, 1873	436	148	4	63
	Ingham, J. (See Firth & Ingham.)					
141, 142	Ingham, J. C. and C. Colby, Benton Harbor, Michigan. Cover for fruit-baskets (Extension)	July 22, 1873	736	244	4	96
143, 158	Ingham, S. D., Ripley, Ohio. Meat-mangle	Sept. 23, 1873	729	251	4	334
6, 628	Ingraham, E., Bristol, Conn. Clock-front (Design)	May 6, 1873			3	497
140, 138	Ingraham, H., Naples, N. Y. Base-burning cooking-stove	June 24, 1873	658	207	3	693
143, 908	Ingram, D. D., Manistee, Mich. Pipe-wrench	Oct. 21, 1873	481	162	4	437
136, 164	Inman, C., Hope, Mich. Rotary steam-engine	Feb. 25, 1873	726	234	3	223
142, 699	Innan, E., Eaton, Ind. Sawing-machine	Sept. 9, 1873	336	113	4	281
135, 224	Innan, S., assignor of one-half interest to H. P. Stockton, Rockford, Ill. Feed-roll for plaining-machines	Jan. 28, 1873	686	221	3	203

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135, 558	Innis, J. W., Newburgh, N. Y. Potato-digger	Feb. 4, 1873	152	49	3	139
	Innis, W. J. (See Hullings & Innis.)					
142, 570	Innis, W. J., Oil City, Pa. Wrench	Sept. 9, 1873	231	75	4	272
	Inslee, J. H. P. (See Tarbell & Inslee.)					
142, 854	Insley, M. H. (See Blunt, J. G., assignor.)					
	Insull, T. and J. F. Dovey, Philadelphia, Pa. Machine for cutting carriage lock-plate blanks	Sept. 16, 1873	476	162	4	303
138, 160	Irland, D. H., Hudson, Mich. Gas-generator	Apr. 22, 1873	808	257	3	456
	Irons, A. A., et al. (See Miller, H., assignor.)					
7, 062	Irons, J., Philadelphia, Pa. Show-case	Dec. 16, 1873			4	641
142, 632	Irvine, J., Parkersburgh, Iowa. Harvester-rake	Sept. 9, 1873	280	92	4	276
143, 909	Irving, C. L., Indianapolis, Ind. Combined brake and starter for street-cars	Oct. 21, 1873	481	162	4	437
140, 045	Irving, T. J., Baltimore, Md. Suspenders	June 17, 1873	555	175	3	677
136, 520	Irwin, D. J., Noble, Ill. Brick-machine	Mar. 4, 1873	151	48	3	257
141, 560	Irwin, D. J. and H. S. Langdon, Noble, Ill. Brick-machine	Aug. 5, 1873	131	41	4	146
	Irwin, G. M., et al. (See Gearing, C., assignor.)					
140, 710	Irwin, G. W. and T. A. Cox, Champaign County, Ill. Coupling for earth-anger shafts ..	July 8, 1873	327	111	4	46
137, 684	Irwin, H. M., Davidson College, N. C. Horse-power	Apr. 8, 1873	368	114	3	398
138, 653	Irwin, J. H., Philadelphia, Pa. Lamp	May 6, 1873	163	52	3	511
138, 654	Same	May 6, 1873	165	53	3	511
142, 791	Irwin, J. N., Pittsburgh, Pa. Fire-place	Sept. 16, 1873	427	144	4	299
147, 553	Isbell, C. W., New York, N. Y. Piston-blower	Apr. 8, 1873	257	79	3	389
142, 700	Same	Sept. 9, 1873	337	113	4	281
142, 655	Isbell, J. L., Naugatuck, Conn. Hoisting-apparatus	May 6, 1873	166	53	3	511
5, 694	Isbell, R. H., New Milford, Conn. Process of preparing wood for the manufacture of buttons	Dec. 23, 1873	806		4	686
	Isburgh, C. H. (See Renton, G., assignor.)					
136, 521	Isham, G. B., Burlington, Vt. Portable stove	Mar. 4, 1873	152	49	3	257
138, 905	Same	May 13, 1873	311	96	3	533
138, 893	Isherwood, T. and W. Nuttall, Westerly, R. I. Stop-mechanism for looms	May 13, 1873	388	181	3	539
138, 894	Isidor, M., New York, N. Y. Ear-protector	May 13, 1873	369	122	3	539
136, 601	Iske, A., Lancaster, Pa. Compound implements	Mar. 11, 1873	235	80	3	273
137, 371	Iske, A., assignor to M. L. Herr, Lancaster, Pa. Extension-trough for wagons	Apr. 1, 1873	83	27	3	364
144, 906	Iske, A., Lancaster, Pa. Machine for slicing dried-beef	Nov. 4, 1873	33	10	4	481
145, 803	Iskiyah, G., New York, N. Y. Carpet	Dec. 23, 1873	695	228	4	678
140, 139	Israel, J. P. and D. W. McLane, Oil City, Pa. Door check	June 24, 1873	659	207	3	693
	Ives, E. R., et al. (See Krinks, J. S., assignor.)					
135, 276	Ives, G. L., Rome, N. Y. Combined horse-rake and tedder	Jan. 22, 1873	734	236	3	107
	Ives, J. A. and Brother. (See Bowers, J., assignor.)					
144, 544	Ives, J. S., New York, N. Y. Process of removing ink from engraved printing-plates. ...	Nov. 11, 1873	323		4	516
5, 455	Ives, W. A., New Haven, Conn. Machine for forming anger-bits	June 17, 1873	623	196	3	682
145, 422	Ives, W. J., Meriden, Conn. Bow-pin for ox-yoke	Dec. 9, 1873	345	115	4	625
144, 849	Jack, E. N., Williamsburgh, Ohio. Wagon-brake	Nov. 25, 1873	600	204	4	560
	Jack, R. M. (See Kline & Jack.)					
	Jackson, A. C. (See Jackson, T. R. and A. C.)					
	Same					
140, 371	Jackson, A. F., Minneapolis, Minn. Spike-extractor	July 1, 1873	31	10	4	10
	Jackson, A. T. (See Beddow & Jackson.)					
144, 459	Jackson, E. A., New York, N. Y. Fire-place front	Nov. 11, 1873	250	84	4	510
144, 460	Same	Nov. 11, 1873	250	84	4	510
143, 344	Jackson, J., assignor of one-half interest to G. Rohrmayer, Hartford, Conn. Apparatus for checking horses	Sept. 30, 1873	810	278	4	356
138, 806	Jackson, L. G., Marton, assignor of one-half interest to C. Wood and A. Ellis, Woodman, Wis. Combined harrow and seeder	May 13, 1873	311	96	3	533
135, 477	Jackson, M., Bavington, Pa. Adjustable journal	Feb. 4, 1873	79	25	3	133
6, 348	Jackson, P. H., New York, N. Y. Lamp-post	Jan. 21, 1873			3	70
134, 549	Same	Jan. 7, 1873	42	13, 14	3	10
	Jackson, R. (See Lidron, C., assignor.)					
143, 015	Jackson, R., Philadelphia, Pa. Fan attachment for sewing-machines	Sept. 23, 1873	618	210	4	325
135, 646	Jackson, R. A., Pittsburgh, Pa., assignor to I. Charles, Allegheny Pa., and J. J. Johnston, Columbiana, Ohio, said Johnston assignor to W. D. Rinehart, Allegheny, Pa. Process for converting cast-iron articles into steel		248		3	159
	Jackson, T. M. (See Weston, J. W., assignor.)					
143, 349	Jackson, T. R., Dallas, Tex. Cotton-press	Sept. 30, 1873	906	308	4	364
139, 007	Jackson, T. R. and A. C., Sabine Pass, Tex. Windmill	May 20, 1873	495	156	3	561
139, 157	Jackson, T. R. and A. C., and C. S. Watson, Sabine Pass, Tex. Jack-screw and clamp combined	May 20, 1873	637	198	3	572
138, 895	Jackson, W. B., and J. M. and O. J. Childs, Utica, N. Y. Plow	May 13, 1873	389	122	3	539
	Jackson, W. H. (See Howard & Jackson.)					
142, 397	Jackson, W. M., Woodland, Cal. Heater and blower	Sept. 2, 1873	60	23	4	248
	Jacobs, F. A. (See Jacobs, W. E. and F. A.)					
	Jacobs, J. (See Turner & Jacobs.)					
142, 633	Jacobs, M. E., Winnebago, Ill. Tire-tightener	Sept. 9, 1873	281	92	4	276
143, 511	Jacobs, W. E., Columbus, Ohio. Wheel for wheelbarrows	Oct. 7, 1873	95	33	4	388
143, 016	Jacobs, W. E. and F. A., Columbus, Ohio. Scraper	Sept. 23, 1873	619	210	4	325
138, 255	Jacobsen, C. F., New York, N. Y. Reflector	Apr. 29, 1873	923	291	3	474
139, 394	Jacobsen, C. F., and A. Berger, said Berger assignor to said Jacobsen, New York, N. Y. Street-lamp	May 27, 1873	855	{ 273 } { 274 }	3	598
143, 577	Jacoby, W. H., Minneapolis, Minn. Photographic printing-frame	Oct. 14, 1873	168	56, 57	4	403
135, 559	Jacot, C. E., Chaux de Fonds, Switzerland. Winding and setting watches	Feb. 4, 1873	153	49	3	139
136, 246	Jaeger, G. L., New York, N. Y. Machine for making paper boxes	Feb. 25, 1873	789	{ 255 } { 256 }	3	227
	Jagger, I., et al. (See Harris, S. W., assignor.)					
141, 354	Jakel, J., assignor to self and F. L. Dolunstreich, Detroit, Mich. Brewer's stocking-cask	July 29, 1873	956	311	4	121
	Jakov, J. T., et al. (See Ruth, W. A., assignor.)					
	James, A. (See Murphy, R. Y., assignor.)					
137, 080	James, A., Chicago, Ill. Toy-gun	Mar. 25, 1873	667	221	3	398
142, 477	James, B. W., Philadelphia, Pa. Nasal respirator	Sept. 2, 1873	139	45	4	253
145, 874	Same	Dec. 23, 1873	756	247	4	683
139, 959	James, F. D., Tamworth, N. H. Combined collar and cravat	June 17, 1873	481	151	3	671
144, 101	James, G. W., Jersey City, N. J. Cuff-holder	Oct. 28, 1873	670	221	4	463
141, 057	James, R. C., Denison, Tex. Cane stripper	July 22, 1873	655	221	4	90
	James, W. H. (See Anderson, J., assignor.)					

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137, 775	Jameson, J., Gateshead, England, assignor to H. A. Tucker, New York, N. Y. Safety-papers for bank-notes, &c.	Apr. 15, 1873	463	3	419
144, 545	Jamison, H. A., assignor to self and G. Whitaker, Brooklyn, N. Y. Valve for direct-acting engines	Nov. 11, 1873	324	109	4	516
139, 717	Jamison, S. W., assignor to self and W. J. Dudley, Newark, N. J. Machine for crimping leather for boots and shoes	June 10, 1873	259	82	3	646
137, 611	Janea, J. H., H. Tucker, and T. D. Terry, Knobrooster, Mo. Wheel-plow	Apr. 8, 1873	306	95	3	393
136, 063	Janke, F., Brünn, Austria. Lamp-stove	Feb. 18, 1873	619	203	3	202
134, 750	Janney, C., assignor to C. M. Hardenbergh, Minneapolis, Minn. Middlings-purifier	Jan. 14, 1873	242	78	3	40
138, 405	Janney, E. H., Alexandria, Va. Car-coupling	Apr. 29, 1873	1,052	331	3	484
139, 960	Jansen, C. (See Van Herwerden, C., assignor.) Jantzen, S. C., Philadelphia, Pa. Coffee-mill	June 17, 1873	481	151	3	671
137, 926	Jaques, B. F. (See McDuffy & Jaques.) Jaques, D. L., Hudson, Mich. Harrow	Apr. 15, 1873	588	185	3	429
137, 875	Jaques, J. A., Tottenham; J. T. Oakley, Bermondsey; and L. Sterne, Westminster, England. Magnetic chuck for lathes and planers	Apr. 15, 1873	545	170	3	425
145, 061	Jaquith, A. B., and J. Wolohan, assignors of one-third interest to E. A. Jaquith, Rochester, N. Y. Heel-breasting machine	Dec. 2, 1873	20	7	4	587
138, 161	Jaquith, E. A. (See Jaquith & Wolohan, assignors.) Jarecki, A. H., Erie, Pa. Pipe-tongs	Apr. 22, 1873	809	257	3	456
137, 927	Jarre, A. E. & P. J., Paris, France. Breach-loading fire-arm	Apr. 15, 1873	589	186	3	429
141, 355	Jarre, P. J. (See Jarre, A. E. & P. J.) Jarrell, W., Humboldt, Tenn. Cotton-scraper	July 29, 1873	957	{ 311 312 }	4	121
143, 350	Jay, P. E., Saint Jean Baptiste, Canada. Manufacture of cast-iron from ore	Sept. 30, 1873	906	.....	4	364
140, 780	Jaycox, G. B., Hartford, and A. Webster, Farmington, said Jaycox assignor of one-half interest to W. E. Simonds, Hartford, Conn. Screw-cutting machine	July 15, 1873	390	134	4	59
140, 923	Jaynor, A., Regent's Park, England. Pneumatic telegraph	July 15, 1873	521	175	4	70
140, 924	Jeanong, J. A., Newport, Ky. Electro-deposition of aluminum	July 15, 1873	523	.....	4	70
137, 081	Jebb, T. A., Buffalo, N. Y. Duplex ticket	Mar. 25, 1873	668	221	3	328
137, 209	Jebb, T. A., and L. Brush, assignors to The American Duplex Ticket Company, Buffalo, N. Y. Book of railway-fare tickets	Mar. 25, 1873	782	258	3	337
143, 159	Jedkins, J. W. (See Brown & Jedkins.) Jedkins, J. W., Monmouth, Me. Shutter-worker	Sept. 23, 1873	729	251	4	334
135, 225	Jeffers, R., and D. C. Bockoven, South Sodus, N. Y. Wash-boiler attachments	Jan. 28, 1873	688	221	3	103
144, 765	Jeffers, W., Pawtucket, R. I. Relief-valve for steam fire-engines	Nov. 18, 1873	515	175	4	543
135, 121	Jeffery, E. A., Jersey City. Sewing-machine table-cover	Jan. 21, 1873	572	187	3	81
142, 024	Same. Sewing-machine table	Aug. 19, 1873	563	186	4	198
136, 536	Jeffs, W., Battle Creek, Mich. Table-leaf support	Mar. 18, 1873	445	147	3	299
136, 537	Same. Table	Mar. 18, 1873	445	148	3	299
143, 413	Jenison Lubricator Company. (See Monitron, W. J. L., assignor.) Jelliffe, C. E. L., Bayonne, N. J. Chisel	Oct. 7, 1873	16	6	4	382
5, 702	Jeucluck, W., Manchester, N. H., assignor to G. Draper & Son, Hopedale, Mass. Spinning-ring	Dec. 23, 1873	816	266	4	687
142, 238	Jenings, S. H., Oquawka, Ill. Sewer-cleaner	Aug. 26, 1873	769	253	4	224
139, 961	Jenison Lubricator Company. (See Fay, C. T., assignor.) Jenkins, C. B., New York, N. Y. Attaching metal caps to glass, porcelain, &c.	June 17, 1873	482	152	3	671
145, 349	Jenkins, C. W., New York, N. Y. Skate	Dec. 9, 1873	282	94	4	620
141, 226	Jenkins, E. W., Camden, N. J., and S. Jenkins, Landsdale, Pa. Rotary steam-engine	July 29, 1873	831	271	4	111
140, 372	Jenkins, G. E., assignor to Ogden, Milstead & Co., Philadelphia, Pa. Tassel	July 1, 1873	31	10	4	10
145, 904	Jenkins, H., deceased, by L. Jenkins. Ornamental connection of the parts of an iron fence	Mar. 3, 1873	.....	.....	3	386
	Jenkins, J., et al. (See Dewell, J. V., assignor.) Jenkins, L. (See Jenkins, H.)	.....	.....	.....	.....	.....
	Jenkins, N., Madison, assignor to self and F. O. Manchester, New Haven, Conn. Molding-machine	Dec. 23, 1873	695	228	4	678
	Jenkins, S. (See Jenkins, E. W. & S.) Jenkins, S. H., et al. (See Hart, J., assignor.)	.....	.....	.....	.....	.....
144, 102	Jenkins, S. H., Nashville, Tenn. Railway-switch	Oct. 28, 1873	670	221	4	463
144, 103	Jenkins, W., Abergavenny, England. Cask for transporting oils, &c.	Oct. 28, 1873	671	222	4	463
139, 158	Jenkinson, G. B., Newark, N. J. Trunk	May 20, 1873	637	199	3	572
144, 617	Jenkinson, J., Brooklyn, N. Y. Skirt-protector	Nov. 18, 1873	392	131	4	533
	Jenks, B. H. (See Craven, T. C., assignor.) Jenks, B. H. (See Goodyear, R. B., assignor.)	.....	.....	.....	.....	.....
5, 521	Jenks, B. H., Bridesburgh, Pa. Spindle for spinning-machines	Aug. 5, 1873	186	59	4	150
141, 440	Same. Spindle-bolster for spinning-machines	Aug. 5, 1873	26	9	4	137
141, 441	Same. Spindle-bolster for spinning-machines	Aug. 5, 1873	27	9	4	137
135, 478	Jenka, C. W., Somerville, Mass. Shirt-bosom	Feb. 4, 1873	79	25	3	134
135, 277	Jenka, W. T., Toledo, Ohio. Street-car	Jan. 22, 1873	736	217	3	107
135, 712	Same. Key-ring	Feb. 11, 1873	306	97	3	164
139, 063	Same. Reversible street-car	May 20, 1873	543	171	3	565
139, 159	Jennings, A. W., Ravenna, Ohio. Washing-machine	May 20, 1873	638	199	3	572
137, 685	Jennings, B. (See McCarver, A. H. & Jennings.) Jennings, C. S., assignor to Parker and Whipple Company, Meriden, Conn. Reversible knob-latch	Apr. 8, 1873	369	115	3	398
137, 082	Jennings, J. G., Stangate, England. Water-closet	Mar. 25, 1873	669	222	3	328
143, 697	Jennings, R. S., Philadelphia, Pa. Composite roofing	Oct. 14, 1873	277	92	4	411
146, 075	Jennings, S. H., Deep River, and W. F. Arnold, Winthrop, Conn. Joiner's gage	Dec. 30, 1873	954	308	4	709
144, 983	Jennison, G. C., Ware, Mass. Baker's oven	Feb. 1, 1873	.....	.....	3	100
141, 561	Jennison, L. H., Monroeville, Ohio. Sulky	Nov. 25, 1873	706	238	4	570
145, 950	Jensen, H., Long Island City, N. Y. Cover for sewing-machine tables	Aug. 5, 1873	132	42	4	146
145, 350	Jerrald, S. E., Cheshire, Conn., assignor of one-half interest to E. R. Lawton. Ferrule	Dec. 30, 1873	849	276	4	700
	Jerzmanowski, E. J., New York, N. Y. Manufacture of water-gas	Dec. 9, 1873	283	94	4	620
	Jewell, E. M., et al. (See Steele, F., assignor.) Jewell, H. S., et al. (See Steele, F., assignor.)	.....	.....	.....	.....	.....
140, 199	Jewell, H. S., Brooklyn, N. Y. Metallic fabric for smut-mill cases	June 24, 1873	711	224	3	697
136, 732	Jewett, G. H., assignor of one-half interest to J. Horton, Saline, Mich. Whip-socket	Mar. 11, 1873	345	114	3	282
140, 274	Jewett, J. S., Gloucester, Mass. Machine for cutting tape, &c.	June 24, 1873	772	244	3	703
141, 004	Jewett, S. E., Haverhill, Mass. Belt-tension apparatus	July 22, 1873	614	207	4	86
136, 437	Joannides, J. M., London, England. Apparatus for protecting grain and seed	Mar. 4, 1873	72	25	3	251
140, 275	Jocelyn, A. H., New York, N. Y. Book-cover	June 24, 1873	773	244	3	703
144, 104	Same. Plate-frame	Oct. 28, 1873	672	222	4	463
	Jocelyn, L. A. (See Holly, H. W., assignor.)

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5, 685	Johannes, J. G. (See Chollar & Johannes.)					
134, 673	John, F. K., Moscow, Russia. Spring..... (Reissue)	Dec. 16, 1873	610	200	4	659
143, 211	Same..... Spring for vehicles.....	Jan. 7, 1873	165	55	3	20
	John, J., Chicago, Ill. Fire-proof floor and wall.....	Dec. 2, 1873	155	53	4	598
	Johns, S. M. (See Parmelee & Johns.)					
	Johnson, A. (See Evert & Johnson.)					
136, 064	Johnson, A., Brooklyn, assignor of one-half interest to W. H. Johnson, New York, N. Y. Propelling canal-boats.....	Feb. 18, 1873	620	204	3	202
136, 247	Johnson, A., Brooklyn, N. Y. Bosom, collar, and similar articles of apparel.....	Feb. 25, 1873	790	256	3	227
144, 029	Johnson, A., New York, N. Y. Railway-rail.....	Oct. 28, 1873	609	202	4	458
146, 004	Johnson, A., San Francisco, Cal. Combination plane.....	Dec. 30, 1873	893	290	4	704
137, 910	Johnson, A. C., Rockford, Ill. Table-leaf support.....	Mar. 25, 1873	785	259	3	337
134, 604	Johnson, A. H., Bridgeport, Conn. Tongs for lifting fruit-cans.....	Jan. 7, 1873	101	32	3	15
142, 917	Johnson, A. J., assignor of one-half interest to N. V. Jones, Vicksburgh, Mich. Milking-rail.....	Sept. 16, 1873	526	179	4	307
	Johnson, A. W. (See Wever & Johnson.)					
142, 478	Johnson, A. W., New Haven, Conn. Embroidery-attachment for sewing-machines.....	Sept. 2, 1873	140	46	4	253
144, 106	Johnson, C. C., Somerville, Mass. Toy money-box.....	Oct. 28, 1873	674	223	4	463
135, 228	Johnson, C. H., New Brighton, Pa. Apparatus for making ozone.....	Jan. 22, 1873	689	221	3	103
145, 656	Johnson, C. H., and W. Axford, White Hall, Ill. Ice-creper.....	Dec. 16, 1873	558	183	4	625
140, 276	Johnson, D. A., Boston, Mass. Whiffletree.....	June 24, 1873	774	244	3	703
138, 406	Johnson, E., McLean County, Ill. Auxiliary-table.....	Apr. 29, 1873	1,053	332	3	484
138, 658	Johnson, E. C., Williamsport, Pa. Machine for making wooden pins.....	May 6, 1873	168	54	3	511
142, 916	Johnson, E. C., South Providence, R. I. Ice-tongs.....	Sept. 16, 1873	526	179	4	307
135, 713	Johnson, E. E., Painesville, Ohio. Window-shades.....	Feb. 11, 1873	306	97	3	164
5, 469	Johnson, E. S., Jersey City, N. J. Ornamental pencil-case..... (Reissue)	July 1, 1873	197	66	4	24
6, 523	Same..... Pencil..... (Design)	Mar. 25, 1873	84	27	3	325
137, 372	Johnson, F., Toledo, Ohio. Rock-drilling machine.....	Apr. 1, 1873	84	27	3	364
137, 776	Johnson, F. G., Brooklyn, N. Y. Gang-plank.....	Apr. 15, 1873	465	145	3	419
	Johnson, F. V. (See Johnson, W. A. and F. V. and Worth.)					
145, 423	Johnson, G. E., Smith Valley, N. Y. Corn-shocker.....	Dec. 9, 1873	346	116	4	625
140, 373	Johnson, G. F., assignor of two-thirds interest to W. G. Walter, and D. W. J. Hutton, Philadelphia, Pa. Shirt-bosom supporter.....	July 1, 1873	32	11	4	11
	Johnson, G. H. (See Fryer & Johnson.)					
139, 317	Johnson, G. H., Bridgeport, Conn. Hub-band for the wheels of vehicles.....	May 27, 1873	789	251	3	592
143, 351	Johnson, G. H., assignor of one-half interest to W. J. Fryer, jr., New York, N. Y. Fire-proof building.....	Sept. 30, 1873	907	308	4	364
143, 352	Johnson, G. H., and W. G. Fryer, jr., New York, N. Y. Fire-proof roof.....	Sept. 30, 1873	907	309	4	364
	Johnson, H. J. (See Chace, J. K., assignor.)					
134, 674	Johnson, H. M., Marshall, and C. M. Barker, Albion, Mich. Honey-box for bee-hives.....	Jan. 7, 1873	166	55	3	20
136, 065	Johnson, H., Marshall, Mich. Ripper and bag-looper.....	Feb. 18, 1873	622	204	2	202
	Johnson, J., et al. (See Hubbell, N. C., assignor.)					
135, 814	Johnson, J., Lowell, Mass. Pad for horses' feet.....	Feb. 11, 1873	400	128	3	170
136, 522	Johnson, J., Brooklyn, N. Y. Furniture-caster.....	Mar. 4, 1873	153	49	3	257
137, 138	Johnson, J., Iowa City, Iowa. Wagon-loader.....	Mar. 25, 1873	715	237	3	332
139, 248	Johnson, J., New York, N. Y. Machine for cleaning grain, nuts, &c.....	May 27, 1873	730	230	3	588
144, 105	Johnson, J., Harrisburgh, Pa. Heating-stove.....	Oct. 28, 1873	673	222	4	463
145, 424	Johnson, J., Spring City, Pa. Heating-stove.....	Dec. 9, 1873	346	116	4	625
	Johnson, J. A. (See Burr & Johnson.)					
138, 256	Johnson, J. B., San Francisco, Cal. File.....	Apr. 29, 1873	924	291	3	474
141, 058	Johnson, J. B., assignor to Swain, Fuller & Co., Lynn, Mass. Machinery for shaping boot and shoe soles.....	July 22, 1873	655	221 } 222 }	4	90
141, 795	Johnson, J. B., Alma, Ill. Corn-sheller.....	Aug. 12, 1873	355	117	4	172
134, 257	Johnson, J. B., and G. W. Moulton, Lynn, Mass. Machine for turning heel-brands.....	Apr. 29, 1873	925	291	3	474
	Johnson, J. D., et al. (See Leonard, T. D., assignor.)					
	Johnson, J. E. (See Akers & Johnson.)					
	Johnson, J. F., et al. (See Rigby, J., assignor.)					
143, 160	Johnson, J. F., Cincinnati, Ohio. Hemmer for sewing-machines.....	Sept. 23, 1873	730	252	4	334
145, 425	Johnson, J. G., Elkton, assignor to the Lubricating Car-Axle Company, Baltimore, Md. Car-axle box.....	Dec. 9, 1873	347	116	4	625
140, 200	Johnson, J. H., and J. E. Layton, Springfield, Ohio. Railway-signal.....	June 24, 1873	711	224	3	698
138, 657	Johnson, J. O., New York, N. Y. Fluid-meter.....	May 6, 1873	168	54	3	511
141, 931	Johnson, J. R., Benton Harbor, Mich. Fly-trap.....	Aug. 19, 1873	485	160	4	191
138, 407	Johnson, J. W., assignor of two-thirds interest to I. Sayra, Port Troverton, Pa. Fanning-mill.....	Apr. 29, 1873	1,054	332	3	484
145, 571	Johnson, J. W., Columbus, Tex. Cotton-worm destroyer.....	Dec. 16, 1873	487	160	4	649
145, 572	Same..... same.....	Dec. 16, 1873	487	160	4	649
136, 733	Johnson, M., assignor of one-half interest to A. Fees, Three Rivers, Mich. Hoe.....	Mar. 11, 1873	346	114	3	282
142, 239	Johnson, M. C., assignor to Morse Twist Drill and Machine Company, New Bedford, Mass. Jaw for lathe-chucks.....	Aug. 26, 1873	770	253	4	224
	Johnson, M. M. (See Weeden, J. B., assignor.)					
	Johnson, N. (See Pooley, T., assignor.)					
139, 395	Johnson, N., Newburgh, Minn. Harvester-dropper.....	May 27, 1873	658	274	3	598
139, 793	Johnson, N., Jasper, N. Y. Slide-valve for steam-engines.....	June 10, 1873	332	103	3	651
144, 766	Johnson, P., Springfield, Mass. Iron bridge.....	Nov. 18, 1873	516	175	4	543
145, 875	Johnson, R., Griffin, Ga. Portable fence.....	Dec. 23, 1873	757	247	4	653
	Johnson, S. (See Telling & Johnson.)					
136, 922	Johnson, S., James Creek, Pa. Extension attachment for stove-pipes.....	Mar. 18, 1873	516	170	3	205
136, 665	Johnson, L. S., and M. G. Cortland, N. Y. Article of food.....	Feb. 25, 1873	727	227	3	222
136, 734	Johnson, T. A., Portland, Me. Foot-rest for chairs.....	Mar. 11, 1873	346	115	3	282
	Johnson, T. B. (See Curran, J. H., assignor.)					
143, 698	Johnson, T. L., Louisville, Ky. Fare-box.....	Oct. 14, 1873	278	92	4	411
134, 675	Johnson, T. W., and A. W. Goodell, New York, N. Y. Apparatus for making tannin extracts, &c.....	Jan. 7, 1873	167	55	3	20
140, 629	Johnson, T. W., Fort Madison, Iowa. Combined refrigerator and soda-water apparatus.....	July 8, 1873	260	88	4	41
	Johnson, W. (See Storie, O. O., assignor.)					
141, 276	Johnson, W., Lambertville, N. J. Lathe-chuck.....	July 29, 1873	878	287	4	115
141, 794	Johnson, W., Milwaukee, Wis. Wrench.....	Aug. 12, 1873	353	117	4	172
138, 656	Johnson, W., and M. Ranney, Northfield, Ohio. Shovel-plow.....	May 6, 1873	167	53	3	511
143, 512	Johnson, W. A. & F. V., and H. S. Worth, Oxford, Pa. Mode of fastening buttons.....	Oct. 7, 1873	96	34	4	378
	Johnson, W. H. (See Johnson, A., assignor.)					
135, 431	Johnson, W. H., Springfield, Mass. Wax-thread sewing-machine.....	Feb. 4, 1873	36	10, 11	3	130
	Johnson, W. J. (See Nourse, L. S., assignor.)					
136, 066	Johnson, W. J., Allendale, England. Apparatus for condensing and purifying the smoke of metallurgic furnaces.....	Feb. 18, 1873	623	204 } 205 }	3	202

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	Johnson, W. L. D. (See Warinner & Johnson.)					
	Johnston, A., et al. (See Grotz, C., assignor.)					
134, 891	Johnston, A., Lockport, N. Y. Thrashing-machine	Jan. 14, 1873	365	116	3	49
135, 122	Johnston, A., Ottumwa, Iowa. Gathering or ruffling attachment for sewing-machines	Jan. 21, 1873	572	187	3	81
135, 123	Same..... same	Jan. 21, 1873	575	187	3	81
135, 479	Same..... Needle setter, threaders, and cutter	Feb. 4, 1873	80	25	3	134
135, 919	Same..... Tuck-creaser for sewing-machines	Feb. 18, 1873	498	162	3	192
137, 686	Same..... Ruffling or plaiting attachment for sewing-machines	Apr. 8, 1873	370	115	3	398
139, 064	Same..... Ruffler and gatherer for sewing-machines	May 20, 1873	544	171	3	565
146, 005	Same..... Gathering and ruffling attachment for sewing-machines	Dec. 30, 1873	894	290	4	704
135, 124	Johnston, F. S., assignor to G. S. Jones, Philadelphia, Pa. Chevron	Jan. 21, 1873	576	{ 187 } { 188 }	3	81
5, 510	Johnston, H. M., New York, N. Y. Material for distemper painting..... (Reissue)	July 29, 1873	1,019		4	196
144, 677	Same..... Postal-card	Nov. 18, 1873	440		4	537
144, 678	Same..... Treating paper and card-board to fix marks by metallic pencils	Nov. 18, 1873	441		4	537
	Johnston, J. (See Adams, S. M., assignor.)					
135, 039	Johnston, J., New York, N. Y. Graining or imitating wood	Jan. 21, 1873	511		3	76
140, 507	Johnston, J. A., Montreal, Canada. Tailor's measure	July 1, 1873	141	48	4	20
142, 701	Johnston, J. B., New York, N. Y. Railway-rail	Sept. 9, 1873	338	113	4	281
143, 353	Same..... Horseshoe	Sept. 30, 1873	908	309	4	364
	Johnston, J. J., et al. (See Jackson, R. A., assignor.)					
5, 570	Johnston, J. J., Columbiana, Ohio, assignor of part interest to J. Campbell and C. Seibert, Allegheny, Pa. Process and apparatus for evaporating liquids..... (Reissue)	Sept. 9, 1873	396	132	4	286
	Johnston Ruffler Company. (See Rush, A., assignor.)					
140, 781	Johnston, T. W., Chicago, Ill. Car-starter	July 15, 1873	391	134	4	59
140, 630	Johnston, W. A., New York, N. Y. Emery-wheel	July 8, 1873	261	89	4	41
	Joice, S. A. (See Averell, J. D., assignor.)					
	Joint, W. (See Downing & Joint.)					
137, 373	Jonas, F., assignor of one-half interest to G. O. Ray, Burlington, Iowa. Adjustable bit	Apr. 1, 1873	85	28	3	364
144, 618	Jonas, F., assignor to self and G. O. Ray, Burlington, Iowa. Hub-boring machine	Nov. 18, 1873	392	132	4	533
	Jones & Nimick Manufacturing Company. (See Seibert, J., assignor.)					
	Jones, A. T. (See Cooley, L. C., assignor.)					
139, 580	Jones, A. T., Clinton, Wis. Fruit-jar	June 3, 1873	117	39	3	618
140, 508	Same..... same	July 1, 1873	142	49	4	20
139, 581	Jones, A. T., and L. C. Cooley, New York, N. Y. Preserving fruit, vegetables, &c	June 3, 1873	117		3	618
143, 451	Jones, B., State Line City, Ind. Sad-iron	Oct. 7, 1873	46	16	4	384
	Jones, B. B. (See Wright & Jones.)					
140, 140	Jones, C., Saint Louis, Mo. Puddling-furnace	June 24, 1873	659	207	3	693
	Jones, C. E. (See Caylor, J., assignor.)					
142, 792	Jones, D., assignor of one-half interest to National Tube Works Company, Boston, Mass. Coupling for pipe and oil-well tubing	Sept. 16, 1873	427	144	4	299
135, 647	Jones, E., Boston, Mass. Apparatus for the manufacture of coal-gas	Feb. 11, 1873	248	78	3	159
144, 619	Same..... Sealing dip-pipe of gas-works	Nov. 18, 1873	394	132	4	533
139, 675	Jones, E. P., Shell Mound, Miss. Bale-tie	June 10, 1873	216	70	3	642
140, 046	Jones, E. P., Greensborough, N. C. Seed-planter and fertilizer-distributor	June 17, 1873	556	176	3	677
145, 426	Jones, E. P., Shell Mound, Miss. Device for detaching horses	Dec. 9, 1873	348	116	4	625
140, 420	Jones, E. W., Woodhaven, N. Y. Heel-trimming machine	July 1, 1873	66	23	4	13
	Jones, F. A. (See Pacaud, E. J., assignor.)					
140, 581	Jones, F. A., Boston, Mass. Hand-setting watch	July 8, 1873	218	73	4	37
137, 687	Jones, F. W., Orangeburgh, S. C. Automatic fan	Apr. 8, 1873	372	115	3	398
139, 582	Jones, G., Peekskill, N. Y., assignor to T. J. Fisher, New York, N. Y. Lamp-bracket	June 3, 1873	118	39	3	618
142, 398	Jones, G. L., Vanville, Wis. Compound metal-working machine	Sept. 2, 1873	70	23	4	248
	Jones, G. S. (See Johnston, F. S., assignor.)					
	Jones, G. W. (See Black & Jones.)					
144, 767	Jones, G. W., Philadelphia, Pa. Toy-propeller	Nov. 18, 1873	517	175	4	543
145, 210	Same..... Propulsion of vessels by direct action of steam	Dec. 2, 1873	153	52	4	597
137, 845	Jones, H. C., Dowagiac, Mich. Grain-basket	Apr. 15, 1873	523	163	3	424
137, 846	Same..... same	Apr. 15, 1873	523	163	3	424
142, 341	Same..... same	Sept. 2, 1873	17	6	4	243
142, 342	Same..... same	Sept. 2, 1873	18	6	4	243
142, 343	Same..... Basket	Sept. 2, 1873	19	7	4	243
145, 573	Same..... Grain basket	Dec. 16, 1873	428	161	4	649
5, 408	Jones, H. K., Kensington, Conn., assignor to The Hart, Bliven, and Mead Manufacturing Company. Machine for graduating carpenters' squares..... (Reissue)	May 13, 1873	461	145	3	546
	Jones, H. M. (See Fitch & Jones)					
138, 408	Jones, H. P., Springfield, Ohio. Middlings-separator	Apr. 29, 1873	1,056	332	3	484
142, 702	Jones, H. P., Davenport, Iowa. Steam-valve	Sept. 9, 1873	338	113	4	281
144, 768	Same..... Kneading-board	Nov. 18, 1873	518	175	4	543
	Jones, J. (See Wheeler, M. M., assignor.)					
137, 211	Jones, J., New York, N. Y. Door-bolt	Mar. 25, 1873	785	259	3	337
135, 341	Jones, J., assignor to W. A. Freeman, Newark, N. J. Plane for scraping	Jan. 28, 1873	792	256	3	111
135, 342	Same..... Carpenter's bench	Jan. 28, 1873	793	256	3	111
145, 657	Jones, J., assignor of one-half interest to J. F. Holmes, Providence, R. I. Hoisting-machine	Dec. 16, 1873	558	184	4	655
138, 091	Jones, J., and J. and J. Dunkerley, Paterson, N. J. Carriage-axle box	Apr. 22, 1873	754	239	3	452
135, 920	Jones, J. B., Philadelphia, Pa. Car-starter	Feb. 18, 1873	499	162	3	192
142, 703	Jones, J. C., New York, N. Y. Refrigerator for transporting oysters, &c	Sept. 9, 1873	339	114	4	281
	Jones, J. E., et al. (See Corsor, G. A., assignor.)					
145, 737	Jones, J. G., Falmouth, Mass. Spading-machine	Dec. 23, 1873	642	209	4	673
	Jones, J. L. (See Jones, J. M. and J. L.)					
141, 582	Jones, J. L., Oxford, N. C. Machine for manufacturing plug-tobacco	Aug. 5, 1873	133	42	4	146
141, 583	Same..... Machine for cleaning and preparing tobacco-leaves	Aug. 5, 1873	134	42	4	146
144, 767	Jones, J. M., Paris, and J. L. Jones, Lexington, Ky. Wheelbarrow	Oct. 21, 1873	362	120	4	428
137, 688	Jones, J. O., Brooklyn, assignor to self and A. Starke, New York, N. Y. Bolt-machine	Apr. 8, 1873	372	115	3	399
141, 059	Same..... Bolt-heading machine	July 22, 1873	657	222	4	90
143, 578	Jones, J. O., Boston, Mass. Rake	Oct. 14, 1873	171	58	4	403
	Jones, J. R., et al. (See Brandeis, S., assignor.)					
	Jones, J. T. (See Jones, T. J. and J. T.)					
136, 324	Jones, J. T., Iliou, N. Y. Sewing-machine	Feb. 25, 1873	860	277	3	232
134, 892	Jones, J. W., Middleport, Ohio. Machine for chamfering and crozing barrel-staves	Jan. 14, 1873	367	116	3	49
136, 523	Jones, J. W., Towson, Md. Car-coupling	Mar. 4, 1873	154	49	3	253
139, 160	Jones, L. R., Carthage, Ind. Safety-stirrup	May 20, 1873	689	199	3	572
134, 751	Jones, M. D., Boston, Mass. Bracket for flower-pots	Jan. 14, 1873	242	79	3	40

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5, 319	Jones, M. M., Morrisville, N. Y. Cotton-press..... (Reissue)	Mar. 11, 1873	409	135	3	287
136, 735	Jones, N., Syracuse, N. Y. Truss-pad.....	Mar. 11, 1873	347	115	3	282
	Jones, N. V. (See Johnson, A. J., assignor.)					
	Jones, O. (See Marston & Jones.)					
137, 083	Jones, P., Newark, N. J. Wheel for vehicles.....	Mar. 23, 1873	670	222	3	328
143, 077	Jones, R. R., Pillar Point, N. Y. Wheel for vehicles.....	Sept. 23, 1873	669	230	4	329
143, 078	Same.....same.....	Sept. 23, 1873	670	230	4	329
143, 286	Same.....Device for detaching horses.....	Sept. 30, 1873	843	290	4	360
140, 631	Jones, S. H., East Albany, N. Y. Leather-trimming machine.....	July 8, 1873	261	89	4	41
143, 827	Jones, S. J., Helena, Mont. Reciprocating-engine.....	Oct. 21, 1873	412	137	4	432
141, 932	Jones, T. J. and J. T., Sharon, Pa. Machine for making paper-tubes.....	Aug. 19, 1873	486	160	4	192
	Jones, T. O. (See Boon, A. T., assignor.)					
142, 108	Jones, W., Davenport, Iowa, assignor of one-half interest to Nelson, La Tourette & Co., Bushnell, Ill. Windmill.....	Aug. 26, 1873	661	217	4	215
143, 354	Jones, W., New Albany, Ind. Garden-weeding implement.....	Sept. 30, 1873	910	309	4	364
144, 908	Jones, W., Brooklyn, N. Y. Machine for turning carriage-axles.....	Nov. 25, 1873	643	219	4	564
	Jones, W. A. (See O'Haire, J. A., assignor.)					
140, 831	Jones, W. S., Damariscotta Mills, Me. Railway-car stove.....	July 15, 1873	436	148	4	63
144, 984	Jones, W. W., Philadelphia, Pa. Bed-spring.....	Nov. 25, 1873	706	239	4	570
138, 659	Jonson, J., assignor to L. Chase, New York, N. Y. Float-valve for horse-troughs, &c.....	May 6, 1873	170	54	3	511
142, 240	Jordan, A. C., assignor to self and C. H. Bocaso, New York, N. Y. Apparatus for corking bottles.....	Aug. 26, 1873	771	253	4	224
137, 374	Jordan, G. W., Passaic, N. J. Adjusting-attachment to reversing levers, &c.....	Apr. 1, 1873	86	28	3	364
145, 876	Jordan, J., and A. Paul, Liverpool, England. Safety-valve.....	Dec. 23, 1873	758	247	4	683
	Jordan, J. C. (See Cummings, Smith & Jordan.)					
5, 294	Jordan, L., and L. E. Smith, assignors to the Collins Company, Collinsville, Conn. Wrench..... (Reissue)	Feb. 25, 1873	890	286	3	335
144, 620	Jordan, M. S., Tilton, N. H. Rod for drawing in warp-thread.....	Nov. 18, 1873	385	132	4	533
145, 108	Jordan, R. K., Oakland, Cal. Horse-shoe.....	Dec. 2, 1873	62	20	4	590
	Jordan, T. (See Gridley, F. R., assignor.)					
144, 546	Jordan, W. A., assignor of one-half interest to A. J. Aiken, New Orleans, La. Car-starter.....	Nov. 11, 1873	325	109	4	516
140, 047	Jordan, B. L., Mercersburgh, Pa. Chair-fan attachment.....	June 17, 1873	557	176	3	677
	Josef, P. F., et al. (See Bedell, O. T., assignor.)..... (Reissue)					
	Same..... (See Taber, W. D., assignor.)..... (Reissue)					
145, 109	Joseph, N., San Francisco, Cal. Toy putty-blower.....	Dec. 2, 1873	63	21	4	590
141, 356	Joss, G. N., New Philadelphia, Ohio. Sash-balance.....	July 29, 1873	958	312	4	122
143, 768	Jowitz, J., Brooklyn, N. Y. Filter for oils, acids, &c.....	Oct. 21, 1873	363	120	4	428
141, 796	Joy, H. P., South Berwick Junction, Me. Knitting-holder.....	Aug. 12, 1873	356	117	4	172
141, 357	Joyce, J. L., New Haven, Conn. Manufacture of boots and shoes.....	July 29, 1873	959	312	4	122
142, 855	Joyce, S., New York, N. Y. Spring-hinge.....	Sept. 16, 1873	477	163	4	303
140, 782	Jud, J. B. F., New York, N. Y. Ink for stamping purposes.....	July 15, 1873	392	127	4	59
5, 370	Judd, A. D., New Haven, Conn. Window-button..... (Reissue)	Apr. 22, 1873	821	278	3	462
6, 686	Same.....Bracket..... (Design)	May 27, 1873			3	586
6, 694	Same.....Hat and coat hook..... (Design)	June 3, 1873			3	608
145, 351	Same.....Metallic bracket.....	Dec. 9, 1873	284	95	4	620
145, 352	Same.....Inkstand.....	Dec. 9, 1873	285	95	4	621
137, 450	Judd, A. D. & E. M., assignors to H. L. Judd, New Haven, Conn. Curtain-fixture.....	Apr. 1, 1873	152	49	3	369
114, 679	Judd, D., Hinsdale, N. Y. Excavator.....	Nov. 18, 1873	442	149	4	537
	Judd, E. M. (See Judd, A. D. & E. M.)					
135, 560	Judd, E. M., New Haven, Conn. Bolt.....	Feb. 4, 1873	154	49	3	139
	Judd, H. L. (See Judd, A. D. & E. M., assignors.)					
135, 561	Judd, H. L., Brooklyn, N. Y. Cord-tightener for curtain-fixture.....	Feb. 4, 1873	154	49	3	140
139, 676	Same.....Curtain-hook.....	June 10, 1873	218	70	3	642
139, 895	Judd, M., Wallingford, Conn. Fastener for the meeting-rails of sashes.....	June 17, 1873	433	134	3	667
	Judd, O. S., et al. (See Miller, C. G., assignor.)					
140, 711	Judd, T., and C. H. Pierson, assignors to Philadelphia Gas-Machine Company, Philadelphia, Pa. Carbureting-apparatus.....	July 8, 1873	328	111	4	46
138, 409	Judd, T., and E. Doty, Janesville, Wis., assignors to the Philadelphia Gas-Machine Company, Philadelphia, Pa. Apparatus for carbureting air.....	Apr. 29, 1873	1,057	{ 332 } { 333 }	3	484
139, 468	Judson, E., assignor to Giant Powder Company and Atlantic Giant Powder Company, San Francisco, Cal. Explosive compound or giant powder.....	June 3, 1873	22		3	610
	Judson, E. S. (See Judson, H. & E. S.)					
139, 677	Judson, H. & E. S., Brooklyn, N. Y. Lady's dress.....	June 10, 1873	219	70	3	643
144, 338	Judson, J. S., Austin, Minn. Spring bed-bottom.....	Nov. 4, 1873	137	46	4	489
134, 893	Judson, W. B., New York, N. Y. Spring-coupling for mattresses, seats, &c.....	Jan. 14, 1873	368	117	3	49
135, 125	Juegst, G., Somers, N. Y. Bobbin for sewing-machine shuttles.....	Jan. 21, 1873	578	188	3	82
137, 928	Jurgens, L., Prescott, Wis. Stove-pipe.....	Apr. 15, 1873	500	186	3	429
143, 983	Juvet, U. A., Glen's Falls, N. Y. Watch-case spring.....	Oct. 28, 1873	568	188	4	455
136, 736	Kacerovsky, J. K., Bridgeport, Conn. Expanding boring-tool.....	Mar. 11, 1873	34P	115	3	282
144, 769	Kade, C., Lexington, Mo. Combined table and secret writing-desk.....	Nov. 18, 1873	519	176	4	543
144, 850	Kaestner, C., Chicago, Ill. Sifting-shovel.....	Nov. 25, 1873	601	204	4	560
6, 349	Kagy, H., assignor to T. Potter, Sons & Co., Philadelphia, Pa. Oil-cloth..... (Design)	Jan. 21, 1873			3	70
6, 350	Same.....same..... (Design)	Jan. 21, 1873			3	70
6, 991	Same.....same..... (Design)	Nov. 11, 1873			4	504
6, 992	Same.....same..... (Design)	Nov. 11, 1873			4	504
6, 993	Same.....same..... (Design)	Nov. 11, 1873			4	504
6, 994	Same.....same..... (Design)	Nov. 11, 1873			4	505
138, 500	Kallmes, J., San Francisco, Cal. Treating gold and silver ores.....	May 6, 1873	27		3	500
137, 689	Kallmeyer, G., Bremen, Germany. Button-hole sewing-machine.....	Apr. 8, 1873	373	116	3	399
142, 025	Kaltenbacher, L., Louisville, Ky. Pantaloon-stretcher.....	Aug. 19, 1873	565	187	4	198
143, 452	Kampfe, F., New York, N. Y. Lamp.....	Oct. 7, 1873	47	16	4	384
143, 628	Kamphaus, J. G., Pittsburgh, Pa. Child's carriage.....	Oct. 14, 1873	212	72	4	406
137, 077	Kane, C. J., Milford, Conn. Loom.....	Mar. 25, 1873	665	220	3	328
	Kane, F. (See Gum, J., assignor.)					
144, 680	Kane, J. E., assignor of one-half interest to S. Guthrie, San Francisco, Cal. Tap, plug, and faucet connection.....	Nov. 18, 1873	444	149	4	537
146, 006	Kane, J. J., Brooklyn, N. Y. Burglar-alarm.....	Dec. 30, 1873	896	290	4	704
134, 550	Kane, T. H., New York, N. Y. Drawing-board.....	Jan. 7, 1873	44	14	3	11
139, 249	Kane, W. D., Chicago, Ill. Tuck creaser for sewing-machines.....	May 27, 1873	730	231	3	588
136, 737	Kanne, W. H., Baltimore, Md. Oyater-winder.....	Mar. 11, 1873	348	115	3	282
140, 277	Kappe, W. J. H., Quincy, Ill. Chicken-coop.....	June 24, 1873	774	245	3	703
145, 062	Kappler, L., Woodstock, Ill. Medical compound or bitter.....	Dec. 2, 1873	20		4	587
137, 451	Karcheski, X., Belleville, N. J., assignor to S. D. McMillan, trustee, New York, N. Y. Water-proof material.....	Apr. 1, 1873	153		3	269
137, 452	Same.....Process of rendering fibrous and textile materials water-proof.....	Apr. 1, 1873	154		3	269

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144, 681	Karg, M., assignor to self and M. Haber, Albany, N. Y. Car-brake.....	Nov. 18, 1873	445	150	4	537
139, 396	Karn, E. W. (See Karn, J. W. & E. W.)					
141, 508	Karn, J. W. & E. W., Watkins, N. Y. Sleigh-runner.....	May 27, 1873	858	274	3	598
146, 076	Karshner, W. W., Aubrey, Kans. Cooking-stove.....	Aug. 5, 1873	88	27	4	142
140, 278	Kaskel, J. W., Paducah, Ky. Candy-cutter.....	Dec. 30, 1873	955	308	4	709
140, 279	Kastenbein, C., London, England, assignor to E. L. Ford, Brooklyn, N. Y. Machine for distributing type.....	June 24, 1873	775	245 246	3	703
135, 126	Same..... Type-composing machine.....	June 24, 1873	777	246 247	3	703
135, 127	Kater, T., Hamilton, Canada. Piano sounding-board.....	Jan. 21, 1873	579	188	3	82
142, 479	Katzenstein, L., New York, N. Y. Packing for piston-rods, &c.....	Jan. 21, 1873	580	189	3	82
137, 078	Kauffman, A. (See Bierbower, J., assignor.)					
139, 469	Kauffman, M. J., Arcola, Ill. Windmill.....	Sept. 2, 1873	140	46	4	253
143, 910	Kaufman, A., Davisville, Cal. Plow-clevis.....	Mar. 25, 1873	666	221	3	328
141, 717	Kaufman, D., Boiling Springs, Pa. Iron post for wire fences.....	June 3, 1873	23	7	3	610
141, 564	Kaufman, J. G., deceased, by R. J. Morthland, administratrix, Nevada, Mo. Flour-bolt.....	Oct. 21, 1873	482	162	4	438
145, 427	Kaufman, P., Hudson, Ill. Feeding-elevator for corn-shellers.....	Aug. 12, 1873	281	92	4	166
143, 287	Kavanagh, P., Canarsie, N. Y. Sheave.....	Aug. 5, 1873	135	43	4	146
140, 932	Kaylor, E., Pittsburg, Pa. Nut-lock.....	Dec. , 1873	349	117	4	625
144, 909	Kayser, L., Homburg, assignor to J. B. C. Camozzi and H. J. Schloesser, Frankfort, Germany. Railway-gage.....	Sept. 20, 1873	844	291	4	360
5, 290	Kealy, J. P., and J. Rigney, Bridgeport, Conn. Sharpening-machine.....	July 15, 1873	437	149	4	63
138, 028	Same..... Pneumatic station-indicator.....	Nov. 25, 1873	643	219	4	564
145, 428	Kear, G. W. (See Sax & Kear.)					
139, 896	Kearney, W., Belleville, N. J. Valve for water-pipes..... (Reissue).....	Jan. 7, 1873	211	68	3	23
144, 928	Keating, J. M. D., New York, N. Y. Postal-card machine.....	Apr. 22, 1873	697	221	3	447
143, 546	Keck, J., Dwight, Ill. Car-coupling.....	Dec. 9, 1873	350	117	4	625
139, 896	Kee, A. J. (See White & Kee.)					
144, 207	Keech, E., Poughkeepsie, N. Y. Elevator for buildings, &c.....	June 17, 1873	434	134	3	667
142, 546	Keech, G., Centreville, Mich. Railway-tie.....	Nov. 4, 1873	34	10	4	481
145, 574	Keech, L. P., assignor to J. Phelan, Brooklyn, N. Y. Paper file and binder.....	Sept. 2, 1873	200	65	4	258
145, 574	Keefe, D. (See Boynton & Keefe.)					
145, 877	Keesh, F., Milwaukee, Wis. Printer's side-stick and quoin.....	Dec. 16, 1873	489	161	4	649
139, 897	Keeler, H. J. (See Gardner, T. W., assignor.)					
140, 280	Keeler, J. and C. C. Harris, Kewanee, Ill. Windmill.....	Dec. 23, 1873	758	248	4	683
141, 358	Keeler, J. F., Pittsburgh, Pa. Platform-scales.....	June 17, 1873	435	135	3	667
137, 453	Keeler, L. B., Westerville, Ohio. Reciprocating-churn.....	June 24, 1873	779	247	3	703
143, 017	Keely, O. B., et al. (See Smith & Brown, assignors)..... (Design.)					
144, 682	Keely, N., Philadelphia, Pa., assignor to self and W. P. Outterson, Akron, Ohio. Paper-making machine.....	July 29, 1873	959	312	4	192
135, 815	Keen, G. W., Zanesville, Ohio. Nut-lock.....	Apr. 1, 1873	155	50	3	369
139, 583	Keen, H., Philadelphia, Pa. Steering-apparatus.....	Sept. 23, 1873	620	211	4	325
145, 951	Keen, M. E. (See Keen, M. L., assignor.)					
138, 410	Keen, M. L., assignor by mesne assignment to M. E. Keen, Jersey City, N. J. Furnace for evaporating alkaline solutions, &c.....	Nov. 18, 1873	446	150 151	4	537
139, 583	Keene, G. A., Lynn, Mass. Carriage-step.....	Feb. 11, 1873	401	129	3	170
145, 951	Keene, G. W. (See Beasley, J. & J., jr., assignors.)					
138, 410	Keep, W. J., Troy, N. Y. Stove-grate.....	June 2, 1873	119	40	3	618
141, 797	Keffler, P., Reading, Pa. Shutter-fastener.....	Dec. 30, 1873	849	276	4	700
5, 645	Kegg, W., Laselleville, N. Y. Fire-escape.....	Apr. 29, 1873	1,058	333	3	485
139, 962	Keith, A. A. (See Townsend, Hughes & Keith.)					
144, 985	Keith, A. B., trustee. (See Keith, J., assignor)..... (Reissue.)					
139, 962	Keith, A. B. (See Shorey, S. W., assignor.)					
144, 985	Keith, A. C. (See Carter & Keith.)					
139, 794	Keith, C. A., Danvers, assignor to G. McKay, trustee, Boston, Mass. Manufacture of boots and shoes.....	Aug. 12, 1873	356	117	4	172
139, 318	Keith, J., Providence, R. I., assignor by mesne assignment to A. B. Keith, trustee, Boston, Mass. Metallic seam for uniting materials..... (Reissue.)	Nov. 4, 1873	180	60	4	493
140, 901	Keith, T. K., Haverhill, Mass. Sewing-machine.....	June 17, 1873	483	152	3	671
140, 925	Keith, T. K., Haverhill, and A. Seaver, Milford, Mass. Measuring-device for spooling-machine.....	Nov. 5, 1873	707	239	4	570
135, 816	Keizer, L. R. (See Painter, W., assignor.)					
137, 212	Kellam, D. C., Detroit, Mich. Window-screen.....	June 10, 1873	333	103	3	651
137, 920	Keller, H., Sauk Centre, Minn. Oil-can.....	May 27, 1873	790	251	3	592
144, 107	Same..... Reciprocating-winnower.....	June 24, 1873	712	224	3	698
137, 212	Keller, J. C., Philadelphia, Pa. Metal-drilling machine.....	July 15, 1873	524	175	4	70
137, 920	Keller, J. F., Hagerstown, Md. Straw-cutter.....	Feb. 11, 1873	401	129	3	171
137, 920	Same..... Horse hay-rake.....	Mar. 25, 1873	786	259	3	337
137, 920	Same..... Grain-drill.....	Apr. 15, 1873	590	186	3	429
137, 454	Keller, M. B., Penn Township, Lancaster County, Pa. Shifting top for vehicles.....	Oct. 28, 1873	675	223	4	463
6, 381	Keller, P., assignor to self and J. Helm, New York, N. Y. Gas-regulator.....	Apr. 1, 1873	155	50	3	369
139, 250	Kellett, S., San Francisco, Cal. Center-piece..... (Design).....	Feb. 4, 1873				127
136, 923	Kelley, E. W., Lowell, Mass. Machine for making horseshoe-nails.....	May 27, 1873	731	231	3	588
144, 108	Kelley, E. Y. (See Wellings & Soules, assignors)					
135, 128	Kelley, T., et al. (See Cadwallader, C. N., assignor.)					
141, 359	Kellie, W. M., Chicago, Ill. Door-spring.....	Mar. 18, 1873	516	170	3	305
146, 077	Kellogg, D., Ypsilanti, Mich. Peanut-heater.....	Oct. 28, 1873	675	223	4	464
134, 894	Kellogg, D. W., Battle Creek, Mich. Traction or portable engine.....	Jan. 21, 1873	581	189	3	82
143, 163	Kellogg, D. W., Battle Creek, Mich., and B. C. Cohn, New York, N. Y. Straw-burning attachment for steam-boilers.....	July 29, 1873	960	313	4	192
136, 923	Kellogg, E. H. (See Eggleston, J. S., assignor)..... (Reissue.)					
143, 163	Kellogg, E. P., New York, N. Y. Combined tatting-shuttle and crochet-needle.....	Dec. 30, 1873	956	309	4	709
136, 438	Kellogg, G. G. (See Morahan, B., assignor.)					
143, 164	Kellogg, H. (See Crosby & Kellogg.)					
136, 923	Kellogg, H., Floyd, Iowa. Wheel for vehicles.....	Jan. 14, 1873	369	117	3	50
6, 381	Kellogg, H., Milford, Conn. Manufacture of fur-coated fabrics.....	Sept. 23, 1873	732	252	4	334
139, 250	Kellogg, O. W., Fond du Lac, Wis. Street-sweeper.....	Mar. 4, 1873	73	25	3	251
139, 250	Kellogg, U. H., Jamestown, N. Y. Medical compound or opium-cure.....	Sept. 23, 1873	733		4	334
144, 986	Kellogg, W. P. & Co. (See Trussell, J. W., assignor.)					
144, 986	Kellogg, W. S. (See Hughes, H., assignor.)					
144, 547	Kellogg, W. T., Troy, N. Y. Blacksmiths' forge.....	Nov. 25, 1873	707	239	4	570
144, 547	Kelly, E. H., Jackson, Tenn. Watchmaker's lathe.....	Nov. 11, 1873	326	16	4	516
	Kelly, H. C. (See Sholes & Kelly.)					
	Kelly, I. C. (See Knox, J. M., assignor.)					
	Kelly, J., et al. (See Lord, T., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
	Kelly, J., et al. (See O'Neill, E. V., assignor.)					
138, 333	Kelly, P., New York, N. Y. Carpet-stretcher	Apr. 29, 1873	995	313	3	479
135, 432	Kelly, R., Red Bank, Cal. Canteen	Feb. 4, 1873	38	11	3	130
5, 636	Kelly, W., Louisville, Ky., assignor of one-half interest to T. C. Coleman. Manufacture of steel castings	Oct. 28, 1873	747	246	4	469
5, 637	Same.....Mold and core for casting steel	Oct. 28, 1873	748	248	4	469
136, 738	Kelly, W., Baltimore, Md., assignor of one-half interest to W. Armstrong, Martinsburgh, W. Va. Combined oil-can and torch	Mar. 11, 1873	349	116	3	282
141, 796	Kelly, W. E., New Brunswick, N. J. Steam-generator	Aug. 12, 1873	358	118	4	172
141, 799	Same.....Sectional steam-generator	Aug. 12, 1873	359	118	4	172
142, 918	Kelsey, F., and F. H. Hoemer, said Hoemer assignor of one-half interest to J. A. Hoemer, Sandusky, Ohio. Machine for dressing fish	Sept. 16, 1873	527	150	4	307
138, 565	Kelsey, H., Ottawa, Kans. Fruit-gatherer	May 6, 1873	89	28	3	505
143, 453	Kelsey, O. S., Hartford, Conn. Hot-air furnace	Oct. 7, 1873	47	16, 17	4	384
138, 660	Kelsey, W. A., Meriden, Conn. Printing-press	May 6, 1873	170	55	3	511
	Kelsey, W. H. (See Forman, W. A., assignor.)					
	Kelsey, W. H., et al. (See West & Fish, assignors.)					
	Kemp, T. P. (See Nealey & Kemp.)					
139, 584	Kempe, E., assignor to self and N. C. Newton, Richmond, Va. Sewing-machine fan attachment	June 3, 1873	190	40	3	619
139, 718	Kempshall, E., New Britain, Conn. Tobacco-hanger	June 10, 1873	283	82	3	646
	Kempton, D. W. (See Merrill & Kempton.)					
134, 676	Kendall, C. H., McConnellsburgh, Pa. Car-coupling	Jan. 7, 1873	168	55	3	90
	Kendall, E., et al. (See Lane, F. A., assignor.)					
144, 548	Kendall, J. L., Foxborough, Mass. Paper product	Nov. 11, 1873	327	110	4	516
	Kendall, L. B. (See Wilson & Kendall.)					
142, 109	Kenderdine, T., Lisbon, Iowa. Combined can-opener and knife or fork	Aug. 26, 1873	662	217	4	215
	Kendrick, A. W., et al. (See Estell, S. F., assignor.)					
	Kendrick, A. W. (See Osborn & Kendrick.)					
	Kendrick, C. T. (See Thompson & Kendrick.)					
145, 738	Kendrick, H. H., Fulton, assignor of one-half interest to J. W. Throop, Syracuse, N. Y. Combined step-ladder and ironing-board	Dec. 23, 1873	642	{ 209 210 }	4	673
	Kendrick, J., et al. (See Crowell, J. H., assignor.)					
	Same. (See Winsor, J. S., assignor.)					
	Kendrick, J. H., et al. (See Crowell, J. H., assignor.)					
	Kendrick Loom-Harness Company. (See Crowell, J. H., assignor.)					
142, 110	Kendrick, P., Trenton, N. J. Method of fastening blocks in triple-chains	Aug. 26, 1873	662	217	4	215
142, 634	Same.....Car-coupling	Sept. 3, 1873	281	92	4	276
139, 509	Kendrick, T. D., Boston, Mass. Spark-arrester	June 3, 1873	57	19	3	613
	Kenfield, F. (See Cooke & Kenfield.)					
135, 921	Kenfield, J., jr., Elmira, N. Y. Water-heater	Feb. 18, 1873	500	162	3	192
	Keniston, C., et al. (See Coy, F. W., assignor.)					
134, 551	Keniston, C., Somerville, Mass., assignor to the Shoe-Machinery Manufacturing Company. Machine for skiving counters	Jan. 7, 1873	45	14	3	11
142, 026	Keniston, C., Somerville, assignor to self and W. Butterfield, Boston, Mass. Seam for leather-work	Aug. 19, 1873	566	187	4	198
145, 658	Keniston, C., Somerville, Mass. Metal-fastening material for leather-work	Dec. 16, 1873	560	184	4	655
5, 476	Kennedy, A. H., Brunswick, assignor by mesne assignment to J. M. Segur, Akron, Ohio. Apparatus for transmitting motion	July 1, 1873	204	68	4	25
	Same.....Machine for shearing sheep	July 1, 1873	205	68	4	25
143, 355	Kennedy, D., Brooklyn, N. Y. Rock-drill	Sept. 30, 1873	910	309	4	365
141, 565	Kennedy, J., assignor to self and J. Moffit, Osage Mission, Kans. Trace-buckle	Aug. 5, 1873	136	43	4	146
145, 503	Kennedy, J. C., Toledo, Ohio, assignor to J. W. Tufts, Medford, Mass. Apparatus for charging soda-fountains	Dec. 16, 1873	420	138	4	643
134, 677	Kennedy, J. W., Saint Louis, Mo. Derrick and crane	Jan. 7, 1873	189	56	3	20
140, 374	Same.....Hose-coupling	July 1, 1873	33	11	4	11
141, 718	Same.....same	Aug. 12, 1873	282	92	4	166
142, 793	Same.....Fire-proof Mansard roof	Sept. 16, 1873	428	{ 144 145 }	4	299
135, 714	Kennedy, P., jr., and A. B. Dias, Watertown, N. Y. Car-coupling	Feb. 11, 1873	307	97	3	164
142, 164	Kennedy, S., Allegheny City, Pa. Griddle	Aug. 26, 1873	706	233	4	219
	Kennedy, T., et al. (See Gordon, W., assignor.)					
132, 162	Kenney, M. M., Travis, Tex. Method of adjusting signaling mirrors	Apr. 22, 1873	810	258	3	456
	Konrick, A. (See Scott, T., assignor.)					
136, 166	Kent, A., assignor of one-half interest to J. Frildrich, Baltimore, Md. Safety-stud, &c.	Feb. 25, 1873	727	224	3	222
135, 817	Kent, B. L., Coatesville, Pa. Earth-closet	Feb. 11, 1873	402	{ 189 130 }	3	171
	Kent, E. F., et al. (See Thurber, A. E., assignor.)					
	Kent, J. (See Westmoreland, W. and E., assignors.)					
136, 602	Kent, J., New York, N. Y. Cloth-cutting machine	Mar. 11, 1873	236	80	3	273
139, 898	Same.....Hanger for pulleys	June 17, 1873	436	135	3	667
142, 399	Kent, W. J., Buffalo, N. Y. Reed-organ	Sept. 2, 1873	70	23	4	248
144, 549	Kent, W. J., assignor of one-half interest to G. A. Prince, Buffalo, N. Y. Reed-organ	Nov. 11, 1873	327	110	4	516
143, 513	Kenyon, L. H., East Greenwich, R. I. Hand-car	Oct. 7, 1873	96	34	4	388
134, 672	Kenyon, W. H., North Providence, R. I. Corn-harvester	Jan. 7, 1873	169	56	3	30
142, 241	Kepler, W. M., Cincinnati, Ohio. Fire-place	Aug. 26, 1873	772	254	4	224
145, 212	Kepler, S., Pottstown, Pa. Grate	Dec. 3, 1873	155	53	4	598
135, 562	Ker, S., Washington, D. C. Curtain-fixture	Feb. 4, 1873	155	50	3	140
136, 067	Kern, J. W., Portland, Oreg. Railway-bed	Feb. 18, 1873	624	205	3	202
136, 068	Same.....Car-wheel	Feb. 18, 1873	625	205	3	202
138, 163	Kernaul, M. H., Berlin, Prussia. Sewing-machine	Apr. 22, 1873	810	258	3	456
139, 963	Kernodle, J. W., and A. H. Haun, Lebanon, Ind. Ash-leach	June 17, 1873	483	152	3	671
6, 358	Kerr, H. S., assignor to J. Gay, Philadelphia, Pa. Carpet	Jan. 21, 1873			3	70
6, 687	Kerr, H. S., assignor to Leedom, Shaw & Stewart, Philadelphia, Pa. Carpet	May 27, 1873			3	586
6, 688	Same.....same	May 27, 1873			3	586
137, 064	Kerr, J., assignor to W. H. Towers, Boston, Mass. Flavoring, coating, and putting up tobacco	Mar. 25, 1873	671		3	328
	Kershaw, J. M. (See Burridge & Kershaw.)					
142, 919	Kersten, H., Wheeling, W. Va. Corpse-preserver	Sept. 16, 1873	528	181	4	307
143, 079	Kerstine, H. C., Cleveland, Ohio. Grate-bar	Sept. 23, 1873	670	231	4	329
144, 910	Kerstin, F., assignor of two-thirds interest to C. Rudow and B. F. Broadwell, Grand Rapids, Mich. Refining varnishes	Nov. 25, 1873	645		4	564
	Kervan, F. B., et al. (See Park, F., assignor.)					
142, 344	Kessberger, A., Springfield, Ill. Axle and thimble-skein for vehicles	Sept. 2, 1873	19	7	4	244
143, 784	Kested, B. D., Glen, N. Y. Carpet-fastener	Oct. 21, 1873	377	125	4	429

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 830	Ketcham, C. E., Washington, D. C. Fish-trap	Apr. 15, 1873	591	186	3	430
143, 018	Ketcham, F. M., Indianapolis, Ind. Fire-shovel	Sept. 23, 1873	621	211	4	325
136, 164	Ketcham, I. A., Breslau, N. Y. Oyster-dredge	Apr. 22, 1873	811	258	3	457
136, 524	Ketchum, O. W., Toronto, Canada. Oil-burning steam-generator	Mar. 4, 1873	154	50	3	258
139, 795	Same..... Combined furnace and steam-generator	June 10, 1873	334	104	3	651
138, 896	Keuffel, W., and H. Esser, Hoboken, N. J. Drawing-board	May 13, 1873	390	122	3	539
144, 393	Keyes, S., Bennington, Vt. Steam-boiler furnace	Nov. 11, 1873	195	67	4	506
	Kibbe, H. C., et al. (See Disney, M., assignor.)					
	Kibby, R. C. (See Ropp & Kibby.)					
144, 770	Kiblinger, P. F., Millersburgh, Ind. Eave-trough	Nov. 18, 1873	590	176	4	543
	Kichline, W. E. (See Frankensfeld & Kichline.)					
143, 080	Kichner, J. T., and W. H. Odenatt, Philadelphia, Pa. Metal-planing machine	Sept. 23, 1873	671	231	4	329
	Kidd Iron Works Company. (See Gleason, W., assignor.)					
5, 246	Kidd, J. S., and M. L. Melville, Brooklyn, N. Y. Culinary pot..... (Reissue)	Jan. 21, 1873	642	209	3	87
140, 833	Kidder, C. F., Millburgh, Mass. Thill-coupling	July 15, 1873	438	149	4	63
136, 069	Kidder, J. H., assignor to self and G. E. Hood, Lawrence, Mass. Ink-well	Feb. 18, 1873	626	205	3	202
142, 480	Kidder, J. H., Lawrence, Mass. Pen-wiper	Sept. 2, 1873	141	46	4	253
136, 070	Kidder, J. H., and G. E. Hood, Lawrence, Mass. Inkstand	Feb. 18, 1873	627	206	3	202
	Kiesling, A. L. (See Berghausen & Kiesling.)					
142, 242	Kiff, T. F., Cincinnati, Ohio. Washing-machine	Aug. 26, 1873	773	254	4	224
	Kihlgren, C. A. (See Moore & Wyman, assignors.)					
142, 920	Kilborn, J., assignor of one-third interest to W. Grellier, Chicago, Ill. Corn-harvester	Sept. 16, 1873	598	181	4	307
134, 895	Kilburn, C., assignor to self and J. H. Gates, Philadelphia, Pa. Folding crib	Jan. 14, 1873	370	117	3	50
135, 896	Same..... Bow for chair-backs	Jan. 14, 1873	370	117	3	50
140, 834	Kilburn, W., Napa, Cal. Coupling for gas and water mains	July 15, 1873	438	149	4	63
140, 835	Same..... Pavement	July 15, 1873	439	149	4	63
143, 514	Same..... Hose-coupling	Oct. 7, 1873	97	34	4	388
139, 899	Kilgore, D. Y., Philadelphia, Pa. Inside blind	June 17, 1873	437	135	3	667
144, 771	Kilgore, J. L., Cleveland, Ohio. Making barrel-heads	Nov. 18, 1873	590	177	4	543
137, 690	Kilgore, J. L., Wilmington, Del. Folding-bedstead	Apr. 8, 1873	375	116	3	399
138, 165	Kilner, J. M., Chester, Great Britain. Boat-detaching apparatus	Apr. 22, 1873	812	258	3	457
140, 202	Same..... Cable-stopper	June 24, 1873	713	224	3	698
143, 911	Kimball, B., Saint Louis, Mo. Cotton-bale tie	Oct. 21, 1873	483	163	4	438
138, 897	Kimball, C. E., New York, N. Y. Sewing-machine brake	May 13, 1873	391	122	3	539
145, 504	Kimball, E. A., assignor to self, J. E. Kimball, and E. Merritt, Abingdon, Mass. Cut-nail machine	Dec. 16, 1873	422	138	4	643
	Kimball, H. I. (See Cook & Kimball.)					
	Kimball, J. D., Reading, Mass. Cutter-head for planing or molding machines	Sept. 16, 1873	429	145	4	299
	Kimball, J. E., et al. (See Kimball, E. A., assignor.)					
	Kimball, W. H. (See Morris & Kimball.)					
140, 712	Kimball, W. S., Philadelphia, Pa. Water-cooler	July 8, 1873	329	112	4	46
144, 109	Kimble, S. W., Springfield, Ill. Bending-machine	Oct. 28, 1873	676	223	4	464
143, 356	Kindermann, A., Cleveland, Ohio. Straw-cutter	Sept. 30, 1873	912	310	4	365
144, 208	King, A. D., Grayville Corners, Mass., and J. W. King, Bridgeport, Conn. Faucet	Nov. 4, 1873	35	10	4	481
	King, A. J. (See Simmons & King.)					
140, 632	King, D. H., and W. M. Hulse, Palmyra, Ill. Equalizing-attachment for plows	July 8, 1873	263	89	4	41
143, 357	King, D. M., Garrettsville, Ohio. Machine for sorting potatoes	Sept. 30, 1873	913	310	4	365
137, 931	King, D. M. and G. E., Mantua Station, Ohio. Potato-digger	Apr. 15, 1873	592	127	3	430
142, 795	King, E., Dunkirk, N. Y. Fence-post	Sept. 16, 1873	429	145	4	299
	King, G. E. (See King, D. M. and G. E.)					
145, 429	King, G. E., New York, N. Y. Skirt-protector	Dec. 9, 1873	350	117	4	626
134, 897	King, J., Warren, Ohio. Spectacles	Jan. 14, 1873	370	118	3	50
138, 166	King, J., assignor of one-half interest to Berner, English & Over, Indianapolis, Ind. Grain-drill	Apr. 22, 1873	813	259	3	457
139, 161	King, J., Quincy, Ill. Machine for elevating building material	May 20, 1873	639	200	3	573
144, 276	King, J., Oswego, N. Y. Slide for extension-tables	Nov. 4, 1873	89	29	4	485
135, 129	King, J. A., Hamburg, Iowa. Well-boring machine	Jan. 21, 1873	583	189	3	82
	King, J. F. (See Denney, W. H., assignor.)					
	King, J. M., et al. (See Lee, G. D., assignor.)					
	King, J. W. (See King, A. D. and J. W.)					
141, 877	King, P. F., Saint Louis, Mo. Nut and bolt fastening	Aug. 19, 1873	443	144	4	188
145, 110	King, R. T., Pana, Ill. Hardening the surfaces of iron	Dec. 2, 1873	61	.....	4	590
135, 563	King, S. D., Middletown, N. Y. Lawn-mower	Feb. 4, 1873	155	50	3	140
137, 891	Same..... same	Apr. 8, 1873	376	117	3	399
	King, S. L. (See Woodside, G. W., assignor.)					
139, 162	King, S. M., Lancaster, Pa. Shingle-machine	May 20, 1873	641	200	3	573
139, 065	King, T. M., Murfreesborough, Tenn. Harrow	May 20, 1873	546	172	3	565
	King, V. A. (See Pratt & King.)					
138, 501	King, W. C., Pittsburgh, Pa. Molasses-pitcher	May 6, 1873	28	10	3	500
138, 502	Same..... Jelly-jar	May 6, 1873	28	10	3	500
138, 503	Same..... Candy-jar lid	May 6, 1873	29	10	3	500
146, 078	Same..... Beer-mug	Dec. 30, 1873	957	309	4	709
143, 161	King, W. F., Gonzales County, Texas. Fence	Sept. 23, 1873	731	252	4	334
135, 990	King, W. H., Westbury, England. Pocket-book	Feb. 18, 1873	556	184	3	197
	King, W. M. (See Sterick, S. T. F., assignor.)					
138, 411	Kingan, T. D., Indianapolis, Ind. Apparatus for cooling rooms and buildings	Apr. 20, 1873	1,059	333	3	485
140, 375	Same..... Apparatus for cooling air	July 1, 1873	34	11	4	11
142, 796	Same..... Refrigerator	Sept. 16, 1873	430	145	4	299
145, 659	Same..... Apparatus for cooling air and making ice	Dec. 16, 1873	560	184	4	655
136, 838	Kingdon, T. R., and L. P. Dodge, New York, N. Y. Mill for grinding paint	Mar. 18, 1873	446	148	3	299
141, 277	Kingman, J. W., and A. Eurgens, Laramie City, Wyo. Smoke and steam burner	July 29, 1873	878	288	4	115
143, 579	Kingsbury, G. J., Rochester, N. Y. Cracker-machine	Oct. 14, 1873	171	58	4	403
141, 647	Kingsbury, H., Rochester, N. Y. Sash-lifter	Aug. 12, 1873	224	70	4	161
140, 141	Kingsford, T., Oswego, N. Y. Apparatus for the manufacture of starch	June 24, 1873	660	208	3	693
141, 442	Same..... same	Aug. 5, 1873	28	9	4	137
145, 213	Same..... same	Dec. 2, 1873	157	54	4	598
	Kingsland, L. S. (See Wills, H. A., assignor)..... (Reissue.)					
	Kingsley, S. W. (See Warner & Kingsley.)					
135, 991	Kingwill, J. F., Chicago, Ill. Ratchet-pinion	Feb. 18, 1873	557	184	3	197
136, 325	Same..... Harvester	Feb. 25, 1873	861	277	3	292
136, 071	Kinne, E. M., Cuba, N. Y. Fastening for halter-rings, &c.	Feb. 18, 1873	627	206	3	202
140, 203	Kinney, F. S., New York, N. Y. Machine for cutting tobacco	June 24, 1873	713	225	3	698
143, 162	Kinney, H. B., Leonardsville, N. Y. Thill-coupling	Sept. 23, 1873	731	252	4	334
134, 208	Kintz, H. J., Greece, N. Y. Medical compound for liniment	Jan. 14, 1873	294	.....	3	44

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. &	Vol.	Page.
136, 654	Kintz, J., Meriden, assignor to self and P. J. Clark, West Meriden, Conn. Die for forming tubes	Mar. 11, 1873	2 0	94	3	277
139, 066	Kintz, J., West Meriden, assignor to J. Kintz, Meriden, and P. J. Clark, West Meriden, Conn. Chandelier	May 20, 1873	546	172	3	565
139, 319	Kintz, J., assignor to self and P. J. Clark, West Meriden, Conn. Coloring-matter	May 27, 1873	790		3	592
142, 165	Same.....Chandelier-center	Aug. 26, 1873	707	233	4	219
146, 079	Same.....Lantern	Dec. 30, 1873	957	309	4	709
	Kintzel, J. M. (See Green & Kintzel.)					
140, 713	Kinzel, G. J., Knoxville, Tenn. Track-lifter	July 8, 1873	730	112	4	46
135, 343	Kinzer, J., Pittsburgh, Pa. Car-axle box	Jan. 28, 1873	794	257	3	111
138, 566	Kinzer, J., assignor to self, R. Pitcairn, D. M. Watt, and J. J. Torley, Pittsburgh, Pa. Seal-lock	May 6, 1873	90	29	3	505
140, 926	Kinzer, J., Pittsburgh, Pa. Hasp-lock	July 15, 1873	525	175	4	70
	Kip Manufacturing Company. (See Hays, C., assignor.) (Reissue.)					
144, 209	Kirby, G. W., Detroit, Mich. Saw-gage	Nov. 4, 1873	35	10	4	481
141, 933	Kirby, J., jr., Adrian, Mich. Lamp	Aug. 19, 1873	487	161	4	192
143, 912	Kirby, S. R., Detroit, Mich., assignor to J. Hoyt, New York, N. Y. Kiln for drying lumber	Oct. 21, 1873	483	163	4	438
142, 111	Kirby, W. A., assignor to self and D. M. Osborn, Auburn, N. Y. Mowing-machine	Aug. 26, 1873	663	218	4	216
136, 839	Kirch, F. A., Mansfield, Pa. Sleigh-brake	Mar. 18, 1873	447	148	3	300
137, 692	Kircher, J., New York, N. Y. Obtaining sulphur, sulphuric acid, and sulphurets of sodium and potassium from gas-lime, &c	Apr. 8, 1873	377		3	399
138, 504	Same.....Obtaining bisulphide of carbon from gas-lime, &c	May 6, 1873	29		3	500
141, 878	Kirchhofer, L. F., Union Hill, N. J., assignor by means assignment to J. E. Wheeler. Process for preserving milk	Aug. 19, 1873	443		4	188
139, 796	Kirchhoffer, G. W., Chicago, Ill. Refining butter	June 10, 1873	335	104	3	651
136, 525	Kirchner, G. A., Philadelphia, Pa. Tray for sewing-machines	Mar. 4, 1873	155	50	3	258
	Kirk, E. W. (See Buck & Kirk.)					
136, 439	Kirk, J., Newark, N. J. Photographic negative	Mar. 4, 1873	74		3	251
	Kirk, P. C. (See Davis, R., assignor.)					
	Kirk, P. C., et al. (See Siner, J. B., assignor.)					
144, 772	Kirk, S. W., Philadelphia, Pa. Separating precious metals from ores	Nov. 18, 1873	521		4	544
5, 385	Kirkham, G. B., New York, N. Y. Treadle	Apr. 29, 1873	1, 116	352	3	489
136, 603	Same.....same	Mar. 11, 1873	237	80	3	273
137, 932	Kirkham, L. G., Derby, Conn. Machine for boring blind-stiles	Apr. 15, 1873	594	187	3	430
140, 376	Kirkham, T. C., Ancaster, Canada. Card-grinding machine	July 1, 1873	34	11	4	11
143, 984	Kirkhart, J. F., and J. Ramsay, Long Creek Township, Iowa. Water-wheel	Oct. 22, 1873	568	189	4	455
142, 635	Kirkpatrick, C. H., La Fayette, Ind. Hay-elevator	Sept. 9, 1873	282	93	4	276
	Kirkpatrick, W. H. (See Barrett & Fenimore, assignors.)					
132, 029	Kirkup, L., New York, N. Y., assignor of two-thirds interest to Steele & Condict, Jersey City, N. J., and H. Wilson, Brooklyn, N. Y. Wrought-iron beam	Apr. 22, 1873	699	221	3	447
6, 880	Kisch, D., New York, N. Y. Ruche-holder	Sept. 9, 1873			4	270
	Kisner, D. P., et al. (See Borden, T., assignor.)					
136, 072	Kisor, J., Nevada, Ohio. Fruit-gatherer	Feb. 18, 1873	628	206	3	202
143, 985	Kissel, J., Cassopolis, Mich. Punching and shearing machine	Oct. 28, 1873	569	189	4	455
142, 921	Kistler, W. F., assignor to Thomas & Robinson, Cincinnati, Ohio. Sheet-metal bending-machine	Sept. 16, 1873	530	181	4	308
135, 344	Kitch, W. W., Crestline, Ohio. Snap-hook	Jan. 28, 1873	795	257	3	111
139, 163	Kitson, G. L., assignor to self and G. W. Carr, Philadelphia, Pa. Automatic regulating-valve	May 20, 1873	641	200	3	573
142, 027	Same.....same	Aug. 19, 1873	566	187	4	198
135, 818	Kitson, G. L., and J. Benner, assignors to selves and G. W. Carr, Philadelphia, Pa. Seal-lock	Feb. 11, 1873	403	130	3	171
	Kitson, R. (See Harding, D., assignor.)					
	Same.....(See Woton, W., assignor.)					
144, 394	Kitson, R., Lowell, Mass. Cotton-opener	Nov. 11, 1873	196	67	4	506
145, 300	Same.....Feed-regulator for cotton-openers	Dec. 9, 1873	239	80	4	617
135, 992	Kittle, J., East Bend, N. C. Combination padlock	Feb. 18, 1873	558	184	3	197
	Kitzmiller, E. A., et al. (See Cuddy, J., assignor.)					
	Kitzmiller, E. A. (See Todd, W., assignor.)					
145, 952	Klar, J., Shelbyville, Ill. Corn-planter	Dec. 30, 1873	850	276	4	701
141, 360	Klee, J., Dayton, Ohio. Bottling liquids	July 29, 1873	961	313	4	122
5, 708	Kleemann, C. A., deceased, by K. Kleemann, executrix, assignor to C. F. A. Hinrichs, Brooklyn, N. Y. Lamp	Dec. 30, 1873	999	322	4	713
	Kleemann, K., executrix. (See Kleemann, C. A.) (Reissue.)					
	Klein, A. (See Hamburger, Siskind & Klein.)					
	Klein, C. C. (See Atkinson & Klein.)					
145, 505	Klein, C. C., Philadelphia, Pa. Rotary engine	Dec. 16, 1873	425	{ 139 } { 140 }	4	644
	Klenen, F., et al. (See Simpson & Drake, assignors.)					
	Klenen, H., et al. (See Simpson & Drake, assignors.)					
	Klenen, M., et al. (See Simpson & Drake, assignors.)					
136, 655	Kline, A. K., Readington, N. J. Car-coupling	Mar. 11, 1873	281	94	3	277
145, 214	Kline, C. W., Beloit, Wis. Wind-wheel	Dec. 2, 1873	157	54	4	598
139, 164	Kline, R., and R. M. Jack, assignors of one-third interest to F. G. Pompeji, Pottstown, Pa. Running-gear for carriages	May 20, 1873	643	201	3	573
141, 566	Kline, T. D., Opelika, Ala. Railway cattle-guard	Aug. 5, 1873	136	43	4	146
137, 213	Kloozewski, A., and D. Mindeloff, Washington, D. C. Mucilage	Mar. 25, 1873	787		3	337
140, 927	Kloman, A., Pittsburgh, Pa. Apparatus for cooling and removing blast-furnace slag	July 15, 1873	526	176	4	70
134, 898	Klotz, D. H., Philadelphia, Pa. Tray, or show-board	Jan. 14, 1873	371	118	3	50
143, 913	Klotz, P., assignor to B. C. Bibb, Baltimore, Md. Name-plate for stoves	Oct. 21, 1873	484	163	4	438
134, 679	Knaff, R., Nashville, Tenn. Guitar	Jan. 7, 1873	171	56	3	20
141, 005	Knapp, A. M., Lowell, Mass. Breast-cup	July 22, 1873	614	207	4	67
138, 258	Knapp, E., San Francisco, Cal. Sash-holder	Apr. 29, 1873	926	292	3	474
142, 243	Knapp, J. H., New York, N. Y. Pen and pencil case	Aug. 26, 1873	773	254	4	225
144, 110	Knapp, J. W., Cross River, N. Y. Fish-grappling spear	Oct. 28, 1873	677	224	4	464
142, 704	Knapp, M. H., Fulton, N. Y. Treadle for sewing-machines	Sept. 9, 1873	340	114	4	281
142, 400	Knapp, O. B., Brandon, Wis. Windmill	Sept. 2, 1873	71	23	4	248
142, 636	Same.....same	Sept. 9, 1873	282	93	4	277
144, 339	Knapp, W. M., Muncie, Ind. Trestle for painting coach-bodies, &c	Nov. 4, 1873	138	46	4	489
	Knaus, W. C. (See Furr & Knaus.)					
145, 506	Kneeland, S. R., Charlestown, Mass. Screw-driver	Dec. 16, 1873	430	140	4	644
139, 165	Kneisly, C. F., and W. Wensthoft, assignors to Farmers' Friend Manufacturing Company, Dayton, Ohio. Manufacture of shafting	May 20, 1873	644	201	3	573
145, 805	Knevals, C. B., New York, N. Y. Ventilating car-window	Dec. 23, 1873	689	229	4	678
142, 922	Knickerbocker, M., New Lenox, Ill. Corn-planter	Sept. 16, 1873	531	181	4	308

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Knight, E. (See White & Knight.)					
	Knight, E. C., Philadelphia, Pa. Arranging couches in railway cars..... (Extension)	June 28, 1873			3	690
	Same..... Mode of arranging couches in railway cars..... (Extension)	Sept. 27, 1873			4	322
7, 034	Knight, H., assignor to J. Gay, Philadelphia, Pa. Carpet..... (Design)	Dec. 9, 1873			4	614
137, 777	Knight, J. E., Hyde Park, Mass. Self-acting spinning-jack.....	Apr. 15, 1873	465	145	3	419
137, 214	Knight, J. R., and J. P. Coburn, Greenfield, Mass. Bed-urinal for medical purposes.....	Mar. 25, 1873	787	260	3	337
140, 048	Knight, L., assignor of one-half interest to J. H. Thomas and A. Whitlock, Salem, N. Y. Loose pulley.....	June 17, 1873	558	176	3	677
	Knight, N. N. (See Worster, R., assignor.)					
144, 111	Knight, S. D., Bryan, Ohio. Saw-jointer.....	Oct. 28, 1873	677	224	4	464
140, 142	Knight, W., and N. W. Lewis, Bridgeport, Conn. Clutch.....	June 24, 1873	661	208	3	693
138, 807	Knisley, J. H., and J. C. Ferguson, Rainesborough, Ohio. Wagon-standard.....	May 13, 1873	312	97	3	533
144, 112	Knoll, G., San Francisco, Cal. Construction of tunnels and sewers.....	Oct. 28, 1873	678	224	4	464
146, 007	Knopp, J., Columbiana, Ohio. Sausage-cutter.....	Dec. 30, 1873	897	291	4	704
136, 073	Knorr, J. F., New York, N. Y. Harness-mounting.....	Feb. 18, 1873	629	206	3	202
	Knott, E. B. (See Gaunt, J. F., assignor.)					
	Knott, R. (See Hall & Knott.)					
140, 421	Knowles, D., Philadelphia, Pa. Hoisting apparatus.....	July 1, 1873	66	24	4	13
144, 113	Knowles, D. W., Hotchkissville, Conn. Splicing for fence-rails.....	Oct. 28, 1873	679	224	4	464
139, 251	Knowles, J. H., Lawrence, Mass. Loom-filling fork.....	May 27, 1873	732	231	3	588
	Knowles, L. J., Worcester, Mass. Method of operating valves of pumping-engines.. (Ex- tension).....	Jan. 4, 1873			2	729
134, 992	Same..... Loom.....	Jan. 21, 1873	464	149 } 150 }	3	72
142, 401	Same..... Loom-stopping mechanism.....	Sept. 2, 1873	72	24	4	248
138, 753	Knowles, W. W., assignor to Atwater Manufacturing Company, Plantsville, Conn. Shaft-iron for carriages.....	May 13, 1873	267	83	3	529
5, 313	Knowlton, A., assignor to J. Hill, trustee, Boston, Mass. Machine for arranging nails. (Reissue).....	Mar. 4, 1873	214	71	3	262
134, 899	Knowlton, A., assignor to J. W. Brooks, trustee, Boston, Mass. Machine for making boot and shoe heels.....	Jan. 14, 1873	372	118	3	50
135, 345	Same..... Machine for selecting and delivering nails.....	Jan. 28, 1873	796	257	3	111
136, 074	Same..... Nail selecting and delivering machine.....	Feb. 18, 1873	630	207	3	203
142, 402	Knowlton, A., assignor to Knowlton & James, Boston, Mass. Machinery for crimping boot and shoe uppers.....	Sept. 2, 1873	73	24	4	248
	Knowlton & James. (See Knowlton, A., assignor.)					
137, 455	Knowlton, C. H., assignor of one-half interest to F. G. Cook and J. D. Spear, Rockland, and J. E. Robinson, Augusta, Me. Car-coupling.....	Apr. 1, 1873	156	50	3	370
137, 079	Knowlton, J. L., assignor of one-half interest to W. E. Walton, Sharon Hill, Pa. Car-brake.....	Mar. 25, 1873	666	221	3	328
143, 165	Knox, J. E., Ballston Spa, N. Y. Car-coupling.....	Sept. 23, 1873	734	253	4	334
144, 395	Knox, J., Three Rivers, Mich. Shuttle for sewing-machines.....	Nov. 11, 1873	197	67	4	506
137, 933	Knox, J. M., assignor to self and I. C. Kelly, Rensselaer, Ind. Cultivator.....	Apr. 15, 1873	505	187	3	430
134, 809	Knox, M. W., Sheridan, N. Y. Mowing-machine knife-grinder.....	Jan. 14, 1873	294	95	3	44
140, 509	Knox, R. F., assignor to Palmer, Knox & Co., San Francisco, Cal. Rotary-blower.....	July 1, 1873	143	49	4	20
	Knox, W. H. (See Brower & Knox.)					
	Same..... (See Brower & Knox.)					
140, 143	Kudson, A. A., Brooklyn, N. Y. Printing-telegraph.....	June 24, 1873	662	208	3	694
141, 144	Kudson, O., Effingham, Ill. Combined roller and planter.....	July 22, 1873	738	244	4	96
	Knutson, P. (See Weber & Knutson.)					
138, 898	Koch, F., and R. Bra's, Brooklyn, N. Y., assignors to J. Boyle, New York, N. Y. Sewing-machine.....	May 13, 1873	391	123	3	540
145, 215	Same..... Sewing-machine.....	Dec. 2, 1873	158	54, 55	4	598
144, 550	Koch, G., Cass, Pa. Well-drill.....	Nov. 11, 1873	328	110	4	516
5, 321	Koch, J. C., Brooklyn, N. Y. Portfolio..... (Reissue).....	Jan. 7, 1873	212	68	3	23
135, 130	Same..... Portfolio for music.....	Jan. 21, 1873	584	189	3	62
137, 315	Koch, R., New York, N. Y. Governor for gas-exhausters, &c.....	Mar. 25, 1873	788	260	3	337
141, 278	Koeb, G., assignor to self and J. B. Korn, Springfield, Ohio. Car-coupling.....	July 29, 1873	679	228	4	116
137, 778	Koegel, C. H., Buffalo, N. Y. Weight-hooks for knitting-machines.....	Apr. 15, 1873	466	145	3	419
145, 575	Koeller, H. H., Camp Point, Ill. Dropper for seed-planters.....	Dec. 16, 1873	490	161	4	649
135, 131	Kobler, J., Cincinnati, Ohio. Machine for dressing nuts and bolts.....	Jan. 21, 1873	584	190	3	82
	Kohn, T. (See Gillespie & Kohn.)					
	Kolb, A. (See Kolb, J., and A.)					
	Kolb, C. (See Wirth, A., assignor.)					
135, 346	Kolb, J. and A., Oxford, Ind. Door-check.....	Jan. 28, 1873	797	257	3	111
135, 347	Kolle, C., New York, N. Y. Exercising-machine.....	Jan. 28, 1873	798	258	3	111
136, 248	Kollock, M. H., Philadelphia, Pa. Railway car-truck.....	Feb. 25, 1873	791	256 } 257 }	3	227
137, 216	Same..... Dummy-engine.....	Mar. 25, 1873	789	260	3	338
140, 049	Komp, A., New York, N. Y. Neck-tie supporter.....	June 17, 1873	559	177	3	677
134, 993	Konold, C., Pittsburgh, Pa. Die for forging frowers.....	Jan. 21, 1873	467	150	3	73
137, 217	Koons, C. B., Philadelphia, Pa. Soldering apparatus.....	Mar. 25, 1873	790	261	3	338
143, 081	Koons, J., New Auburn, Minn. Grain-separator.....	Sept. 23, 1873	672	231	4	329
141, 567	Kooser, J. H., Pekin, Ill. Washing-machine.....	Aug. 5, 1873	137	43	4	146
143, 580	Kopping, J. G., and J. Weideman, assignors of one-half interest to A. B. Henry, Clinton, Iowa. Baking-powder for bread.....	Oct. 14, 1873	173		4	403
142, 797	Koppitz, J., Boston, and F. B. Mayer, Cambridgeport, Mass. Coloring leather.....	Sept. 16, 1873	431		4	299
137, 004	Korn, C., Brooklyn, N. Y. Leaching and tanning apparatus.....	Mar. 18, 1873	584	194	3	310
	Korn, J. B. (See Koeb, G., assignor.)					
134, 900	Korting, E., Vienna, Austria. Steam-condenser.....	Jan. 14, 1873	374	118	3	50
141, 361	Same..... Steam-condenser.....	July 29, 1873	962	313	4	122
142, 856	Same..... Steam-jet apparatus for forcing and exhausting air and condensing steam.....	Sept. 16, 1873	477	163	4	303
136, 739	Korwan, F., Mannheim, Germany, assignor to self and M. Flürscheim, New York, N. Y. Automatic gas-lighting apparatus.....	Mar. 11, 1873	350	116	3	282
143, 986	Koth, F., New York, N. Y. Piano action.....	Oct. 28, 1873	570	189	4	455
	Kousakoff, A. (See Tiranoff, J. and N., and Kousakoff.)					
145, 878	Kraft, E., Tyrone, Pa. Bung for beer-barrels.....	Dec. 23, 1873	762	249	4	623
136, 377	Kraft, C. J. F., Cleveland, Ohio. Treadle for sewing-machines.....	Mar. 4, 1873	24	8	3	247
144, 773	Kram, J., Germantown, Pa. Vegetable-cutter.....	Nov. 18, 1873	522	177	4	544
135, 132	Kramer, J. W., Bloomsburgh, Pa. Weather-threshold.....	Jan. 21, 1873	585	190	3	82
141, 279	Krapf, C., Philadelphia, Pa. Lathes for turning tobacco-pipes.....	July 29, 1873	880	228	4	116
145, 353	Krapf, X., and J. F. Boerchel, Allentown, Pa. Car-coupling.....	Dec. 9, 1873	285	95	4	621
134, 752	Krafer, F., Pittsburgh, Pa. Lounge.....	Jan. 14, 1873	243	79	3	40
142, 028	Kraus, T. C. H., Fishkill, N. Y. Pump.....	Aug. 19, 1873	567	187	4	198

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
	Krause, H. W., jr. (See Krause, J. W., & H. W., jr.)					
138, 030	Krause, J. W., & H. W., jr., Philadelphia, Pa. Laying concrete pavement	Apr. 22, 1873	700	221	3	448
144, 987	Krausnick, E. E., Saint Louis, Mo. Apparatus for preserving and forcing beer	Nov. 25, 1873	708	239	4	570
137, 847	Krebs, C., Wilmington, Del. Wash-board and rubber	Apr. 15, 1873	524	164	3	424
	Krebs, M. (See Bennett, Krebs & Haley.)					
	Kreid, U. (See Beck, H., assignor.)					
	Krein, J., et al. (See Succop, J. R., assignor.)					
137, 934	Kreischer, G. F., and L. A. Tartieré, New York, N. Y. Compound for gas-retorts	Apr. 15, 1873	595		3	430
140, 422	Kremenz, G., Newark, N. J. Die for enlarging and sizing plain finger-rings	July 1, 1873	67	24	4	13
140, 423	Same.....Die for manufacturing plain finger-rings	July 1, 1873	66	24	4	14
138, 661	Kretschmer, E., Coburgh, Iowa. Bee-hive	May 6, 1873	171	55	3	511
137, 005	Kreter, R., assignor to D. & J. J. Decker, New York, N. Y. Upright-piano actions	Mar. 18, 1873	525	195	3	310
145, 879	Kreter, R., New York, N. Y. Piano-action	Dec. 23, 1873	762	249	4	683
136, 249	Kriebel, H. K., Lansdale, Pa. Cultivator	Feb. 25, 1873	792	257	3	227
137, 693	Krinks, J. S., assignor to E. E. Ives and C. Blackalee, Bridgeport, Conn. Toy-perambulator	Apr. 8, 1873	378	117	3	399
141, 280	Kromer, O., Sandusky, Ohio. Steam-whistle	July 29, 1873	681	289	4	116
142, 166	Same.....same	Aug. 26, 1873	708	234	4	219
140, 377	Kromer, T., Freidburgh, Grand Duchy of Baden. Lock for door, &c	July 1, 1873	35	12	4	11
137, 307	Kromschroeder, J. F. G., London, England. Carbureter	Apr. 1, 1873	24	8	3	359
	Kruger, E. (See Hengen & Kruger.)					
142, 345	Kruger, J., Indianapolis, Ind. Device for building cisterns	Sept. 2, 1873	20	7	4	244
6, 373	Krumm, M., Columbus, Ohio. Iron fence (Design)	Jan. 28, 1873			3	100
136, 378	Krummenauer, J., New York, N. Y. Animal-trap	Mar. 4, 1873	25	8	3	217
137, 613	Krumm, M., Columbus, Ohio. Wash-boiler	Apr. 8, 1873	306	95	3	393
137, 218	Kruse, J. H., New Melle, Mo. Washing-machine	Mar. 25, 1873	790	261	3	353
145, 660	Kuessner, E., Cincinnati, Ohio. Machine for forming pans	Dec. 16, 1873	561	184	4	(5)
141, 145	Kugler, O., Raritan, assignor to self, J. D. McCauley, and J. Van Fleet, Clinton, and J. A. Thompson, Reddington, N. J. Cultivator	July 22, 1873	739	244	4	96
141, 146	Kugler, O., Three Bridges, assignor to self, J. D. McCauley, and J. Van Fleet, Clinton, and J. A. Thompson, Reddington, N. J. Cultivator	July 22, 1873	740	245	4	97
140, 204	Kuh, S., Jefferson, Iowa. Envelope	June 24, 1873	714	225	3	698
141, 719	Same.....Advertising-lantern	Aug. 12, 1873	282	92	4	166
145, 739	Same.....Apparatus for binding stalks	Dec. 23, 1873	643	210	4	673
5, 592	Kuhn, E. K., and T. O. Atkinson, Doylestown, Pa. Envelope (Reissue)	Oct. 7, 1873	147	49	4	392
135, 819	Same.....same	Feb. 11, 1873	403	130	3	
135, 820	Kühner, L., New York, N. Y. Piano-action	Feb. 11, 1873	404	130	3	171
5, 432	Kühner, L., Dayton, Ohio. Grain-drill (Reissue)	June 3, 1873	178	58	3	623
5, 542	Same.....Seed-planter (Reissue)	Aug. 19, 1873	620	204	4	202
	Kummer, E. (See Harris & Kummer) (Design)					
142, 244	Kunkel, D., Oregon, Mo. Drill-extractor	Aug. 26, 1873	774	255	4	225
145, 740	Kunkle, J., Newton Falls, Ohio. Water-wheel	Dec. 23, 1873	643	210	4	674
134, 690	Kunz, J., Napoleon, Ohio. Nail-clinchers	Jan. 7, 1873	172	56	3	20
134, 681	Kursh, F., Philadelphia, Pa. Bracelet-fastening	Jan. 7, 1873	173	57	3	20
135, 821	Kurtz, H. H., Salisbury, Pa. Separator for thrashing-machines	Feb. 11, 1873	405	131	3	171
136, 326	Kutscher, F., New Haven, Conn. Bottle-stopper	Feb. 25, 1873	661	277	3	232
	Kutz, H. D. (See Stockstill & Kutz.)					
145, 661	Kyser, L., Philadelphia, Pa. Shoulder-pad	Dec. 16, 1873	563	185	4	655
	La Belle Glass Company. (See Baggs, A. H., assignor.)					
	Laberie, P. (See Berthel & Laberie.)					
138, 259	Lacey, L., Bath, Ill. Corn-planter	Apr. 29, 1873	926	292	3	474
5, 711	Lacroix, C. N., Minneapolis, Minn. Middlings-purifier (Reissue)	Dec. 30, 1873	1,004	323	4	713
139, 585	Same.....same	June 3, 1873	121	40	3	619
142, 705	Same.....Flour and middlings purifier	Sept. 9, 1873	340	114	4	281
144, 968	Same.....Middlings-purifier	Nov. 25, 1873	710	240	4	570
139, 397	Lacroix, N., Milwaukee, Wis. Middlings-purifier	May 27, 1873	859	274	3	598
				275		
				276		
142, 112	Ladd, A. S., and C. N. Corning, Concord, N. H. Wood-screw	Aug. 26, 1873	664	218	4	216
134, 901	Ladd, D. O. B., Racine, Wis., assignor to self and P. E. Merrihew, Fair Haven, Mass. Thrashing-machine	Jan. 14, 1873	375	119	3	50
	Ladd, H. H., et al. (See Briggs, L. W., assignor.)					
6, 455	Ladd, J. D., assignor to the New York Ottoman and Hassock Company, New York, N. Y. Ottoman (Design)	Feb. 18, 1873			3	189
6, 457	Same.....same	Feb. 25, 1873			3	218
143, 166	La Dow, C., South Galway, N. Y. Combined rake and tedder	Sept. 23, 1873	734	253	4	324
135, 648	La Du, D., Warner, assignor of one-half interest to J. P. Hier, Syracuse, N. Y. Tobacco-press	Feb. 11, 1873	249	78	3	159
	Lafargne, J. P. (See Wilkinson, Passoz, Lafargne, & Dutreih.)					
5, 440	Lafferty, R. M., Toledo, Ohio, assignor to self and E. P. Smith. Pump (Reissue)	June 10, 1873	378	118	3	655
5, 441	Same.....same (Reissue)	June 10, 1873	379	118	3	655
139, 258	Lafferty, S., Chicago, Ill. Dish-pan	May 27, 1873	733	231	3	588
141, 147	Lafin, M., Chicago, Ill. Treating ores	July 22, 1873	741		4	97
142, 245	Lafin, P., Warren, assignor to G. Draper, Hopedale, Mass. Bobbin for spinning-machines	Aug. 26, 1873	775	255	4	225
144, 969	La Fonte, J. G., Dayton, Ohio. Corn-planter	Nov. 25, 1873	712	241	4	570
135, 822	Laforge, F. H., Waterbury, Conn. Securing the covers on boxes for stop-cocks for water and gas service pipes	Feb. 11, 1873	406	131	3	171
	La Forme, F. J., Worcester, Mass. Nursing-bottle (Extension)	Nov. 29, 1873			4	557
140, 714	Lafreniera, O., Brooklyn, N. Y. Horse-collar	July 8, 1873	331	112	4	46
143, 062	La Grove, W. A. P., assignor to self, C. O'Kemp, Brooklyn, N. Y., and H. H. Webb, Newark, N. J. Automatic toy-dancer	Sept. 23, 1873	673	232	4	329
141, 568	Lahman, J., Panora, Iowa. Thimble-axle for vehicle-wheels	Aug. 5, 1873	137	44	4	146
140, 715	Lahman, W., Wellsville, Ohio. Plow-glovis	July 8, 1873	331	112	4	47
140, 144	Laidley, T. T. S., Watertown, Mass. Cartridge for fire-arms	June 24, 1873	664	208	3	694
137, 065	Lakey, J. H., Turner, assignor to G. W. Billings, Chicago, Ill. Railway-frogs	Mar. 25, 1873	671	223	3	329
141, 362	Lakins, G., East Norwalk, Ohio. Fence-post stub	July 29, 1873	963	313	4	122
142, 246	Lakins, G., East Norwalk, and L. N. Lakins, Toledo, Ohio. Wire fence	Aug. 26, 1873	776	255	4	225
	Lakins, L. N. (See Lakins, G. & L. N.)					
144, 210	Lalor, T., assignor to E. Crossman, Toronto, Canada. Bolt for prison-doors	Nov. 4, 1873	36	11	4	481
	Lamarche, C. D. (See O'Brien, J., assignor.)					
144, 030	Lamarre, A., Paris, France, assignor to G. Washburne. Pyrotechnic signal	Oct. 28, 1873	610		4	458
	Lamason, B. P. (See Murray & Lamason) (Reissue)					
135, 716	Lamason, B. P., Milton, Pa. Safety-truck for railway-cars	Feb. 11, 1873	308	98	3	164

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 717	Lamason, B. P., Milton, assignor of one-half interest to W. J. Brundred, Oil City, Pa. Railway freight-car	Feb. 11, 1873	309	98	3	164
138, 505	Lamb, C., and T. S. Frazier, Clinton, Iowa. Machine for trimming lumber	May 6, 1873	30	10	3	500
140, 281	Lamb, D. M., Strathroy, Canada. Production of water-proof gum	June 24, 1873	779		3	703
140, 282	Same..... same	June 24, 1873	780		3	704
140, 283	Same..... Preparing water-proof gum from flaxseed, &c	June 24, 1873	780		3	704
144, 621	Same..... Apparatus for purifying and filtering oils	Nov. 18, 1873	396	132	4	533
144, 622	Same..... Compound vulcanizable gum	Nov. 18, 1873	396		4	533
144, 623	Same..... Treating vulcanizable gums and caoutchouc	Nov. 18, 1873	397		4	533
137, 848	Lamb, J. W. (See Priest, C. W., assignor)					
135, 715	Lamb, J. W., Troy, N. Y. Handle for sheet-metal ware	Apr. 15, 1873	525	164	3	424
141, 934	Lamb, L. L., Chelsea, Mass. Tool-holder	Feb. 11, 1873	308	98	3	164
142, 706	Lamb, L. L., assignor to self and S. K. Lovewell, Chelsea, Mass. Tool-receptacle	Aug. 19, 1873	488	161	4	192
140, 050	Lamb, N. C., Wyandotte, Mich. Corn-planter	Sept. 9, 1873	342	115	4	281
142, 029	Lamb, S. T., Boston, Mass. Fiber-cleaning machinery	June 17, 1873	559	177	3	677
143, 914	Lambart, R. C., Quincy, Mass., assignor to the Shoe-Machinery Manufacturing Company. Machinery for trimming the sole-edges of boots and shoes	Aug. 19, 1873	568	188	4	198
145, 430	Same..... Machine for compressing and punching heel-blanks	Oct. 21, 1873	405	{ 163 164 }	4	438
5, 661	Lambart, R. C., Quincy, Mass., assignor to Tapley Heel-Burnishing Machine Association, Boston, Mass. Machine for burnishing heels of boots and shoes	Dec. 9, 1873	351	117	4	626
135, 133	Lambert, E. A., et al. (See Sinclair, J. D., assignor) (Reissue). Lambert, R. C., Quincy, Mass., assignor by means assignment to the Shoe-Machine Manufacturing Company. Machine for trimming the edges of boot and shoe soles (Reissue)	Nov. 18, 1873	564	191	4	547
141, 281	Lambert, R. C., Quincy, assignor by means assignment to N. C. Lombard, trustee, Boston, Mass. Lasting boots and shoes	Jan. 21, 1873	586	190	3	82
135, 564	Lambert, W. B., Geneseo, Ill. Sign	July 29, 1873	892	289	4	116
23, 924	Lamberton, W. W., and D. R. Lemman, New Orleans, La. Car-starter	Feb. 4, 1873	156	50, 51	3	140
135, 565	Landin, T. J., Baltimore, Md. Mail-bag (Extension)	May 10, 1873			3	497
141, 148	Same..... same (Disclaimer filed)	May 9, 1873			3	497
136, 899	Lamey, P. H., Wilconisco, Pa. Coal-car elevator	Feb. 4, 1873	157	51	3	140
146, 080	Same..... same	July 22, 1873	742	245	4	97
137, 779	La Moree, J. L. (See Hamilton, W., assignor)					
146, 008	La Mothe, B. J., Detroit, Mich. Railway-car seat	May 13, 1873	392	123	3	540
6, 833	Lamoureux, D., Chicago, Ill. Manufacturing corsets and bustles (Extension)	Jan. 4, 1873			2	729
6, 895	Lamplugh, J., Philadelphia, Pa. Composition for preserving leather	Dec. 30, 1873	958		4	709
145, 216	Land, A. (See Fling & Land)					
6, 702	Land, G., Hillsdale, Mich. Dining-table	Apr. 15, 1873	466	146	3	419
6, 860	Land, T. R., Grass Valley, Cal. Car-coupling	Dec. 30, 1873	897	291	4	704
6, 833	Landenberger, C. H., Philadelphia, Pa. Fabric (Design)	Sept. 2, 1873			4	241
6, 895	Same..... Striped fabric (Design)	June 3, 1873			3	608
6, 895	Landenberger, C. H., and H. Atkinson, assignors to M. Landenberger & Co., Philadelphia, Pa. Loom-shedding mechanism	Dec. 2, 1873	159	55	4	598
6, 860	Landenberger, M., Philadelphia, Pa. Cape (Design)	June 10, 1873			3	640
6, 829	Same..... same (Design)	Sept. 2, 1873			4	241
6, 630	Landenberger, M., jr., Philadelphia, Pa. Cape (Design)	May 6, 1873			3	497
6, 631	Same..... same (Design)	May 6, 1873			3	497
6, 632	Same..... same (Design)	May 6, 1873			3	497
6, 633	Same..... same (Design)	May 6, 1873			3	497
6, 634	Same..... same (Design)	May 6, 1873			3	497
6, 635	Same..... same (Design)	May 6, 1873			3	497
6, 641	Same..... same (Design)	May 6, 1873			3	497
6, 642	Same..... same (Design)	May 6, 1873			3	497
6, 643	Same..... same (Design)	May 6, 1873			3	497
6, 651	Same..... Stocking-fabric (Design)	May 20, 1873			3	558
6, 652	Same..... same (Design)	May 20, 1873			3	558
6, 659	Same..... same (Design)	May 20, 1873			3	559
6, 660	Same..... Cape (Design)	May 20, 1873			3	559
6, 681	Same..... same (Design)	May 27, 1873			3	586
6, 689	Same..... Stocking-fabric (Design)	May 27, 1873			3	586
5, 662	Landenberger, M. & Co. (See Landenberger & Atkinson, assignors.) Same..... (See Phipps, J., assignor.) (Design)					
5, 511	Lander, P. C. (See Alling, D. S., assignor)					
139, 797	Landers, Frary & Clarke. (See Turnbull & Webb, assignors)					
145, 662	Landfear, W. R., assignor by means assignment to the Hartford Eyelet Company, Hartford, Conn. Eyelet-making machine (Reissue)	Nov. 18, 1873	565	192	4	547
140, 510	Landis, D. N., jr. (See Dittman, C., assignor)					
136, 075	Landis, I. L., Lancaster, Pa. Fence (Reissue)	July 29, 1873	1,020	330	4	126
141, 363	Same..... Shirt-bosom support	June 10, 1873	336	104	3	651
136, 656	Same..... Device for detaching horses	Dec. 16, 1873	563	185	4	655
136, 657	Landis, J. K., York Township, Ohio. Ribbon-case	July 1, 1873	144	49	4	20
5, 266	Landrum, Z. P., Columbus, Miss. Horse-power	Feb. 18, 1873	631	207	3	203
5, 379	Same..... same	July 29, 1873	964	314	4	122
7, 022	Lane, D. (See Marshall, M., assignor)					
134, 902	Lane, D., assignor to self, P. P. Pitkin, and J. W. Brock, Montpelier, Vt. Head-block for saw-mills	Mar. 11, 1873	281	94	3	277
141, 364	Same..... Head-block for saw-mills	Mar. 11, 1873	282	95	3	277
6, 699	Lane, F. A., Cleveland, Ohio, assignor by means assignment to self, L. S. Lane, and E. Kendall. Stuffing for mattresses (Reissue)	Feb. 4, 1873	216	67	3	144
6, 700	Lane, F. A., Cleveland, Ohio, assignor by means assignment to self and L. S. Lane, Swanzey, N. H., and E. Kendall, Cleveland, Ohio. Stuffing for mattresses (Reissue)	Apr. 29, 1873	1,111	351	3	489
143, 769	Lane, J. G. (See Lane, W. J., assignor)					
143, 507	Lane, J. G. & W. J., Millbrook, N. Y. Frame or stand of grinding-mills (Design)	Dec. 9, 1873			4	614
5, 320	Lane, J. W., Bristol, England, assignor to E. Brimble, London, England. Corset (Reissue)	Jan. 14, 1873	376	119	3	50
143, 769	Lane, L. S., et al. (See Lane, F. A., assignor)					
143, 769	Lane, F. W., Mendocino, Cal. Washing-fluid (Design)	July 29, 1873	965		4	122
143, 769	Lane, S., jr., Englewood, N. J. Ale-pump (Design)	June 10, 1873			3	640
143, 769	Same..... same (Design)	June 10, 1873			3	640
143, 769	Same..... Pump	Oct. 21, 1873	364	121	4	428
143, 507	Lane, T., Whitesburgh, Tenn. Fly-trap	Dec. 16, 1873	431	140	4	644
5, 320	Lane, T. W., Meredith, N. H. Steam-pressure gage (Extension)	Feb. 22, 1873			3	156
5, 320	Same..... Steam-gage (Reissue)	Mar. 11, 1873	410	{ 135 136 }	3	287

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No.	Name, residence, and invention.	Date.	Monthly volume		Official Gazette.	
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23, 032	Lane, T. W., Meredith, N. H. Steam-pressure gage. (Disclaimer filed)	Feb. 15, 1873			3	156
145, 576	Lane, W. J. (See Lane, J. G. and W. J.)					
140, 051	Lane, W. J., assignor to self and J. G. Lane, Millbrook, N. Y. Coffee-roaster	Dec. 16, 1873	491	161	4	649
	Lane, Z. M. (See Hayden, C. M., assignor.)					
142, 346	Laner, J. E., New York, N. Y. Manufacturing crystalline acid phosphate of lime for yeast-powders	June 17, 1873	662		3	678
	Lang & Lauster. (See Lang, G. P., jr., assignor.)					
139, 586	Lang, C., assignor of one-half interest to A. H. Nimochs, Ypsilanti, Mich. Whip-socket	Sept. 2, 1873	21	7	4	244
136, 076	Lang, C. A., Palmyra, Me. Corn-husker	June 3, 1873	123	41	3	619
137, 139	Lang, G. P., jr., assignor to Lang & Lauster, Allegheny, Pa. Molasses pitcher-top	Feb. 18, 1873	631	207	3	303
135, 922	Same	Mar. 25, 1873	716	237	3	332
142, 571	Lang, J. C., Washington, D. C., assignor of three-fourths interest to P. B. Fouke, New Orleans, La. Floating fire-engine	Feb. 18, 1873	501	163	3	193
	Lang, J. G., Pittsburgh, Pa. Furnace for the manufacture of oxide of zinc	Sept. 9, 1873	231	75	4	272
	Langdon, H. S. (See Irwin & Langdon.)					
	Langdon, L. W. (See Robertson, J., assignor.)					
139, 678	Lange, F. A., Glashutte, Saxony. Manufacture of springs for watches and other time-pieces of aluminium compounds	June 10, 1873	219		3	643
139, 398	Lange, R., Baltimore, Md. Lamp-extinguisher	May 27, 1873	863	276	3	598
141, 648	Langellier, A., Concord, N. H. Car-coupling	Aug. 12, 1873	225	71	4	161
143, 023	Same	Sept. 23, 1873	674	232	4	329
144, 624	Same	Nov. 18, 1873	398	133	4	533
134, 682	Langen, E., Cologne, Prussia. Manufacture of loaf-sugar	Jan. 7, 1873	174	57	3	20
144, 114	Langenau, W. C., assignor of one-half interest to J. A. Lannert. Combination-padlock	Oct. 28, 1873	679	225	4	464
138, 167	Langenbach, R., New York, N. Y. Wash-boiler	Apr. 22, 1873	814	259	3	457
6, 869	Langham, T., assignor to T. Dolan and R. Williams, jr., Philadelphia, Pa. Knitted fabric. (Design)	Sept. 16, 1873			4	296
	Langlotz, L. (See Gahren & Langlotz.)					
	Lanier, G. P. (See Gense, C., assignor.)					
139, 399	Lannay, E., Lima, Ohio. Spark-arrester	May 27, 1873	864	276	3	598
	Lannert, J. A. (See Langenau, W. C., assignor.)					
137, 554	Lansdowne, S., assignor to self and R. Davis, Sharon, Pa. Metallurgic furnace-lining	Apr. 8, 1873	257	79	3	389
142, 516	Lanson, R. B., London, England. Apparatus for ironing and pressing garments	Sept. 2, 1873	174	57	4	286
142, 857	Lantia, H. T., and N. Davis, Atlanta, Idaho. Elevated wire-way	Sept. 16, 1873	479	163	4	303
143, 454	Lapham, A., assignor to self and O. W. Leonard, Paterson, N. J. Shears	Oct. 7, 1873	48	17	4	385
	Lapham, N. D., et al. (See Arndt, A. F. R., assignor.)					
	Same. (See Cliff & Martin, assignors.)					
145, 301	Lapham, R., assignor to H. Condron, New York, N. Y. Fountain brush	Dec. 9, 1873	239	81	4	617
134, 683	Lappin, H., Troy, N. Y., assignor of one-half interest to P. Z. Marsh, Lansingburgh, N. Y. Reservoir cooking-stove	Jan. 7, 1873	175	57	3	20
	Larabee, B. F., et al. (See Maloy, J. W., assignor.)					
	Lardner, H. (See Wheeler, R. B., assignor.) (Reissue)					
	Larduskey, W. H. H. (See Onion & Larduskey.)					
144, 851	Laror, D., assignor of one-third interest to S. E. Griscom, Pottsville, Pa. Diamond mill-stone dressing machine	Nov. 25, 1873	601	204	4	560
	Large, A. (See Hutchins, C., assignor.)					
135, 718	Large, J., Gill Hall, Pa. Driven well	Feb. 11, 1873	310	98	3	164
	La Rhett, S. (See Burgess & La Rhett.)					
	Larkin, C. (See Perry, Case & Larkin.)					
137, 780	Larkin, J. T., Halifax, Nova Scotia. Skate	Apr. 15, 1873	467	146	3	419
	Larkin, W. D. F. (See Onion & Larduskey, assignors.)					
141, 006	Larned, G. C., Worcester, Mass. Metal-planing machine	July 22, 1873	615	208	4	87
145, 508	Larson, P. J., Chicago, Ill. Sofa-bedstead	Dec. 16, 1873	432	140	4	644
144, 461	La Rue, S. H., Allentown, Pa. Base-burning stove	Nov. 11, 1873	251	84	4	510
	Lartigue, H. (See Digney, J. D. and F., Lartigue & Forest.)					
5, 398	Lascell, G. W., Syracuse, N. Y., assignor to self and H. Robinson, Jersey City, N. J. Steam boiler and furnace. (Reissue)	May 6, 1873	241	75	3	517
141, 649	Lash, J. S., Philadelphia, Pa. Cherry-stoner	Aug. 12, 1873	225	71	4	161
145, 663	Same	Dec. 16, 1873	564	185	4	653
	Lassiter, D. W. (See McDuffey & Jaques, assignors.)					
142, 481	Lassoe, V. F., Brooklyn, assignor to V. F. Lassoe and G. F. Meyer, New York, N. Y. Compensating spring-balance for safety-valves	Sept. 2, 1873	142	47	4	253
141, 443	Latchaw, D., Barkeyville, Pa. Bee-hive	Aug. 5, 1873	29	9, 10	4	137
145, 111	Latham, B., Westminster, England. Cleaning sewers	Dec. 2, 1873	64		4	590
	Latham, C. H., et al. (See Dudley, G. D., assignor.)					
	Same. (See Sherwood, D., assignor.)					
	Latham, C. H. (See Woods & Sherwood, assignors.) (Reissue.)					
6, 933	Lathrop, B. L., assignor to self and J. Daniels, New Haven, Conn. Lathe-dog. (Design)	Oct. 7, 1873			4	380
	Lathrop Combination Sewing-Machine Company. (See Lathrop, L. W., assignor.)					
139, 067	Lathrop, L. W., Philadelphia, Pa., assignor to Lathrop Combination Sewing-Machine Company, New York, N. Y. Sewing-machine	May 20, 1873	547	{ 172 173 }	3	565
	Lathrop, T. A., et al. (See Ferguson, W., assignor.)					
	Lathrope, H. (See Weirick & Lathrope.)					
137, 694	Latimer, C., Saint Joseph, Mich. Safety-guard for railways	Apr. 8, 1873	378	117	3	399
145, 577	Latourette, D. L., New York, N. Y. Device for cleaning steam-generators	Dec. 16, 1873	491	162	4	649
137, 086	La Tourette, H. L., New Orleans, La. Hand-truck	Mar. 25, 1873	672	223	3	329
	Latrobe, C. H. (See Bender, Latrobe & Smith.)					
139, 068	Latschaw, H., McKnightstown, Pa. Apparatus for detaching horses	May 20, 1873	550	173	3	355
194, 552	Latta, E. G. (See Thornton & Latta.)					
142, 637	Latta, F., Cincinnati, Ohio. Fire-alarm signal-box	Jan. 7, 1873	46	14	3	11
137, 006	Same	Sept. 9, 1873	283	93	4	277
143, 084	Latta, F., and W. H. Hughes, Cincinnati, Ohio. Combined fire-plug and cistern	Mar. 18, 1873	586	195	3	311
141, 879	Laudermilch, J. K., Lebanon, Pa. Jeweler's drilling device	Sept. 23, 1873	675	232	4	329
144, 463	Laughland, G. L., New York, N. Y. Wire-tie for baling hay, &c.	Aug. 19, 1873	444	145	4	188
135, 993	Laughlin, J. L., Peru, Ill. Plow	Nov. 11, 1873	253	85	4	510
142, 403	Laughlin, J. M., Boston, Mass. Horseshoe-nail machine	Feb. 18, 1873	558	185	3	197
135, 348	Same	Sept. 2, 1873	74	24	4	248
143, 167	Laurent, J., New York, and J. Menegay, Brooklyn, N. Y. Spring for watch-cases	Jan. 28, 1873	798	258	3	112
	Lawrie, C. W., Philadelphia, Pa. Stop-cock	Sept. 23, 1873	735	253	4	334
	Lauth, B., Howard, Pa. Manufacture of iron. (Extension.)	Aug. 23, 1873				135
145, 431	Lauerty, W. A., Philadelphia, Pa. Egg-carrier	Dec. 9, 1873	352	118	4	626
138, 506	Lavie, H., and H. Stiefvater, Greenfield, Wis. Wagon-body	May 6, 1873	31	11	3	500
	Lavinia, W. H. (See Crane & Lavinia.)					

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137, 935	Lavo, J. J., assignor by means assignment to United States Chemical-Compound Company, Wyandotte, Kans. Compound for preventing incrustation in steam-boilers.....	Apr. 15, 1873	596	3	430
139, 069	Law, C., Pittston, Pa. Screw-driver.....	May 30, 1873	551	173	3	565
5, 503	Law, H., Chatham, N. J. Paper-cutting machine..... (Reissue)	July 29, 1873	1, 011	{ 328 329 }	4	125
135, 649	Law, J., London, Canada. Tar or petroleum burner.....	Feb. 11, 1873	249	79	3	159
134, 753	Law, E., Toledo, Ohio. Machine for bundling shingles.....	Jan. 14, 1873	243	79	3	40
134, 610	Lawler, M., Holyoke, assignor of one-half interest to O. S. Greenleaf, Springfield, Mass. Feed-regulator for calender-rolls.....	Jan. 14, 1873	295	95	3	44
140, 305	Lawler, J., New York, N. Y. Heating-range.....	June 24, 1873	715	225	3	698
138, 260	Lawrence, B., Lowell, Mass. Milling machine.....	Apr. 29, 1873	927	{ 292 293 }	3	474
145, 302	Lawrence, E. P., Worcester, Mass. Folding-coop.....	Dec. 9, 1873	240	81	4	617
143, 463	Lawrence, F., Philadelphia, Pa. Blast and cupola furnace.....	Sept. 2, 1873	143	47	4	253
138, 808	Lawrence, H., Fredericton, Canada. Scroll-sawing machine.....	May 13, 1873	313	97	3	533
	Lawrence, L. L. (See Fulghum & Lawrence.)					
	Lawrence, P. H. (See Buckley & Lawrence.)					
134, 605	Lawrence, W., and J. Sanders, New Albany, Ind. Automatic fan.....	Jan. 7, 1873	101	33	3	15
135, 134	Lawrence, W. S., Winchester, Ky. Animal-trap.....	Jan. 21, 1873	587	190	3	82
141, 569	Same..... Hemp-brake.....	Aug. 5, 1873	138	44	4	146
143, 168	Laws, A. D., assignor to the Belknap and Burnham Manufacturing Company, Bridgeport, Conn. Machine for tapping gas and water fittings.....	Sept. 23, 1873	736	{ 253 254 }	4	334
145, 206	Lawson, B. S., New York, N. Y. Steam-pump.....	Dec. 23, 1873	697	229	4	678
	Lawson, W. H. (See Rapp, B. R., assignor.)					
	Lawton, E. R. (See Jeralds, S. E., assignor.)					
135, 349	Lawyer, R., Pittsborough, Pa. Wash-boiler.....	Jan. 28, 1873	799	258	3	112
144, 771	Same..... same.....	Nov. 18, 1873	523	177	4	544
	Layton, J. E. (See Johnson & Layton.)					
145, 112	Lazarevitch, C., Brooklyn, N. Y. Grain-conveyor.....	Dec. 2, 1873	65	21	4	590
138, 507	Lazarus, M. G., Pittston, Pa. Folding-screen.....	May 6, 1873	31	11	3	500
	Lazarus, Moses, & Co. (See Ansell, A. D., assignor)					
139, 719	Lazell, A. E., West Meriden, Conn. Curtain-fixture.....	June 10, 1873	263	82	3	646
144, 396	Lea, P., Goliad, Tex. Compound of bitumen, ore, &c.....	Nov. 11, 1873	198	.....	4	506
144, 397	Same..... Mixing mineral and fossil substances with bituminized clay to form a plastic material.....	Nov. 11, 1873	198	.....	4	506
141, 509	Leach, A., Lynn, Mass. Horsehoe.....	Aug. 5, 1873	89	27	4	142
143, 169	Leach, D. A., Bloomington, Ind. Animal-trap.....	Sept. 23, 1873	738	254	4	335
143, 113	Leach, H., Camanche, Iowa. Plow-scraper.....	Aug. 26, 1873	664	218	4	216
	Leach, J. (See Holt & Leach.)					
145, 578	Leach, S. F., Chelsea, Mass. Hand-punch for metal.....	Dec. 16, 1873	492	162	4	649
140, 284	Leach, S. L., assignor to H. R. Ellis, Corry, Pa. Bed-bottom.....	June 24, 1873	781	247	3	704
	Learned, E. A. (See Milton, C. C., assignor.)					
	Leasure, J. A. (See Barner & Leasure.)					
140, 372	Leaver, J., and J. Wock, Canal Fulton, Ohio. Rotary steam-engine.....	July 1, 1873	37	12	4	11
135, 719	Leavitt, C., Cleveland, Ohio. Combined rod-cutter and land-roller.....	Feb. 11, 1873	311	99	3	164
141, 650	Leavitt, C. P., Newark, N. J. Apparatus for feeding fuel to furnaces.....	Aug. 12, 1873	226	71	4	161
	Leavitt, J. H., et al. (See Forrest, H. E., assignor.)					
135, 434	Leckenby, H. B., Kalamazoo, Mich. Wheel for vehicles.....	Feb. 4, 1873	39	12	3	130
140, 145	Ledbetter, T., Detroit, Mich. Stench-trap.....	June 24, 1873	664	209	3	694
135, 433	Ledoux, A. R., Cornwall Landing, N. Y. Boxes for preserving cake and bread.....	Feb. 4, 1873	39	11	3	130
5, 371	Lee, A., White Marsh, Pa. Operating screw-propellers..... (Reissue)	Apr. 22, 1873	862	278	3	462
5, 351	Lee, A. K., Galveston, Tex. Distilling turpentine..... (Reissue)	Apr. 15, 1873	649	205	3	434
137, 849	Same..... Filter for cane-juice oils and other dense liquids.....	Apr. 15, 1873	526	164	3	424
138, 504	Same..... Turpentine-still.....	May 6, 1873	32	11, 12	3	500
138, 809	Same..... Resin box and cooler.....	May 13, 1873	314	97	3	533
138, 810	Same..... Apparatus for steaming and cleaning barrels, &c.....	May 13, 1873	315	97	3	533
139, 402	Same..... Bleaching resin.....	May 27, 1873	666	277	3	598
	Lee, C. A. (See Crane, D., assignor.)					
139, 253	Lee, C. C., Falls Church, Va. Harness-buckle.....	May 27, 1873	733	239	3	588
139, 400	Lee, D., Boston, Mass. Apparatus for drying sugar, salt, &c.....	May 27, 1873	865	277	3	598
139, 401	Same..... same.....	May 27, 1873	865	277	3	598
5, 403	Lee, E. F., Bayonne, N. J., assignor of one-third interest to J. Wienhold, New York, N. Y. Button-fastening..... (Reissue)	May 13, 1873	455	143	3	545
145, 439	Lee, G. D., assignor of two-thirds interest to J. M. King and H. W. Swezey, Brookhaven, N. Y. Bung faucet.....	Dec. 9, 1873	353	118	4	626
	Lee, G. S. (See West & Lee.)					
	Same..... same..... (Reissue)					
137, 781	Lee, G. S., assignor to self and P. West, Worcester, Mass. Boot.....	Apr. 15, 1873	468	146	3	419
140, 306	Lee, H. T., Chicago, Ill. Toy.....	June 24, 1873	715	225	3	698
	Lee, J. (See Ellis, Hoffman & Lee.)					
	Lee, J. (See Smith & Lee.)					
145, 953	Lee, J., assignor of two-thirds interest to J. J. Rich and J. Gallagher, Saint Louis, Mo. Wrench.....	Dec. 30, 1873	851	277	4	701
145, 433	Lee, J. W., and J. W. Davis, Washington, D. C. Disinfecting compound.....	Dec. 9, 1873	353	.....	4	626
136, 092	Lee, M. C., New York, N. Y. Lock-hinge.....	Apr. 22, 1873	734	239	3	452
	Lee, N. (See Decker & Lee.)					
142, 404	Leech, R. L., Winterset, Iowa. Movable cloth-plate for sewing-machines.....	Sept. 2, 1873	75	24	4	248
	Leedom, Shaw & Stewart. (See Crabtree, J., assignor)..... (Design)					
	Same..... (See Kerr, H. P., assignor)..... (Design)					
139, 166	Leeds, G. H., West Chester, and C. N. Thorpe, Philadelphia, Pa. Striking-works of clocks.....	May 20, 1873	644	201	3	573
	Leeds, J. (See Steel & Austin, assignors)					
146, 081	Leeds, L., assignor of one-half interest to E. W. and A. W. Sholes, New London, Conn. Nut-lock.....	Dec. 30, 1873	958	309	4	709
	Lees, E. F. (See Lees, H. C., assignor.)					
144, 115	Lees, H. C., assignor to E. F. Lees, Camden, N. J. Tassel-top.....	Oct. 22, 1873	680	225	4	464
136, 669	Leet, D. W., and W. C. Shields, Bellaire, Ohio. Slate-washer.....	May 6, 1873	173	55	3	511
136, 900	Lefebvre, A., San Francisco, Cal. Feathering paddle-wheel.....	May 13, 1873	393	123	3	540
144, 990	Leffler, J., Rochester, N. Y. Drain-tile.....	Nov. 25, 1873	713	241	4	570
137, 936	Legab, C., Pittsborough, Pa. Bed-bug trap for bedsteads.....	Apr. 15, 1873	596	189	3	430
136, 658	Legg, C., Malcom, assignor of one-half interest to H. W. Wigton, De Soto, Iowa. Composition for molding plastic articles.....	Mar. 11, 1873	283	.....	3	277
141, 651	Legg, J., Rushville, N. Y. Horsehoe's rest.....	Aug. 12, 1873	227	71	4	161
138, 361	Leggett, C. H., Elizabeth, N. J. Match-safe.....	Apr. 29, 1873	928	293	3	474
143, 770	Leggett, E. W., New York, N. Y. Process of lining oil-barrels with glue.....	Oct. 21, 1873	364	4	428

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139, 663	Leggo, W. A., Montreal, Canada. Photographic apparatus.	May 6, 1873	173	55, 56	3	511
138, 664	Same..... Canal-boat.	May 6, 1873	175	56	3	512
138, 665	Same..... Propulsion by gas-explosion.	May 6, 1873	176	56	3	512
145, 509	Lehman, D. A., Wakarusa, Ind., assignor to self and J. D. Gehring, Constantine, Mich. Register for tubular knitting-machine.	Dec. 16, 1873	433	141	4	644
135, 586	Lehman, W., Lexington, Mo. Bee-hive.	Feb. 4, 1873	159	51	3	140
143, 515	Lehmann, C. K., Savannah, Ohio. Seat for carriages and wagons.	Oct. 7, 1873	97	34	3	388
136, 840	Lehndorff, R., Detroit, Mich. Composite roofing.	Mar. 18, 1873	447		3	300
143, 288	Lehner, F., Marquette, Mich. Folding camp-baker.	Sept. 30, 1873	845	291	4	360
138, 567	Lehner, J., Galena, Ill. Automatic fan.	May 6, 1873	91	29	3	505
144, 991	Lehnis, C. H., Philadelphia, assignor of one-half interest to A. Leschorn, Pittsburgh, Pa. Automatic fire-alarm.	Nov. 25, 1873	714	241	4	571
	Leidy, A. C., et al. (See Snyder, B., assignor.)					
136, 924	Leigh, J. W., Norfolk, Va. Cotton-harvester.	Mar. 18, 1873	517	170	3	305
137, 219	Leigh, W., Bridgeport, Conn. Musical-instrument.	Mar. 25, 1873	791	261	3	338
	Leighton, D. R. (See Leighton, J. T. & D. R.)					
138, 509	Leighton, J. E., Lowell, Mass. Lamp.	May 6, 1873	36	19	3	500
139, 587	Leighton, J. T. & D. R., New Haven, Conn. Sleeping-car.	June 3, 1873	124	41	3	619
142, 923	Same..... same.	Sept. 16, 1873	531	182	4	308
145, 664	Same..... same.	Dec. 16, 1873	564	185, 186	4	655
141, 935	Leighton, W., jr., Wheeling, W. Va. Glass-furnace.	Aug. 19, 1873	488	161	4	192
144, 341	Leinroth, G., Philadelphia, Pa. Pattern for cutting the uppers of shoes.	Nov. 4, 1873	140	47	4	490
	Leisenring, H. G. (See Howard, W. T., assignor.) (Reissue.)					
	Leisher, B. A. (See Leisher, G. W., assignor.)					
139, 900	Leisher, G. W., New Wilmington, assignor of one-half interest to B. A. Leisher, Renovo, Pa. Harvester.	June 17, 1873	437	136	3	667
145, 217	Leiter, J., Vienna, Austria, assignor to F. G. Otto, and J. Reynders, New York, N. Y. Hypodermic syringe.	Dec. 2, 1873	160	55	4	588
138, 031	Leland, H. S., Canton, Ohio. Universal coupling.	Apr. 22, 1873	701	222	3	448
136, 604	Lemare, R., New York, N. Y. Artificial stone.	Mar. 11, 1873	238		3	273
	Lemman, D. R. (See Lambertson & Lemman.)					
137, 220	Lengelée, C. A. J., Paris, France. Apparatus for shearing animals.	Mar. 25, 1873	791	261	3	338
	Lenhart, P. (See Scheider, J. F., assignor.)					
	Lenhart, W. (See Morris & Lenhart.)					
	Lentz, M. A. (See Royal, Lentz & Delbert.)					
137, 782	Leonard, A., Newell's Run, Ohio. Cultivator.	Apr. 15, 1873	469	147	3	419
143, 289	Leonard, D. M., La Crosse, Wis. Combined shutter-worker and blind-operator.	Sept. 30, 1873	846	291	4	360
140, 583	Leonard, F., Cleveland, Ohio. Chain-machine.	July 8, 1873	230	74	4	37
145, 063	Same..... same.	Dec. 2, 1873	21	7, 8	4	587
140, 582	Leonard, G. F., Newport, Vt., assignor to self and J. P. Lindsay, New York, N. Y. Sheet-metal roofing.	July 8, 1873	219	73, 74	4	37
	Leonard, H. G., Taunton, Mass. Cooking-stove. (Extension.)	May 10, 1873			3	497
	Leonard, I. D. (See Mayhew & Leonard.)					
135, 623	Leonard, J., Attica, Ohio. Knitting-machine.	Feb. 11, 1873	406	131	3	171
142, 572	Leonard, J. D., assignor of one-half interest to R. E. Hoyt, Cleveland, Ohio. Self-acting coal-car brake.	Sept. 9, 1873	232	76	4	272
134, 811	Leonard, J. P., and G. Hancock, Oroville, Cal. Sediment-collector and blow-off for steam-boilers.	Jan. 14, 1873	296	95	3	44
	Leonard, O. W. (See Lapham, A., assignor.)					
	Leonard, W. A. (See Babcock, Leonard & Crane.)					
144, 775	Leonard, T. D., assignor of two-thirds interest to J. D. Johnson and B. C. Drury, Waco, Tex. Cotton-press.	Nov. 18, 1873	523	178	4	544
144, 776	Same..... Bale-tie clamp.	Nov. 18, 1873	524	178	4	544
139, 403	Lerew, H., Panora, Iowa. Harness-saddle pad.	May 27, 1873	868	278	3	599
	Lertora, J. (See Geister, K., assignor.)					
144, 777	Leschorn, A. (See Lehnis, C. H., assignor.)					
139, 470	Leshner, H. S., New York, N. Y. Bottle-stopper.	Nov. 18, 1873	525	178	4	544
138, 412	Lesley, A. M., New York, N. Y. Apparatus for cooling rooms.	June 3, 1873	23	7	3	611
136, 440	Leslie, A. M., Chicago, Ill. Thread-cutter for sewing-machines.	Apr. 29, 1873	1,060	333	3	485
138, 901	Leslie, J. W., Cairo, Ill. Saw-set.	Mar. 4, 1873	75	26	3	251
136, 327	Leslie, J. W., and G. R. Smith, Cairo, Ill. Veneer-cutting machine.	May 13, 1873	394	124	3	540
144, 211	Leslie, L. N., Leominster, Mass. Oil-cup support for sewing-machines.	Feb. 25, 1873	862	277	3	233
	Leslig, S., sr., Reading, Pa. Grain-separator.	Nov. 4, 1873	37	11	4	481
	Lesling, S., Reading, Pa. Horse hay-rake. (Extension.)	Dec. 27, 1873			4	671
141, 570	Lessor, R. J., and J. B. Shambo, Brandon, Vt. Securing wheels to axles.	Aug. 5, 1873	139	44	4	146
143, 516	Lester, J. S., Atlanta, Ga., assignor to self and A. S. Woisham. Running-gear for railway cars.	Oct. 7, 1873	98	35	4	388
	Lester, W. (See Peck, C. O., assignor.)					
6, 883	Letchworth, J., Buffalo, N. Y. Tug-clip. (Design.)	Sept. 16, 1873			4	296
134, 684	Same..... Bridle-bit.	Jan. 7, 1873	176	47	3	20
140, 836	Letsinger, H. C., assignor to E. C. Burt, New York, N. Y. Ladies' gaiter shoe.	July 15, 1873	440	150	4	63
134, 754	Letton, R. E., Quincy, Ill. Reed-organ.	Jan. 14, 1873	244	80	3	40
141, 444	Letton, R. E., assignor of one-half interest to L. M. Locke, Quincy, Ill. Organ-coupler.	Aug. 5, 1873	31	10	4	137
141, 510	Letton, R. E., Quincy, Ill. Reed-organ.	Aug. 5, 1873	89	28	4	142
134, 685	Levallois, H. A., Paris, France. Manufacture of steel.	Jan. 7, 1873	176		3	20
6, 374	Le Van, W. B., Philadelphia, Pa. Governor-base. (Design.)	Jan. 28, 1873			3	100
141, 936	Same..... Furnace-grate.	Aug. 19, 1873	489	161	4	192
138, 413	Levavasseur, E. I., Paris, France, assignor to H. Witzemann, Pforzheim, Baden. Machine for making links for ornamental chains.	Apr. 29, 1873	1,061	334	3	485
	Leverich, E. B. (See Pine, J., assignor.)					
	Levy, A. (See Levy, J. T., and A.)					
137, 850	Levy, J. T., and A., New York, N. Y. Machine for cutting and perforating cigars.	Apr. 15, 1873	527	164	3	424
	Levy, T. (See Levy, J. T., and A.)					
140, 928	Lewando, C., Cambridge, Mass. Metallic roofing.	July 15, 1873	528	176	4	70
137, 221	Lewellin, M., Bergen, N. Y. Cultivator.	Mar. 25, 1873	792	262	3	338
139, 588	Lewis, A., Minneapolis, Minn. Running gear for wagons.	June 3, 1873	125	42	3	619
138, 902	Lewis, C., and J. Soothill, Howard, Ill. Sewing-machine.	May 13, 1873	394	124	3	540
134, 606	Lewis, C. E., York, Pa. Thread-waxing attachment for sewing-machines.	Jan. 7, 1873	102	33	3	15
	Lewis, D. D., deceased, G. J. Chamberlain, Dunmore and G. H. McCabe, Philadelphia, Pa., executors. Railway-frog. (Extension.)	May 17, 1873			3	527
	Lewis, E. (See Worswick & Lewis.)					
143, 085	Lewis, G. W., assignor to self and C. W. Walker, Portsmouth, Va. Spring for vehicles.	Sept. 23, 1873	676	232	4	329
	Lewis, H., et al. (See Stewart, G. W., assignor.)					
136, 328	Lewis, H., Bennington, Vt. Hose-coupling.	Feb. 25, 1873	862	278	3	233

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141, 445	Lewis, I. R., assignor to self and C. Van Wyck, Albion, Mich. Car-coupling.....	Aug. 5, 1873	32	10	4	137
145, 218	Lewis, J. D., Toronto, Canada. Crib for children.....	Dec. 2, 1873	161	56	4	598
	Lewis, J. H., et al. (See Sloan, D. S., assignor.)					
	Lewis, J. K. (See Lewis, W. H., assignor.)					
	Lewis, L. S., et al. (See Sloan, D. S., assignor.)					
141, 800	Lewis, L. V., Sun Prairie, Wis. Mechanical movement.....	Aug. 12, 1873	360	118	4	172
140, 511	Lewis, M. E., Mansfield, O. Fruit-packer.....	July 1, 1873	145	49	4	20
	Lewis, N. W. (See Knight & Lewis.)					
136, 841	Lewis, R., Charleston, S. C. Cotton-press.....	Mar. 18, 1873	448	148	3	300
137, 140	Lewis, R. B., Quincy, Ill. Culinary boilers.....	Mar. 25, 1873	716	338	3	332
140, 424	Lewis, S. C., Brooklyn, N. Y. Die for making watch-case caps and backs.....	July 1, 1873	65	24	4	14
138, 032	Lewis, T. J., Chicago, Ill. Cigar-holder.....	Apr. 22, 1873	702	232	3	448
138, 414	Lewis, W., Brooklyn, N. Y. Photographic-plate holder.....	Apr. 22, 1873	1,062	354	3	485
143, 019	Lewis, W., Oxford, N. C. Cultivator.....	Sept. 23, 1873	621	211	4	325
136, 925	Lewis, W. A., Springfield, Vt. Churn-power.....	Mar. 18, 1873	518	171	3	305
139, 167	Lewis, W. H., assignor of part interest to H. E. Thayer, Philadelphia, Pa. Artificial stone.....	May 20, 1873	645	.....	3	573
139, 168	Lewis, W. H., assignor to J. K. Lewis, New York, N. Y. Refrigerator.....	May 20, 1873	645	201	3	573
141, 227	Lewis, W. J., Pittsburgh, Pa. Manufacture of bolster plates.....	July 29, 1873	632	272	4	111
	Lewis, W. L. (See Bogart, Cramer & Lewis.)					
	Lewis, W. M. (See De Forest, D. W., assignor.)					
	Lewis, W. W., Cincinnati, Ohio. Machine for rolling horseshoe-iron..... (Extension)	Feb. 1, 1873	.....	.....	3	156
22, 812	Same..... Horseshoe-machine..... (Disclaimer filed)	Feb. 13, 1873	.....	.....	3	156
140, 285	Lewitt, W. H., assignor of one-half interest to T. M. Cochrane, Saint Louis, Mo. Ruffler for sewing-machines.....	June 24, 1873	782	248	3	704
	Leyburn, W. C. (See Crowley, J., assignor.)					
137, 222	Leyer, G., and J. A. Winter, Pomeroy, Ohio. Apparatus for producing bromine from bitterns, &c.....	Mar. 25, 1873	793	262	3	338
7, 023	Libbey, W. L., assignor to New England Glass Company, Boston, Mass. Lamp-shade. (Design).....	Dec. 9, 1873	.....	.....	4	614
	Libby, A. S. (See Blake & Libby.)					
	Same..... same..... (Reissue.)					
135, 824	Libby, A. S., Lawrence, Mass. Nail-carrier for sole-nailing machines.....	Feb. 11, 1873	408	132	3	171
138, 666	Same..... Sole-nailing machine.....	May 6, 1873	177	56	3	512
143, 699	Same..... Driver for boot and shoe nailing machines.....	Oct. 14, 1873	279	92	4	411
138, 262	Libby, C. A., La Cygne, Kans. Furniture-polish.....	Apr. 29, 1873	929	.....	3	474
143, 358	Liddell, W., assignor of three-fourths interest to R. D. Hamlin, Buffalo, N. Y. Paper-bag machine.....	Sept. 30, 1873	913	310	4	365
135, 480	Lidren, C., assignor to self and R. Jackson, Lafayette, Ind. Harvester.....	Feb. 4, 1873	81	25	3	134
	Lieb, J. W. (See Sounekalb & Lieb.)					
144, 340	Lieb, J. W., Newark, N. J. Manufacture of traveling-bags.....	Nov. 4, 1873	139	46	4	490
	Liebenstein, A., et al. (See Hoffman, A. D., assignor.)					
5, 352	Liebrich, C., deceased, by S. Croft and J. C. Schuellermann, executors, and assignors to L. Hillebrand and D. Wolf, Philadelphia, Pa. Hasp for trunk-locks..... (Reissue)	Apr. 15, 1873	652	205	3	435
	Liedbeck, A. (See Norrbin & Ohlsson, assignors.)					
5, 652	Lightfoot, B. H., Philadelphia, Pa. Treating tanned leather..... (Reissue)	Nov. 11, 1873	366	.....	4	519
	Lighthall, J. A. (See Beckman, J. V., assignor.)					
138, 667	Likar, F. C., Baltimore, Md. Safety-hook for pocket-hooks.....	May 6, 1873	178	57	3	512
143, 086	Likes, M., assignor to self and J. H. Barr, Mansfield, Ohio. Wagon-seat.....	Sept. 23, 1873	676	233	4	329
	Lillard, D. (See Nance & Lillard.)					
6, 484	Lilley, C. S., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet. (Design)	Mar. 4, 1873	.....	.....	3	245
6, 485	Same..... same..... (Design)	Mar. 4, 1873	.....	.....	3	245
138, 415	Lilley, H. H. V., Milford, Mass. Lamp-filler.....	Apr. 29, 1873	1,063	334	3	485
	Lilley, J. W. (See Buell & Lilley.)					
	Lilliendahl, E. M., et al. (See Clark & Lilliendahl, assignors.)					
	Lilliendahl, W. A. (See Clark & Lilliendahl.)					
145, 210	Linck, M., Danville, Ill. Vehicle-wheel.....	Dec. 2, 1873	162	56	4	508
139, 679	Lincoln, G. T., Leominster, Mass. Milking-pail.....	June 10, 1873	920	71	3	642
142, 247	Same..... Milking-stool.....	Aug. 26, 1873	776	255	4	225
	Lincoln, J. B. (See Clough & Lincoln.)					
137, 141	Lincoln, J. B., assignor to self and J. M. Sayles, Providence, R. I. Sewing-machine caster.....	Mar. 25, 1873	717	238	3	332
140, 584	Lincoln, J. B., and C. F. Clough, Providence, R. I. Sewing-machine.....	July 8, 1873	221	74	4	38
	Lincoln, J. D., et al. (See Pope, F. L., assignor.)					
	Lincoln, W. S. (See Rayer & Lincoln.)					
137, 007	Lincoln, W. S., and W. A. Rayer, Boston, Mass. Sewing-machine.....	Mar. 18, 1873	557	195	3	311
135, 825	Lindelof, A., Brooklyn, N. Y. Road-roller.....	Feb. 11, 1873	408	132	3	171
135, 567	Lindemann, O., New York, N. Y. Bird-cage.....	Feb. 4, 1873	160	52	3	140
145, 579	Linden, N., Chicago, Ill. Stove-pipe thimble.....	Dec. 16, 1873	493	162	4	649
140, 146	Linderoos, G., Point Arena, Cal. Adding-machine.....	June 24, 1873	665	209	3	694
137, 555	Lindley, N. H., Bridgeport, Conn. Well-curb.....	Apr. 8, 1873	258	79	3	339
145, 113	Lindner, G. H., Brooklyn, N. Y. Sleeping-car.....	Dec. 2, 1873	66	21	4	590
	Lindsay, C. R. (See Proctor, J. K., assignor.)					
	Same..... same..... (Reissue.)					
141, 149	Lindsay, G., Belfast, Ireland. Device for increasing the friction of helical gearing.....	July 22, 1873	743	245	4	97
141, 446	Lindsay, J., New York, N. Y. Carpet-stretcher.....	Aug. 5, 1873	32	10	4	137
	Lindsay, J. P. (See Leonard, G. F., assignor.)					
137, 851	Lindsey, C. D., Cincinnati, Ohio. Paper-file.....	Apr. 15, 1873	528	165	3	424
136, 250	Lindsey, L. T., Jackson, Tenn. Transmitter for printing-telegraph.....	Feb. 25, 1873	793	257	3	227
136, 251	Same..... Telegraph-repeater.....	Feb. 25, 1873	795	258	3	227
136, 329	Same..... Electro-magnetic motor for printing-telegraphs, &c.....	Feb. 25, 1873	863	278	3	233
143, 700	Same..... Circuit for printing-telegraphs.....	Oct. 14, 1873	280	93	4	411
143, 701	Same..... Regulator for printing-telegraphs.....	Oct. 14, 1873	282	93	4	411
143, 702	Same..... Printing-telegraph.....	Oct. 14, 1873	283	93, 94	4	411
139, 169	Lindsley, A. E., Paw Paw, Mich. Post-hole digger.....	May 20, 1873	646	202	3	573
143, 987	Lindsley, L., and J. Mackintosh, Pawtucket, R. I. Lining for horse-collars, &c.....	Oct. 28, 1873	570	190	4	455
141, 801	Lindsley, W. D., assignor to self, E. V. Snively, Wathena, Kans., and L. E. Hedges, Frederick, Md. Lamp-extinguisher.....	Aug. 12, 1873	360	118	4	172
142, 030	Same..... Railway rail-joints.....	Aug. 19, 1873	569	188	4	198
142, 843	Line, C. O., Indianapolis, Ind. Supplementary oven for cooking-stoves.....	Sept. 2, 1873	144	47	4	253
145, 954	Lingenfelter, H. J., Glen, N. Y. Portable furnace.....	Dec. 30, 1873	851	277	4	701
145, 064	Linn, W. G., Bloomfield, Iowa. Telegraph cut-out.....	Dec. 2, 1873	23	8	4	587
141, 720	Linscott, J. M., Buxton, Me. Loom set-off mechanism.....	Aug. 12, 1873	283	93	4	166
134, 994	Linson, E., Shoemakerstown, Pa. Reversible curb-bricks.....	Jan. 21, 1873	468	150	3	73
139, 589	Linthicum, J. F., assignor of one-fourth interest to I. Gilchrist, Vallejo, Cal. Railway-switch.....	June 3, 1873	126	42	3	619
145, 114	Linville, J. H., Philadelphia, Pa. Truss-frame for bridge.....	Dec. 2, 1873	67	22	4	591
	Lippincott, C. & Co. (See Patterson, J., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
6, 541	Lippincott, C., and J. Patterson, Philadelphia, Pa. Soda-water apparatus (Design)	Apr. 1, 1873			3	356
6, 542	Same same (Design)	Apr. 1, 1873			3	356
6, 543	Same same (Design)	Apr. 1, 1873			3	356
6, 544	Same Tumbler-holder (Design)	Apr. 1, 1873			3	356
140, 512	Same Fire-extinguisher	July 1, 1873	145	50	4	20
136, 740	Lippincott, S. T., Elizabeth, N. J. Window-screen	Mar. 11, 1873	352	116	3	283
143, 359	Lippitt, H., trustee. (See Vanstone, S., assignor.)					
144, 911	Lippmann, P., New York, N. Y. Corset-clasp	Sept. 30, 1873	916	311	4	365
144, 683	Same Skeleton-skirt	Nov. 25, 1873	646	290	4	565
137, 695	Lippoldt, E., Brighton, Ill. Harvester-rake	Nov. 18, 1873	447	151	4	537
135, 923	Lippy, D., and J. S. Blymer, Mansfield, Ohio. Thrashing-machine	Apr. 8, 1873	380	{ 117 118 }	3	369
140, 513	Liston, R., Albany, N. Y. Safety-hatch for railway-cars	Feb. 18, 1873	501	163	3	193
6, 359	Litchfield, L., and J. S. Corbin, Gouverneur, N. Y. Horse hay-rake	July 1, 1873	145	50	4	20
6, 735	Little, A., New York, N. Y. Printing-type (Design)	Jan. 21, 1873			3	71
6, 761	Same same (Design)	July 1, 1873			4	7
	Same same (Design)	July 8, 1873			4	37
	Little, C. L. (See Merriam & Little) (Design)					
	Little, E. (See Baily, A. S., assignor.)					
	Little, E. C. (See Nation & Little)					
142, 707	Little, E. C., and D. H. Nation, Saint Louis, Mo. Heating-stove	Sept. 9, 1873	343	115	4	281
5, 287	Little, G., Rutherford Park, N. J. Printing-telegraph (Reissue)	Feb. 4, 1873	216	67	3	144
137, 456	Same Burglar-proof door, safe, &c	Apr. 1, 1873	159	50	3	370
142, 484	Same Transmitter and receiver for automatic telegraphs	Sept. 2, 1873	145	47, 48	4	253
142, 485	Same Perforator for automatic telegraphs	Sept. 2, 1873	147	48	4	254
142, 486	Same Telegraph-apparatus	Sept. 2, 1873	148	49	4	254
	Little, G. A., et al. (See Hoyt, F. A., assignor.)					
137, 852	Little, J., Newburgh, N. Y. Machine for grinding horseshoe-calks	Apr. 15, 1873	529	165	3	424
140, 147	Little, J. A., Cartersburgh, Ind. Wire fence	June 24, 1873	667	209	3	694
136, 441	Little, J. R., assignor of one-half interest to C. A. Dunn, Monmouth, Ill. Steam vacuum-pump	Mar. 4, 1873	75	26	3	251
140, 052	Little, S. H., Rosemond, Ill. Street-railway car	June 17, 1873	563	177	3	678
143, 360	Little, S. H., assignor of one-half interest to W. D. Little, Rosemond, Ill. Fare-box	Sept. 30, 1873	917	311	4	365
	Little, W. D. (See Little, S. H., assignor.)					
137, 008	Littlefield, C. B., Manchester, N. H. Pill-making machine	Mar. 12, 1873	589	196	3	311
138, 093	Littlefield, D. G., Albany, N. Y. Cooking-stove	Apr. 22, 1873	755	239	3	452
139, 730	Same Reservoir cooking-stove	June 10, 1873	264	83	3	646
	Littlejohn, H., deceased, by W. Gurley, Troy, and E. Waters, Lansingburgh, N. Y., executors. Machine for crozing and chamfering barrels (Extension)	Mar. 1, 1873			3	218
138, 568	Littlejohn, L., New York, N. Y. Bung-bush inserter	May 6, 1873	92	29	3	505
141, 511	Same Tool for seating bung-busher	Aug. 5, 1873	90	28	4	142
145, 807	Same Bung-bush inserter	Dec. 23, 1873	699	229	4	678
138, 168	Litty, M., Williamsville, Neb. Reciprocating churn	Apr. 22, 1873	815	259	3	457
143, 361	Livermore, J. C., Boston, Mass. Skirt-protector	Sept. 30, 1873	918	311	4	365
	Livingston, G. P. (See Zeh, Livingston & Cullings.)					
137, 009	Livingstone, W., Brooklyn, assignor to J. H. Whitney, New York, N. Y. Manufacture of bolts and rivets	Mar. 12, 1873	589	196	3	311
135, 650	Lloyd, E., Pittsburgh, Pa. Puddling furnace	Feb. 11, 1873	250	79	3	159
	Lloyd, F. (See Tucker, W. B., assignor.)					
143, 828	Lloyd, R., Cleveland, Ohio. Car-coupling	Oct. 21, 1873	413	138	4	432
139, 798	Lobdell, G. G., assignor to self and W. Stuart, Wilmington, Del. Casting chilled rolls	June 10, 1873	336	104	3	651
144, 778	Lobdell, G. G., Wilmington, Del. Steam-boiler	Nov. 18, 1873	525	179	4	544
	Lock, J., et al. (See Cooper, S. L., assignor.)					
5, 543	Locke, H. H., Pleasantville, Pa., assignor to D. Bly, Rochester, N. Y. Pump-rod attachment	Aug. 19, 1873	621	205	4	202
138, 903	Locke, J., Lewisburgh, Pa. Cheese-cutter	May 13, 1873	395	124	3	540
6, 997	Locke, J. R., Amesbury, Mass. Carriage-wheel hub (Design)	Nov. 18, 1873			4	534
	Locke, L. M. (See Letton, R. E., assignor.)					
135, 826	Locke, S. D., Hoosick Falls, N. Y. Grain-binder	Feb. 11, 1873	409	132	3	171
139, 008	Same same	May 20, 1873	495	156	3	561
142, 798	Locke, S. D., assignor to W. A. Wood, Hoosick Falls, N. Y. Harvester-rake	Sept. 16, 1873	431	146	4	299
	Locke Slate Company. (See Shenton, F., assignor.)					
	Locken, J., et al. (See Wilson, A., assignor.)					
135, 651	Lockwood, C. E., Bridgeport, Conn. Lunch-box	Feb. 11, 1873	251	79	3	159
136, 232	Lockwood, E. W., Middletown, Del. Box for assorting peaches	Feb. 25, 1873	796	258	3	227
143, 829	Lockwood, F. A., Winthrop, Mass. Machine for scouring, glassing, or setting leather	Oct. 21, 1873	414	{ 138 139 }	4	432
	Lockwood, G. E. (See Lockwood, J. F. & G. E.)					
139, 510	Lockwood, G. W., and A. Carter, assignors to C. C. Carpenter & Co., New York, N. Y. Hoop-skirt	June 3, 1873	58	19	3	613
142, 248	Lockwood, H. C., Baltimore, Md. Coffee-package	Aug. 26, 1873	777	256	4	235
145, 890	Same Coffee-roaster	Dec. 23, 1873	763	249	4	683
138, 416	Lockwood, H. D., Charlestown, Mass. Atomizer-bulb	Apr. 29, 1873	1,064	335	3	485
138, 417	Same Fountain-syringe	Apr. 29, 1873	1,064	335	3	485
142, 545	Lockwood, J. F. & G. E., Taylorville, Ill. Carbureter	Sept. 2, 1873	200	65	4	258
	Lockwood, R. B., et al. (See Woodhouse, J. V., assignor.)					
137, 556	Lockwood, R. M., assignor to W. H. Sawyer, New York, N. Y., and F. L. Pope, Elizabeth, N. J. Galvanic battery	Apr. 8, 1873	259	80	3	369
141, 365	Lockwood, T. B., Smyrna, Del. Hoe	July 29, 1873	965	314	4	122
	Lockwood, W. E., Philadelphia, Pa. Lady's collar and cuff (Extension of No. 1,921)	Apr. 26, 1873			3	444
	Same same (Extension of No. 1,932)	Apr. 26, 1873			3	444
5, 259	Same same (Extension of No. 5,259)	Apr. 26, 1873			3	444
	Same same (Reissue)	Jan. 28, 1873	845	272	3	115
140, 053	Loeb, P., assignor of one-half interest to Dayton Malleable-Iron Company, Dayton, Ohio. Plow	June 17, 1873	563	178	3	678
137, 223	Loeffelholz, A., and A. Prier, Milwaukee, Wis. Lanterns	Mar. 25, 1873	794	262	3	332
145, 955	Loesch, F., assignor of one-half interest to G. Fisher, Buffalo, N. Y. Cooler for preserving beer and wine	Dec. 30, 1873	852	277	4	701
145, 354	Loetscher, C., Dubuque, Iowa. Mitering-machine	Dec. 9, 1873	286	95	4	621
	Lofink, F. (See Reiner, H. F., assignor.)					
145, 220	Logan, C. H. & F., Pawling Post-Office, Pa. Marker, seed-planter, and cultivator	Dec. 2, 1873	163	56	4	598
	Logan, F. (See Logan, C. H. & F.)					
142, 924	Logan, J., Jersey City, and J. E. Hart, Newark, N. J. Cartridge	Sept. 16, 1873	533	182	4	308
142, 708	Logan, J. B., Baltimore, Md. Lock for sewing-machine tables, &c	Sept. 9, 1873	344	115	4	282

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gette.	
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141, 150	Logan, A. W. A., Rochdale, England. Molding pipes	July 22, 1873	743	245	4	97
145, 956	Loggins, J. G., and P. P. Wilkins, Williston, Vt. Hoop-lock cutter	Dec. 30, 1873	853	277	4	701
141, 447	Logne, F. M., Setartia, Missa. Bale-band stretcher	Aug. 5, 1873	33	11	4	132
137, 010	Lohne, C., Springfield, Ohio. Rock-drilling machine	Mar. 18, 1873	591	196	3	311
137, 937	Lomas, J., Kellyville, Pa. Shedding mechanism for looms	Apr. 15, 1873	597	188	3	430
6, 603	Lomas, J. R., assignor to B. Shoninger, New Haven, Conn. Reel-organ case (Design)	Apr. 22, 1873			3	444
140, 054	Same. Pedestal for stool and tables	June 17, 1873	564	178	3	673
141, 282	Same. Reel-organ swell	July 29, 1873	862	289	4	116
137, 011	Lomax, A. P., Warsaw, Ill. Excavator	Mar. 18, 1873	592	196	3	311
143, 639	Lomax, G. H., Somerville, Mass. Mold for glass ware	Oct. 14, 1873	213	72	4	406
144, 116	Lombard, E., assignor to self and A. H. Colby, Plymouth, Mich. Reciprocating winnower	Oct. 28, 1873	681	225	4	464
144, 398	Lombard, H., J. P. Morrill, and L. A. Sweatt, San Francisco, Cal. Machine for cutting cobble-stones	Nov. 11, 1873	199	67	4	506
	Lombard, N. C., trustee. (See Lambert, R. C., assignor.)					
	Lomont, F. T. (See Bayliss, Brown & Lomont.)					
	Lomont, F. T., et al. (See Hodges, P. F., assignor.)					
	Lones, J., et al. (See Lones, Vernon & Holden.)					
145, 510	Lonea, J. C. and J. C. Vernon, and E. Holden, Smethwick, England. Manufacture of carriage-axles	Dec. 16, 1873	433	{ 141 142 }	4	644
	Long & Allstater. (See Allstater, It., assignor.)					
	Long & Allstater. (See Long, J. M., assignor.)					
	Long & Brothara. (See Long, C. R., assignor.)					
145, 511	Long, C. B., Worcester, Mass. Machine for bending chain-links	Dec. 16, 1873	436	142	4	644
137, 012	Long, C. P., and C. N. McEvers, Murrayville, Ill. Windmill	Mar. 18, 1873	593	197	3	311
137, 613	Long, C. R., assignor to Long & Brothara, Louisville, Ky. Knock-down chair	Apr. 8, 1873	307	95	3	393
135, 790	Long, G. W., Delaware Centre, Iowa. Apparatus for loading and unloading hay	Feb. 11, 1873	312	99	3	164
142, 638	Same. Sling for loading and unloading hay, &c.	Sept. 9, 1873	285	93	4	277
143, 581	Long, J., Mechanicsburgh, Pa. Fire and water proof roof	Oct. 14, 1873	172	58	4	403
136, 253	Long, J. M., assignor to Long & Allstater, Hamilton, Ohio. Power-hammer	Feb. 25, 1873	797	{ 258 259 }	3	228
138, 033	Long, N., Muncie, Ind. Automatic gate	Apr. 22, 1873	703	222	3	448
139, 320	Long, P., assignor of one-half interest to J. M. Phillips, Penn Township, Pa. Cultivator	May 27, 1873	791	252	3	592
145, 355	Long, S., Mayville, Ohio. Cooking stove	Dec. 9, 1873	287	96	4	621
140, 379	Long, S. F., Cleveland, Ohio. Combined shirt-bosom support and shoulder-braces	July 1, 1873	37	12	4	11
144, 992	Long, S. W., assignor to self and T. H. Guthrie, Owensborough, Ky. Machine for tenoning cogs	Nov. 25, 1873	715	242	4	571
140, 286	Longcor, A. and J. B., Paw Paw, Mich. Fruit-ladder	June 24, 1873	783	248	3	704
	Longcor, J. B. (See Longcor, A. and J. B.)					
	Longden, C. E. (See Collins & Longden.)					
135, 227	Longfellow, H. N., Lawrence, Mass. Hot-air furnace	Jan. 22, 1873	690	222	3	103
145, 665	Longley, A. H., and E. R. Stickney, Springfield, Mass. Chemical compound for cleaning jewelry, diamonds, &c.	Dec. 2, 1873	23		4	587
	Longley, C. H., et al. (See Clark, C. H., assignor.)					
139, 901	Longwell, H., Mansfield, Pa. Boring-machine	June 17, 1873	438	136	3	667
134, 686	Lonsky, A., Hoboken, N. J. Apparatus and process for revivifying bone-black	Jan. 7, 1873	177	58	3	21
134, 687	Loofbourrow, D., Hillsborough, Iowa. Bee-hive	Jan. 7, 1873	178	58	3	21
141, 652	Look, O., Bridgeport, Conn. Wheel for vehicles	Aug. 12, 1873	228	72	4	161
	Loomer, A. F. (See Loomer, L. H. and A. F., and Smith.)					
145, 665	Loomer, L. H. and A. F., and L. M. Smith, assignors to L. L. Loomer & Sons, Birmingham, Conn. Corset	Dec. 16, 1873	566	186	4	635
	Loomer, L. L., & Sons. (See Loomer, L. H. and A. F., and Smith, assignor.)					
6, 964	Loomis, J. W., and A. T. Goodell, New York, N. Y. Breast-piu, &c. (Design)	Oct. 21, 1873			4	425
142, 709	Loomis, K. H., Cleveland, Ohio. Nut-lock	Sept. 9, 1873	344	116	4	222
145, 434	Loomis, M., Liberty Centre, Ohio. Gate	Dec. 9, 1873	354	118	4	626
139, 009	Looney, J. J., Saint Petersburg, Pa. Treating heavy petroleum	May 20, 1873	496		3	561
139, 010	Same. Cleaning oil-wells	May 20, 1873	497		3	561
145, 741	Lord, E., Portland, Me. Sofa-bedstead	Dec. 23, 1873	644	211	4	674
134, 688	Lord, G. E., Utica, N. Y. Rocking-chair	Jan. 7, 1873	179	58	3	21
	Lord, H. C., et al. (See Stephenson, W. O., assignor.)					
	Lord, I. C., et al. (See Richardson, J. D., assignor.)					
144, 399	Lord, J. P., Manchester, N. H. Key-cap for key-board instruments	Nov. 11, 1873	199	68	4	566
137, 783	Lord, T., assignor to self, J. Kelly, and H. J. Paine, Providence, R. I. Platon-rod packing	Apr. 15, 1873	470	147	3	419
145, 066	Lorenz, J., and H. F. W. Bender, Hamilton, Ohio. Refrigerator	Dec. 2, 1873	24	8	4	587
134, 689	Loretz, A. J. L., Brooklyn, N. Y. Steam-pumping engine	Jan. 7, 1873	180	58, 59	3	21
139, 070	Same. Compound steam-pump	May 20, 1873	551	173	3	565
139, 071	Same. Compound high and low pressure steam-pump	May 20, 1873	552	174	3	565
144, 852	Loretz, A. J. L., assignor of one-third interest to N. Hubbard, Brooklyn, N. Y. Combined quarter-connection and parallel-motion for engines	Nov. 25, 1873	602	205	4	561
136, 605	Lorey, W. F., Mendon, N. Y. Brush-ferrule	Mar. 11, 1873	238	81	3	274
134, 903	Lorton, A. H., New York, N. Y. Wash-stand	Jan. 14, 1873	376	120	3	50
	Loryea, A. M. (See Palmer, C. H., assignor.)					
137, 457	Losie Manufacturing Company. (See Losie, T. M., assignor.)					
	Losie, T. M., assignor to Losie Manufacturing Company, Elmira, N. Y. Adjustable stove-pipe cover	Apr. 1, 1873	159	51	3	370
141, 937	Lossie, W., Owensborough, Ky. Fire-place	Aug. 19, 1873	490	162	4	192
134, 904	Loth, H., Philadelphia, Pa. Sewing-machine table	Jan. 14, 1873	377	120	3	50
134, 905	Same. Same	Jan. 14, 1873	378	120	3	50
135, 827	Same. Same	Feb. 11, 1873	410	132	3	171
138, 904	Same. Folding-table, &c.	May 13, 1873	395	124	3	540
140, 929	Same. Sewing-machine stand	July 15, 1873	528	176	4	70
140, 930	Same. Compound hinge	July 15, 1873	529	177	4	70
	Lothrop, H. A. (See Watson, J. M., assignor.) (Reissue.)					
	Lots, W. H. (See Sontag & Lotz.) (Extension.)					
	Loucks, W., executor. (See Crowell & Smith.)					
	Loughery, J. S. (See Marston, T. P., assignor.)					
134, 755	Loughery, J. S., New York, N. Y. Tag-fastening	Jan. 14, 1873	245	80	3	40
	Loughlin, J., et al. (See Pritchard, T., assignor.)					
135, 828	Louhridge, W., Baltimore, Md. Steam and air brake	Feb. 11, 1873	410	133	3	171
143, 703	Louineau, B., Sables D'Olonnes, France. Domino	Oct. 14, 1873	287	94	4	412
135, 350	Lounsberry, N. O., Wilmington, Del. Machines for graining, pebbling, and softening skins and leather	Jan. 28, 1873	800	258	3	112
140, 633	Same. Machinery for pebbling and graining wet skins	July 8, 1873	264	89, 90	4	41
	Love Brothers. (See Love, S. Y., assignor.)					
135, 889	Love, J., Cusseta, Tex. Plow	Feb. 11, 1873	411	133	3	171
143, 915	Love, J. C., Philadelphia, Pa. Vapor-burner	Oct. 21, 1873	486	164	4	438

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143, 362	Love, S. Y., assignor to Love Brothers, Philadelphia, Pa. Lubricating compound.....	Sept. 30, 1873	919	4	365
139, 321	Love, W., McConnellsville, Ohio. Gaiter.....	May 27, 1873	791	252	3	592
144, 463	Love, W., Buffalo, N. Y. Slide-valve for steam-engine.....	Nov. 11, 1873	253	85	4	510
144, 684	Lovejoy, A. J., assignor of one-half interest to M. Whithead, Augusta, Me. Storm window-fastening.....	Nov. 18, 1873	448	152	4	537
139, 254	Lovejoy, I. A., Lynn, Mass. Hook for hanging flower-pots, &c.....	May 27, 1873	734	232	3	588
144, 377	Lovell, A. A., Worcester, Mass. Cement-pipe trap.....	Nov. 4, 1873	90	30	4	485
142, 249	Lovell, E., St. Louis, Mo. Sofa-bedstead.....	Aug. 26, 1873	777	256	4	225
136, 077	Lovell, G. W. C., Clarksville, Tenn. Case for heating sad-irons.....	Feb. 18, 1873	632	207	3	303
136, 526	Same..... Sad-iron.....	Mar. 4, 1873	156	50	3	258
136, 659	Lovell, M. N., assignor of one-half interest to F. F. Adams, Erie, Pa. Step-ladder.....	Mar. 11, 1873	264	95	3	277
139, 511	Lovell, M. N., Erie, Pa. Washing-machine.....	June 3, 1873	59	19	3	613
136, 842	Lovett, A. M., Zanesville, Ohio. Animal-trap.....	Mar. 18, 1873	449	149	3	306
137, 696	Lovett, G. L., Fitchburgh, Mass. Machine for washing paper-stock.....	Apr. 8, 1873	361	118	3	399
134, 906	Lovett, T. R., Philadelphia, Pa. Street-railway.....	Jan. 14, 1873	378	120	3	50
136, 078	Lovewell, S. K. (See Lamb, L. L., assignor.)					
136, 078	Low, J., Steubenville, Ohio. Thill-coupling.....	Feb. 18, 1873	633	208	3	203
135, 830	Low, J. B., Ravenna, Ohio. Screw-cutting device.....	Feb. 11, 1873	412	133	3	171
135, 481	Low, W. R., Sandwich, Ill. Binder's stand and table for harvesters.....	Feb. 4, 1873	82	26	3	134
139, 721	Lowden, G., Brooklyn, N. Y. Car-starter.....	June 10, 1873	265	83	3	646
142, 858	Lowder, S. (See Crippen, I. A., assignor.)					
142, 858	Lowe, H. C., assignor to self and J. B. Haley, Northeast, Md. Nut-lock.....	Sept. 16, 1873	480	164	4	303
138, 264	Lowe, J., assignor to the Albert Field Tack Company, Taunton, Mass. Machine for cutting out planchets of sheet metal.....	Apr. 29, 1873	930	283 294	3	474
143, 170	Lowe, J. A., New York. Molding water-traps..... (Extension)	Sept. 29, 1873			4	322
138, 668	Same..... Water-trap..... (Extension)	Dec. 20, 1873			4	640
143, 170	Lowe, J. T. (See Thomas, W. E., assignor.)					
138, 668	Lowe, J. W., Ashland, Ohio. Horse hay-fork.....	Sept. 23, 1873	739	254	4	335
138, 668	Lowe, P. W., assignor to self and E. W. Doolittle, Plantsville, Conn. Die for forging stay-ends.....	May 6, 1873	179	57	3	512
	Lowell Manufacturing Company. (See Campbell, R. R., assignor.)..... (Design.)					
	Same..... (See Christie, J. M., assignor.)..... (Design.)					
	Same..... (See Hamer, J., assignor.)..... (Design.)					
	Same..... (See Lilley, C. S., assignor.)..... (Design.)					
	Same..... (See McNair, D., assignor.)..... (Design.)					
138, 293	Loewenstein, W., Keokuk, Iowa. Wagon-axle lubricator.....	Apr. 29, 1873	929	293	3	474
142, 859	Lowman, H. L., Birmingham, Conn. Manufacture of shovels, &c.....	Sept. 16, 1873	480	164	4	303
145, 435	Same..... Trunk.....	Dec. 9, 1873	355	118	4	626
142, 487	Lownda, S. (See Chadwick & Lownda.)					
142, 487	Lowrie, H. C., Fort Wayne, Ind. Car-coupling.....	Sept. 2, 1873	149	49	4	254
145, 881	Lowrie, H. C., assignor of one-half interest to W. A. Roberts and D. Gibson, Fort Wayne, Ind. Draw head for railway-cars.....	Dec. 23, 1873	765	250	4	683
	Lowry, J. L., Pittsburgh, Pa. Fire-plug..... (Extension)	Feb. 22, 1873			3	156
	Lozier, S., et al. (See Broadbooks, P., assignor.)					
	Lubricating Car-Axle Company. (See Johnson, J. G., assignor.)					
135, 482	Lucas, B. (See Lucas, N., assignor.)					
135, 482	Lucas, H. S., Chester, Mass. Machine for grinding emery.....	Feb. 4, 1873	83	26	3	134
138, 334	Lucas, I. (See Ernst & Lucas.)					
141, 802	Lucas, J., Hastings, Minn. Rotary steam-engine.....	Apr. 29, 1873	995	313	3	479
139, 011	Lucas, J., Gibbstown, N. J., assignor to self and W. H. Lucas, Philadelphia, Pa. Paints.....	Aug. 12, 1873	361	.....	4	172
145, 742	Lucas, J. B., Portland, Me. Razor-strap.....	May 20, 1873	497	156	3	561
143, 020	Same..... same.....	Dec. 23, 1873	645	211	4	674
144, 117	Lucas, N., Norwich, assignor of one-half interest to B. Lucas, Preston, Conn. Condenser for carding-machines.....	Sept. 23, 1873	622	211	4	325
144, 993	Lucas, T. E., Chesterfield, N. C. Hoop-lock.....	Oct. 28, 1873	681	225	4	464
136, 660	Lucas, W. H. (See Lucas, J., assignor.)					
141, 938	Luce, G., assignor to Luce, Son & Rozan, Marselles, France. Apparatus for refining and desilvering lead.....	Nov. 25, 1873	716	242	4	571
141, 938	Luce, G. D., New Orleans, La. Magazine fire-arm.....	Mar. 11, 1873	285	95	3	277
141, 938	Luce, S., assignor to W. Wallace, Syracuse, N. Y. Harvester.....	Aug. 19, 1873	491	162	4	192
141, 060	Luce, Son & Rozan. (See Luce, G., assignor.)					
141, 366	Lucetti, A., New York, N. Y. Ice-cream freezer.....	July 22, 1873	658	222	4	90
141, 228	Lucia, J., Little Suamico, Wis. Machine for dressing the teeth of saws.....	July 29, 1873	966	314	4	122
144, 994	Luckey, M. M., Indianapolis, Ind. Trestle.....	July 29, 1873	832	272	4	111
138, 335	Lucus, W., Olive Green, Ohio. Farm-gate.....	Nov. 25, 1873	717	242	4	571
134, 812	Lucey, G., Mobile, Ala. Medical compound for treating rheumatism, &c.....	Apr. 29, 1873	996	.....	3	479
137, 458	Ludlow, W. D., New York, N. Y. Curtain-cord rack.....	Jan. 14, 1873	296	95	3	44
141, 653	Ludlow, W. I., Washington, D. C. Hinge.....	Apr. 1, 1873	160	51	3	370
142, 925	Ludwig, J. H. A., et al. (See Buckner, C., assignor.)					
142, 925	Luehmann, F., and C. Roehl, Chicago, Ill. Trick for carrying safes, &c.....	Aug. 12, 1873	298	72	4	161
142, 925	Lufbery, G. F., Montargis, France. Electrical stop for looms, &c.....	Sept. 16, 1873	534	182	4	308
142, 031	Lufkin, A. (See Rogan, D. H., assignor.)					
138, 569	Lufkin, C. M., & C. G. Allen, Barre, Mass. Horse hay-rack.....	Aug. 19, 1873	570	188	4	198
139, 404	Luks, E. C., Massillon, Ohio. Dinner-pail.....	May 6, 1873	93	29	3	505
145, 303	Lull, H., Hoboken, N. J. Curtain-cord fastener.....	May 27, 1873	869	278	3	599
143, 771	Lum, L. P., Newburgh, N. Y. Crimping-machine.....	Dec. 9, 1873	241	81	4	617
141, 512	Lumb, W. J., Zanesville, Ohio. Sealing-wax package.....	Oct. 21, 1873	365	121	4	428
139, 902	Lumbeck, J. B., Leon, Iowa. Compound for destroying insects, &c.....	Aug. 5, 1873	90	.....	4	142
139, 903	Lummus, W. W., Lynn, Mass. Composite beams.....	June 17, 1873	439	136	3	667
139, 904	Same..... Beam for floors.....	June 17, 1873	439	137	3	667
136, 843	Same..... same.....	June 17, 1873	440	137	3	667
143, 171	Lundbergh, A., Chicago, Ill. Folding-lounge.....	Mar. 18, 1873	449	149	3	300
137, 375	Lundgren, J., assignor to J. R. Cole, New York, N. Y. Steam cooking-apparatus.....	Sept. 23, 1873	739	255	4	335
6, 545	Lundquist, E., Grass Valley, Cal. Process for separating gold and silver from base metals.....	Apr. 1, 1873	86	.....	3	364
138, 169	Lunkenheimer, F., Cincinnati, Ohio, and J. Meehan, Covington, Ky. Lubricating-cup..... (Design)	Apr. 1, 1873			3	357
146, 083	Same..... Lubricator.....	Apr. 23, 1873	815	259	3	457
141, 939	Lunquest, J. M., Atlanta, Ga. Garden-implement.....	Dec. 30, 1873	960	310	4	710
141, 939	Luppert, V., & P. St. Pierre, Williamsport, Pa. Saw.....	Aug. 19, 1873	491	162	4	192
136, 741	Lupprian, C. (See Günther, H., assignor.)					
141, 151	Luquet, A., San Francisco, Cal. Ageing wines and liquors.....	Mar. 11, 1873	354	117	3	283
145, 666	Lusby, C. C., Philadelphia, Pa. Umbrella.....	July 22, 1873	754	246	4	97
145, 666	Lusby, C. C., assignor of one-half interest to W. J. Chambers, Philadelphia, Pa. Fan.....	Dec. 16, 1873	567	186	4	655

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr g.	Vol.	Page.
139, 405	Lueby, C. C., and W. W. Winter, Philadelphia, Pa. Umbrella-tip retainer.....	May 27, 1873	869	278	3	599
144, 464	Luther, J., assignor of one-half interest to Richards & Fox, Buchanan, Mich. Carpet-stretcher.....	Nov. 11, 1873	253	85	4	510
5, 386	Luther, J. H., Petroleum Centre, Pa. Grab-tool for oil-wells..... (Reissue)	Apr. 29, 1873	1, 118	353	3	489
134, 995	Same..... Well-packing.....	Jan. 21, 1873	468	150	3	73
141, 940	Luther, J. P., Berlin, Wis. Turning-lathe.....	Aug. 19, 1873	492	162	4	192
134, 907	Luttgens, H. A., Paterson, N. J. Fifth-wheel for carriages.....	Jan. 14, 1873	379	121	3	50
134, 996	Same..... Wagon-body.....	Jan. 21, 1873	469	151	3	73
	Lutz, J. A. (See Waddell, W. H. & L., and Lutz.)					
	Lyde, G. F. (See Richards, J. B., assignor.)					
142, 573	Lydiatte, J., Montreal, Canada, assignor to New England Glass Company, Boston, Mass. Method of treating glass-molds.....	Sept. 9, 1873	233	76	4	273
144, 779	Lyle, J. A., Bridgeport, Ohio. Fly-brush.....	Nov. 18, 1873	527	179	4	544
136, 844	Lyle, R., et al. (See Weagant, H. L., assignor.)					
146, 082	Lyles, H., Washington, D. C. Fire-escape ladder.....	Mar. 18, 1873	450	149	3	300
143, 172	Lyman, J. B., Rockford, Ill. Carbureter.....	Dec. 30, 1873	959	310	4	709
139, 255	Lynch, E. P., Davenport, Iowa. Cultivator.....	Sept. 23, 1873	740	255	4	335
138, 336	Lynch, M. A., Boston, Mass. Lamp-lighting apparatus.....	May 27, 1873	734	232	3	5e8
	Lynch, P. P., Newark, N. J. Hinge.....	Apr. 29, 1873	996	314	3	479
145, 743	Lynde, J. D., Philadelphia, Pa. Sectional steam-generator.....	Dec. 23, 1873	645	{ 211 212 }	4	624
	Lyon and Fellows Manufacturing Company. (See Hatch, G. W., assignor.)					
144, 212	Lyon, C. B., Buffalo, N. Y. Revolving blackboard.....	Nov. 4, 1873	38	11	4	481
	Lyon, H. A., et al. (See Palmer, G. N., assignor.)					
135, 435	Lyon, I. W., Brooklyn, N. Y. Dentist's stool.....	Feb. 4, 1873	40	12	3	130
135, 924	Lyon, I. W., New York, N. Y. Dentist's stool.....	Feb. 18, 1873	502	163	3	193
139, 905	Lyon, V. H., Indianapolis, Ind. Bottle.....	June 17, 1873	440	137	3	667
142, 926	Lyon, W., Mamaroneck, assignor to the Biddle Manufacturing Company, New York, N. Y. Combined punching and shearing machine.....	Sept. 16, 1873	535	183	4	308
138, 418	Lyons, A., and I. B. Abrahams, New York, N. Y. Pin-hinge.....	Apr. 29, 1873	1, 065	335	3	485
142, 710	Lyons, J., Chippewa, Canada. Boot and shoe stretcher.....	Sept. 9, 1873	345	116	4	292
134, 170	Lyons, M. F., New York, N. Y. Plaster wall.....	Apr. 22, 1873	817	260	3	457
144, 465	Lyte, J., Laurinburg, N. C. Fertilizer-distributor.....	Nov. 11, 1873	254	85	4	510
	Lyte, F. M. (See Storck & Lyte.)					
138, 905	Maas, A. W. M., Chicago, Ill. Brick-kiln.....	May 13, 1873	396	125	3	540
143, 916	Maass, F., Newark, N. J. Mold for fancy buttons.....	Oct. 21, 1873	487	164	4	438
140, 514	Mable, G., Dixon, Ill. Windmill.....	July 1, 1873	146	50	4	20
139, 512	Macdonald, C., Hoboken, and C. O. H. Fritzsche, Paterson, N. J. Turn-table.....	June 3, 1873	59	19, 20	3	613
143, 917	MacDonald, J., Boston, Mass. Machine for boring and facing cylinders.....	Oct. 21, 1873	487	164	4	438
135, 228	Macdonald, J. K., Newark, N. J. Security-hook.....	Jan. 28, 1873	691	222	3	408
144, 400	Macdonald, R., Hull, England. Mold for oil-cakes.....	Nov. 11, 1873	200	68	4	506
139, 680	Macfarlane, I. G., Wilkingsburgh, Pa. Railway-car.....	June 10, 1873	221	71	3	643
145, 744	Macfarlane, I. G., Pittsburgh, Pa. Heating-stove.....	Dec. 23, 1873	646	212	4	674
137, 142	Machlet, G., Newark, N. J. Doughnut-mold.....	Mar. 25, 1873	718	238	3	332
137, 013	Mack, B. L., assignor to self and T. M. Dickinson, Essex, Conn. Earth-closet.....	Mar. 18, 1873	594	197	3	311
139, 012	Mack, C. H., New York, N. Y. Porcelain blocks for dental fillings.....	May 20, 1873	498	157	3	561
144, 912	Mack, D., Barnesville, Kans. Garden-cultivating implement.....	Nov. 25, 1873	647	220	4	565
145, 957	Mack, E. E., Albany, N. Y. Cuff.....	Dec. 30, 1873	854	278	4	701
	Mack, S. F. (See Barker & Mack.)					
139, 799	Mack, W. B., Boston, Mass. Ejector.....	June 10, 1873	337	105	3	652
140, 783	Mackay, D., Chicago, Ill. Window-sash and frame.....	July 15, 1873	392	135	4	60
136, 529	Mackay, J., Dundas, Canada. Mill for grinding barley.....	Mar. 4, 1873	157	50, 51	3	258
145, 580	Mackay, P. N., San Francisco, Cal. Flux for treating ores and metals..... (Design.)	Dec. 16, 1873	494	.....	4	649
	MacKellar, Smiths & Jordan. (See Smith, R., assignor.)					
138, 510	MacKenzie, P. W., Blauveltville, N. Y. Cupola-furnace.....	May 6, 1873	37	12	3	
137, 459	Mackey, A., New York, N. Y. Sugar-drier.....	Apr. 1, 1873	161	51	3	370
	Mackey, G. S. (See Mackey, G. W. & G. S.)					
144, 780	Mackey, G. W. & G. S., Lathrop, Pa. Gate.....	Nov. 18, 1873	527	179	4	544
141, 654	Mackie, S. J., Westminster, England. Manufacture of gun-cotton.....	Aug. 12, 1873	230	.....	4	162
	Mackintosh, J. (See Lindsley & Mackintosh.)					
144, 689	MacLean, J. P., Brooklyn, N. Y. Corset-clasp.....	Nov. 18, 1873	452	153	4	538
	Maclure, J. (See Tompkins & Maclure)..... (Extension.)					
	Maclure, J., Newark, N. J. Machine for covering saddle-trees..... (Extension.)	Oct. 18, 1873	.....	.....	4	401
145, 808	Macomber, T. S., Hamilton, N. Y. Pie-marker.....	Dec. 23, 1873	700	229	4	678
145, 829	Macomber, W. C., Mystic River, Conn. Loom-shuttle-relief mechanism.....	Dec. 23, 1873	766	250	4	683
135, 994	Macowitzky, C. P., Corpus Christi, Tex. Vibrating propeller.....	Feb. 18, 1873	559	185	3	197
146, 009	Same..... Propulsion of vessels.....	Dec. 30, 1873	898	291	4	704
134, 908	MacVicar, P., Philadelphia, Pa. Apparatus for filing and binding papers.....	Jan. 14, 1873	380	121	3	50
	Macy, J. W. (See Pierson, Macy & Moore.)					
5, 415	Madden, J. W., and J. Dodsworth, Buffalo, N. Y., said Dodsworth assignor by mesne assignment to J. Hewitt. Fluting-machine..... (Reissue)	May 20, 1873	669	219	3	577
	Madell, J. B. (See Carpenter, C., Jr.)					
140, 287	Maertens, E., Philadelphia, Pa. Electrical stop-motion for machinery.....	June 24, 1873	783	248	3	704
6, 897	Maevers, W., New York, N. Y. Lamp-shade..... (Design.)	Sept. 30, 1873	.....	.....	4	354
	Magee Furnace Company. (See Magee, J., assignor.)					
	Same..... same..... (Design.)					
6, 979	Magee, J., Chelsea, Mass., assignor to the Magee Furnace Company. Heating-stove. (Design).....	Nov. 4, 1873	.....	.....	4	478
145, 512	Same..... Hot-air furnace.....	Dec. 16, 1873	437	{ 142 143 }	4	644
145, 513	Same..... same.....	Dec. 16, 1873	433	143	4	644
136, 845	Magee, P., New Orleans, La., Railway-track tamper.....	Mar. 18, 1873	452	150	3	300
138, 337	Mageean, M., and G. W. Marks, Chicago, Ill. Elevator.....	Apr. 29, 1873	997	314	3	480
	Magic Ruffie Company. (See Arnold, G. B., assignor.)..... (Disclaimer.)					
137, 853	Magie, J. K., Canton, Ill. Station-indicator.....	Apr. 15, 1873	530	165	3	424
135, 278	Magill, W., Port Deposit, Md. Base-burning fire-place heater.....	Jan. 28, 1873	736	227	3	107
134, 813	Magoun, T. P. I., Worcester, Mass. Fastener for meeting-rails of sashes.....	Jan. 14, 1873	297	96	3	44
136, 167	Same..... Folding table, &c.....	Feb. 25, 1873	728	235	3	222
136, 079	Magowan, A., Trenton, N. J. India-rubber spring.....	Feb. 18, 1873	633	208	3	203
137, 376	Maguire, C. W., Brooklyn, N. Y. Blacking-brush.....	Apr. 1, 1873	87	28	3	364
135, 040	Mahan, S., Cleveland, Ohio. Lap-board.....	Jan. 21, 1873	511	165	3	76
143, 918	Mahan, S. W., assignor to self and C. E. Cardell, Middlebury, Vt. Article of food from cider.....	Oct. 21, 1873	488	4	433

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Maburin, J. L. (See Thompson & Maburin.)					
	Maidhof, M., executrix. (See Boch, W.) (Extension.)					
146, 084	Main, R. P., Canton, N. Y. Milk-cooler	Dec. 30, 1873	961	310	4	710
5, 383	Maine, S. C., Boston, Mass., assignor by mesne assignment to Maine's Portable Ventilator Company. Ventilator	Apr. 22, 1873	869	275	3	461
142, 799	Maine, S. C., Boston, Mass. Car-ventilator	Sept. 16, 1873	432	146	4	299
	Maine's Portable Ventilator Company. (See Maine, S. C., assignor) (Reissue.)					
145, 221	Maitre, E., Vauxaules, France. Wooden panel	Dec. 2, 1873	164	56	4	596
142, 250	Majer, C., Brooklyn, N. Y. Machine for forming the backs of saws	Aug. 26, 1873	778	256	4	225
	Major, W. T., et al. (See Grotz, C., assignor.)					
142, 574	Malick, W., Erie, Pa. Machine for making staples	Sept. 9, 1873	234	76	4	273
144, 401	Same. Machine for pointing staples	Nov. 11, 1873	201	68	4	506
145, 514	Same. Till-alarm	Dec. 16, 1873	439	143	4	644
6, 429	Malkin, L. G., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	Feb. 18, 1873			3	189
6, 430	Same. same	Feb. 18, 1873			3	189
6, 524	Same. same	Mar. 25, 1873			3	225
6, 525	Same. same	Mar. 25, 1873			3	225
6, 604	Same. same	Apr. 22, 1873			3	444
6, 605	Same. same	Apr. 22, 1873			3	444
6, 934	Same. same	Oct. 7, 1873			4	380
138, 419	Mallett, F. W., New Haven, Conn. Machine for making needles	Apr. 29, 1873	1,065	{ 335 336 337 }	3	485
	Mallon, J. (See Von Phul & Mallon.)					
5, 512	Mallory, G. W., Mystic Bridge, Conn. Boat-lowering apparatus (Reissue.)	July 29, 1873	1,021	331	4	126
	Mallory, Wheeler & Co. (See Andrews, W. H., assignor.)					
	Same. same (Design.)					
136, 742	Malmström, P. E., and P. E. Dummer, New York, N. Y. Safety pocket-hook	Mar. 11, 1873	354	117	3	283
136, 336	Malone, M. C., Palmyra, Ill. Pruning-shears	Apr. 29, 1873	992	314	3	420
	Maloney, J., et al. (See Welch, K. P., assignor.)					
	Same. same (Reissue.)					
	Maloy, J. C. (See Miller, G. C., assignor.)					
143, 517	Maloy, J. C., Johnstown, Pa. Railway-ticket holder	Oct. 7, 1873	99	35	4	389
145, 067	Same. Car-coupling	Dec. 2, 1873	25	8	4	527
135, 229	Maloy, J. W., Boston, assignor to B. F. Larabee and S. H. Hodges, Lynn, Mass. Machine for burnishing and trimming the edges of boot and shoe soles	Jan. 28, 1873	692	222	3	103
136, 080	Same. Machine for trimming, &c., the edges of boot and shoe soles	Feb. 18, 1873	634	208	3	203
141, 655	Maltbie, P. L., Ramapo, New York, N. Y. Thill-coupling	Aug. 12, 1873	231	72	4	162
	Maltby, D. F., et al. (See Capewell, G. J., assignor.)					
143, 630	Maltby, P., Cleveland, Ohio. Registering steam-gage	Oct. 14, 1873	214	72	4	406
	Manahan, J. G., et al. (See Wynn, U., assignor.)					
135, 279	Mancha, J. F., Ridgely, Md. Bedstead-fastening	Jan. 28, 1873	737	237	3	107
	Manchester, F. O. (See Jenkins, N., assignor.)					
136, 526	Mangham, J. T., Gatesville, Tex. Apparatus for stretching wire fences	Mar. 14, 1873	159	51	3	258
139, 072	Mangold, S., New York, N. Y. Milk-boiler alarm	May 20, 1873	554	174	3	566
141, 283	Manico, E., London, England, assignor to E. Vergnes, New Orleans, La. Submarine foundation	July 29, 1873	883	289	4	116
	Manigle, E. M., Philadelphia, Pa. Scales (Extension.)	Sept. 6, 1873			4	240
138, 265	Manker, W. J., Sodalta, Mo. Car-axle box	Apr. 29, 1873	932	294	3	474
146, 010	Manley, W. R., New York, N. Y. Rotary engine	Dec. 30, 1873	889	{ 291 292 }	4	704
	Manly, M. M. (See Sellers & Manly.)					
134, 553	Manly, M. M., and S. Sellers, Philadelphia, Pa. Rolled-iron moldings	Jan. 7, 1873	48	15	3	11
139, 590	Mann, A. S., Pittsburgh, Pa. Sad, fluting, and band iron	June 3, 1873	127	42	3	619
141, 890	Same. Smoothing-iron	Aug. 19, 1873	445	145	4	188
144, 118	Same. Hand-washing rubber	Oct. 22, 1873	682	226	4	464
140, 716	Mann, A. S., Saint Louis, Mo. Plow	July 8, 1873	332	113	4	47
	Mann, D. (See Cubberley & Mann.)					
135, 230	Mann, E. D., Elyria, O. Railway-chair	Jan. 28, 1873	694	223	3	103
	Mann, H. (See Mann, J. F. & H.) (Design.)					
6, 800	Mann, J. F. & H., Brooklyn, N. Y. Clock-case	Aug. 12, 1873			4	159
135, 925	Mann, R. J., Burlington, Iowa. Construction of metallic sieves	Feb. 18, 1873	503	164	3	193
135, 926	Same. same	Feb. 18, 1873	503	164	3	193
143, 704	Manneck, H., New York, N. Y. Hinge	Oct. 14, 1873	288	94	4	412
5, 470	Manner, G. C., New York, N. Y. Upright piano (Reissue.)	July 1, 1873	198	66	4	24
137, 377	Manner, G. C., Mott Haven, N. Y. Upright-piano action	Apr. 1, 1873	87	22	3	264
141, 152	Manner, G. C., New York, N. Y. Piano	July 22, 1873	745	246	4	97
	Manning, Bowman & Co. (See Manning, E. B., assignor.)					
135, 231	Manning, C. H., Washington, D. C. Tau-valve	Jan. 28, 1873	694	223	3	103
135, 232	Same. same	Jan. 28, 1873	696	223	3	104
138, 906	Same. same	May 13, 1873	397	125	3	540
145, 883	Manning, D. R., Brooklyn, assignor to J. J. & W. M. Walton, New York, N. Y. Combined paper-weight and sponge-holder	Dec. 23, 1873	767	250	4	683
6, 898	Manning, E. B., Middletown, Conn. Tea and coffee pot lase (Design.)	Sept. 30, 1873			4	354
140, 515	Manning, E. B., assignor to Manning, Bowman & Co., West Meriden, Conn. Molasses-pitcher	July 1, 1873	148	51	4	20
	Manning, F. (See Morgan, C., assignor.)					
139, 591	Manning, G. S., Danville, Ill. Lady's work-stand	June 3, 1873	128	42	3	619
145, 515	Manning, I., assignor to M. S. Frink, Philadelphia, Pa. Sewing-machine	Dec. 16, 1873	440	144	4	644
134, 690	Manning, J., Rockport, assignor to C. J. Norwood, Ipswich, and J. J. & W. N. Manning, Rockport, Mass. Manufacture of isinglass	Jan. 7, 1873	181	59	3	21
	Manning, J. J., et al. (See Manning, J., assignor.)					
139, 170	Manning, R. S., Trenton, N. J. Sealing fruit-jars	May 20, 1873	647	202	3	573
	Manning, W. D., et al. (See Manning, J., assignor.)					
144, 781	Manning, W. N., Rockport, Mass. Reed-organ action	Nov. 18, 1873	598	179	4	544
135, 041	Manny, J. P., Rockford, Ill. Harvester	Jan. 21, 1873	512	{ 185 186 }	3	76
139, 471	Same. Cultivator	June 3, 1873	24	7, 8	3	611
142, 032	Mansfield, E., Orno, Ma. Cant-hook	Aug. 19, 1873	573	189	4	199
135, 483	Mansfield, J., Jefferson, Wis. Cooking utensil	Feb. 4, 1873	84	26	3	134
137, 224	Mansfield, P. R., Lancaster, Mass. Feed and delivery apron	Mar. 25, 1873	795	262	3	338
	Mansfield, W. (See Sanborn & Mansfield) (Extension.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 743	Manson, G. W., assignor of one-half interest to A. A. Miller, Auburn, Me. Pegging-machine	Mar. 11, 1873	355	117	3	283
141, 367	Manson, G. W., Auburn, Me. Sewing-machine motor	July 29, 1873	966	314	4	122
140, 148	Mansure, R., Jr., assignor of one-half interest to G. Bates, Philadelphia, Pa. Vessel for paints, oils, varnish, &c.	June 24, 1873	667	209	3	694
135, 484	Manton, J. P. (See Remington, Thayer & Manton.)					
137, 697	Manuel, E., assignor to self and G. Guy, Milwaukee, Wis. Tube-cutter	Feb. 4, 1873	84	26	3	134
145, 516	Manuel, G. W., Napa, Cal. Gang-plow	Apr. 8, 1873	382	118	3	399
	Manwaring, H., Danville, Ky. Thill-coupling	Dec. 16, 1873	441	144	4	645
	Mapes, A. J. (See Hughes & Mapes.)					
	Mapes, E. (See Martin & Mapes.)					
135, 233	Mapother, D. H., Louisville, Ky. Safety gun-locks	Jan. 28, 1873	697	223	3	104
137, 938	Mappin, W. S. (See Skoines, H., assignor.)					
142, 255	Marble, E. F., and R. W. Glidden, Attleborough, Mass., assignors to Whiting Manufacturing Company, New York, N. Y. Smelling-bottle stopper	Apr. 15, 1873	599	162	3	430
144, 995	Marcar, H. H., and S. Mohaffey, Cambridge, Ohio. Washing-machine	Aug. 26, 1873	782	258	4	225
	Marcell, M. R., assignor of one-half interest to W. H. Case, Dansville, N. Y. Crimping apparatus for boots, &c.	Nov. 25, 1873	718	242	4	571
	Marcellus, A. (See Wilkins & Marcellus.)					
137, 087	Marchand, A., Lyons, Mich. Table-leaf support	Mar. 25, 1873	672	223	3	329
139, 621	Marchand, C. E., assignor of one-half interest to T. R. Morgan, Alliance, Ohio. Machine for beading sheet-metal ware	June 10, 1873	222	71	3	643
137, 225	Marchand, H. E., Pittsburgh, Pa. Car-coupling	Mar. 25, 1873	796	263	3	338
138, 669	Same. Safety-platform for cars	May 6, 1873	179	57	3	512
139, 322	Same. Car axle-box	May 27, 1873	792	252	3	593
144, 342	Same. Curtain-fixture	Nov. 4, 1873	141	47	4	490
142, 639	Marchant, W. J., and H. B. Hart, Philadelphia, Pa. Needle-case	Sept. 9, 1873	296	94	4	277
5, 638	Marcy, L. J., Philadelphia, Pa. Magic-lantern (Reissue)	Oct. 28, 1873	749	249	4	469
5, 686	Same. same (Reissue)	Dec. 16, 1873	611	200	4	659
143, 988	Marden, J. A., Boston, and T. S. Smith, assignors of one-third interest to T. G. Smith, Somerville, Mass. Feed-regulator for injectors	Oct. 28, 1873	571	190	4	455
139, 323	Marelli, A., Milan, Italy, assignor of one-half interest to S. Marelli. Breech-loading fire-arms	May 27, 1873	792	252 253	3	593
	Marelli, S. (See Marelli, A., assignor.)					
144, 402	Margeson, J. B., Swampscott, Mass. Stair-rail molding-machine	Nov. 11, 1873	202	68	4	506
142, 252	Margesson, A., Bangor, Me. Moccasin	Aug. 26, 1873	780	257	4	225
143, 363	Marin, F., Geneva, Switzerland. Railway-car	Sept. 30, 1873	920	312	4	365
	Marine Variometer Company. (See Cook, H. O., assignor.)					
135, 568	Marling, L., and E. Mertz, Basle, Switzerland. Hydrocarbon gas-apparatus	Feb. 4, 1873	161	52	3	140
134, 997	Marion, F., and N. E. Wilson, Groveland, Ill. Hay-rake and loader	Jan. 21, 1873	471	151	3	73
144, 853	Marker, S. A., Indianapolis, Ind. Harness-pad	Nov. 25, 1873	603	205	4	561
140, 288	Markle, J. A., Philadelphia, Pa. Combined table, stool, and stand	June 24, 1873	784	249	3	704
138, 907	Markley, F. A., Waynesborough, Va. Compound explosive projectile	May 13, 1873	398	126	3	540
6, 884	Markley, H. H., and A. Mathiew, San Francisco, Cal. Watch-chain (Design)	Sept. 16, 1873			4	286
	Marks, G. W. (See Mageean & Marks.)					
135, 280	Marks, J. Y., Rochester, Pa. Fire-kindler	Jan. 28, 1873	738		3	107
138, 266	Marks, S., San Francisco, Cal. Vessel for containing liquids under pressure	Apr. 29, 1873	932	294	3	474
144, 119	Same. Beer-drawing attachments for casks, &c.	Oct. 28, 1873	683	226	4	464
138, 420	Marland, O., Boston, Mass. Marine steam-engine governor	Apr. 29, 1873	1,069	337	3	485
140, 516	Marlin, J. M., New Haven, Conn. Revolving fire-arm	July 1, 1873	149	51	4	20
139, 682	Marnette, H. L., Chicago, Ill. Horse-power	June 10, 1873	222	71	3	643
	Marot, J. D. (See Lackman, J. M., assignor.)					
136, 442	Marquez, J. A., New York, N. Y. Machine for making matrices for stereotype-plates	Mar. 4, 1873	76	26	3	251
134, 909	Marr, A. D., assignor to self and J. H. C. Munsey, Boston, Mass. Shirt	Jan. 14, 1873	381	121	3	51
141, 881	Marr, J., Simcoe, Canada. Plow	Aug. 19, 1873	446	145	4	188
	Marrin, J. J. (See Byrne, R., assignor.)					
135, 135	Marriott, A., Saint Louis, Mo. Water-heater for heating buildings	Jan. 21, 1873	587	191	3	82
144, 996	Marriott, A., assignor to J. W. Branch, Saint Louis, Mo. Valve	Nov. 25, 1873	719	243	4	571
	Marriott, T. (See Ball, C., assignor.)					
	Same. (Reissue.)					
145, 884	Marriott, T., Detroit, Mich. Nutmeg-grater	Dec. 23, 1873	768	250	4	683
135, 042	Marrs, D., assignor of two-thirds interest to H. H. Marrs and G. B. Carter, Friends Creek Township, Ill. Scraping and loading machine	Jan. 21, 1873	513	166	3	76
	Mars, H. H. (See Marrs, D., assignor.)					
	Mars, J. A. (See Cusenbary & Mars.)					
137, 939	Marsden, H. R., Leeds, England, assignor to the Blake Crusher Company and E. W. Blake, New Haven, Conn. Stone-crusher	Apr. 15, 1873	600	188	3	430
142, 800	Marsh, C., 2d, Natchez, Miss. Plow	Sept. 16, 1873	434	146	4	299
	Marsh, E. J. (See Dorsey, D. B., assignor.)					
137, 940	Marsh, J. F., Littleton, N. H. Elevator	Apr. 15, 1873	600	189	3	430
140, 149	Marsh, J. F., Dubuque, Iowa. Street-lamp	June 24, 1873	668	210	3	694
144, 466	Marsh, L., South Adams, Mass. Ash-sifter	Nov. 11, 1873	255	86	4	510
	Marsh, P. J. (See Brownell, C., assignor.)					
	Marsh, P. Z. (See Lappin H., assignor.)					
139, 964	Marsh, R., Flushing, N. Y. Lamp	June 17, 1873	484	152	3	671
140, 931	Marsh, W. W., and O. E. Miles, Sycamore, Ill. Windmill	July 15, 1873	529	177	4	70
134, 554	Marshall, A. J., North Buffalo, N. Y. Bill and letter file	Jan. 7, 1873	49	15	3	11
140, 207	Marshall, C., Lockport, N. Y. Metallic clasp	June 24, 1873	716	226	3	698
144, 403	Marshall, C., Philadelphia, Pa. Coating iron and other metals with protecting alloys	Nov. 11, 1873	203		4	506
144, 854	Marshall, E. N., Grand Rapids, Mich. Railway-signal	Nov. 25, 1873	604	205 206	4	561
139, 965	Marshall, G., New York, N. Y. Sawing-machine	June 17, 1873	484	153	3	671
145, 356	Marshall, J., Cordova, Ill. Corn-sheller	Dec. 9, 1873	287	96	4	621
	Marshall, J. C. (See Holt & Marshall.)					
	Marshall, J. C. (See Smith & Marshall.)					
138, 811	Marshall, J. C., San Francisco, Cal. Hoisting-whim	May 13, 1873	317	98	3	533
143, 290	Marshall, M., assignor to self and D. Lane, Lowell, Mass. Machine for disintegrating fabrics	Sept. 30, 1873	846	291	4	360
144, 685	Same. Machine for disintegrating fabrics	Nov. 18, 1873	448	152	4	537
135, 831	Marshall, S. F., Wilmington, Del. Back-band of harness saddles	Feb. 11, 1873	412	134	3	171
137, 696	Marshall, W. C., New York, N. Y. Apparatus and process for rendering lard	Apr. 8, 1873	382	118	3	399
137, 699	Same. Apparatus for treating and drying animal matter	Apr. 8, 1873	383	119	3	400
145, 958	Marston, D. W., and J. S. Skinner, Lebanon, N. H. Mop-head	Dec. 30, 1873	854	278	4	701
137, 014	Marston, F. W., and O. Jones, Philadelphia, Pa. Car-coupling	Mar. 18, 1873	595	197	3	311
140, 055	Marston, F. W., assignor to J. Morse, Philadelphia, Pa. Spirit-level	June 17, 1873	545	178	3	678

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 670	Marston, H. C., Washington, D. C. Seal-lock for boxes	May 6, 1873	181	58	3	512
6, 935	Marston, J. M., Boston, Mass. Frame for machines (Design)	Oct. 7, 1873			4	36.0
134, 756	Marston, T. P., assignor to J. S. Loughery, New York, N. Y. Tag-fastener	Jan. 14, 1873	246	80	3	40
134, 757	Same. Tag	Jan. 14, 1873	247	80	3	40
143, 364	Marston, T. P., and N. M. Phillips, New York, N. Y., assignor to N. M. Phillips. Tag-hook	Sept. 30, 1873	921	312	4	365
137, 700	Martin, A. C., Waddam's Centre, Ill. Corn-planter	Apr. 8, 1873	364	119	3	400
145, 115	Martin, A. C., and R. Ferguson, Lena, Ill. Corn-planter	Dec. 2, 1873	69	22	4	591
141, 007	Martin, B. F., and E. Mapes, Rochester, N. Y. Vest-supporter	July 22, 1873	615	208	4	87
134, 910	Martin, B. G., assignor to self and E. R. Esmoud, New York, N. Y. Press for cheese, fruit, &c.	Jan. 14, 1873	382	121	3	51
136, 846	Martin, B. G., New York, N. Y. Cotton-press	Mar. 18, 1873	453	150	3	300
	Martin, B. M. (See Martin, C. G. and B. M.)					
140, 056	Martin, C., Verviers, Belgium. Device for regulating the twist in spinning-frames	June 17, 1873	566	178	3	678
144, 686	Martin, C. G. and B. M., New York, N. Y. Water-gage for boilers	Nov. 18, 1873	449	152	4	538
	Martin, C. M. (See Martin, D. N., assignor) (Reissue.)					
	Martin, C. M., et al. (See Stanton, J. W., assignor.)					
	Martin, D. D., et al. (See Newton, J. M., assignor.)					
5, 405	Martin, D. N., Lawrence, Mass., assignor to D. N. and C. M. Martin. Stove-door. (Reissue.)	May 13, 1873	457	144	3	545
144, 343	Martin, E., Potsdam, N. Y. Milk-cooler	Nov. 4, 1873	142	47	4	490
134, 535	Martin, G. B., New York, N. Y. Construction of canal-boats	Jan. 7, 1873	49	15	3	11
138, 570	Martin, H., Duncan, Pa. Drilling-machine	May 6, 1873	94	30	3	505
138, 754	Martin, H., Chicopee, Mass., assignor of one-half interest to W. C. McCallan, Springfield, Mass. Brick-machine	May 13, 1873	268	83	3	529
140, 057	Martin, H. B., San Francisco, Cal. Brake reaction movement	June 17, 1873	507	179	3	678
	Martin, H. M. (See Kelley, J. O., assignor.)					
	Martin, J., et al. (See Hollenweger F. J., assignor.)					
136, 926	Martin, J., New York, N. Y. Machine for turning bags	Mar. 18, 1873	518	171	3	305
137, 143	Martin, J., Henry City, Ill. Thill-coupling	Mar. 25, 1873	719	238	3	332
141, 448	Martin, J., deceased, by L. Baker, administrator, and G. W. Wilson, Morenci, Mich. Machine for roasing bark	Aug. 5, 1873	34	11	4	138
	Martin, J. E. (See Cliff & Martin.)					
144, 278	Martin, L., Oswego, N. Y. Axle for vehicles	Nov. 4, 1873	91	30	4	485
	Martin, M. (See Fitzhugh, R. G., assignor.)					
	Martin, M., et al. (See Harris, S. W., assignor) (Reissue.)					
135, 569	Martin, M., Baltimore, Md. Wash-boiler attachments	Feb. 4, 1873	162	52	3	140
142, 575	Martin, M., and J. A. Studer, Pittsburgh, Pa. Jewelers' show-case	Sept. 9, 1873	235	76	4	273
	Martin, N. D. (See Prince & Martin.)					
145, 667	Martin, P., Medford, assignor to self and E. S. Gilman, Somerville, Mass. Lamp-wick	Dec. 16, 1873	568	187	4	655
137, 460	Martin, S., Knobnoster, Mo. Brick-machine	Apr. 1, 1873	162	51	3	370
140, 380	Martin, S., Parshallville, Mich. Washing-machine	July 1, 1873	38	12, 13	4	11
138, 571	Martin, S. H., Mount Vernon, N. Y. Extension-table	May 6, 1873	94	30	3	505
135, 652	Martin, T., Chelsea, Mass. Loom-shuttle	Feb. 11, 1873	251	79	3	159
	Martin, T. C. (See Stimens & Martin.)					
136, 661	Martin, T. M., assignor to self and A. S. Hallidie, San Francisco, Cal. Swivel-hoisting apparatus for mines	Mar. 11, 1873	287	96	3	277
143, 087	Same. Saddle for wire-ways	Sept. 23, 1873	677	233	4	329
143, 173	Martin, W., Clarence, Iowa. Double-tree	Sept. 23, 1873	741	255	4	335
	Martin, W., assignor to J. R. Crow, Newark, Ind. Combined chair, table, and bureau	Jan. 7, 1873	182	59	3	21
141, 153	Martindale, E. H., Hobberville, Ind. Thrashing-machine	July 22, 1873	747	246	4	97
140, 634	Martindale, W. C., Philadelphia, Pa. Horse hay-rake	July 8, 1873	264	90	4	41
6, 958	Martino, J., assignor to C. Noble & Co., Philadelphia, Pa. Stove (Design)	Oct. 14, 1873			4	401
140, 932	Marwedel, E., Washington, D. C. Apparatus for cleaning knives, forks, &c.	July 15, 1873	531	177	4	70
144, 344	Marx, E., New York, N. Y. Saw	Nov. 4, 1873	142	48	4	490
	Marx, M. (See Spencer, C. B., assignor.)					
142, 711	Mase, F. W., Oshkosh, Wis. Water-strainer	Sept. 9, 1873	346	116	4	289
145, 668	Same. Seed-separator	Dec. 16, 1873	568	187	4	655
5, 411	Mashmeyer, J. A., Beardstown, Ill., assignor to S. S. Sargeant, Newark, N. J. Buckle. (Reissue.)	May 13, 1873	464	146	3	546
	Mason & Hamlin Organ Company. (See Trowbridge, W. O., assignor.)					
	Mason, A. C., Chicago, Ill. Machine for wiring the joints of clothes-pins. (Extension)	Sept. 6, 1873			4	240
	Mason, A. J. (See Rogers & Mason.)					
	Mason, B. A. (See Bayard & Mason.)					
136, 662	Mason, C., New York, N. Y. Sample-fastener	Mar. 11, 1873	287	96	3	277
139, 592	Same. Paper-file	June 3, 1873	198	43	3	619
139, 256	Mason, D. N., Indianola, Iowa. Heating-stove	May 27, 1873	735	232	3	588
137, 784	Mason, I., Brooklyn, N. Y. Bottom for sofas, &c.	Apr. 15, 1873	470	147	3	419
142, 801	Mason, J., Detroit, Mich., and G. W. Rogers, Brooklyn, N. Y. Float for life-rafts	Sept. 16, 1873	435	146	4	299
133, 376	Mason, J. F., Johnstown, N. Y. Glove (Disclaimer filed)	Apr. 4, 1873			3	356
	Mason, J. L. (See Baker, C. L. W., assignor.)					
	Same. (See Neuber & Perry, assignors.)					
137, 461	Mason, J. L., New Brunswick, N. J. Fruit-jar	Apr. 1, 1873	163	52	3	370
137, 462	Mason, J. L., New York, N. Y. Fruit-jar cover	Apr. 1, 1873	163	52	3	370
142, 251	Mason, M. B., Kansas City, Mo., assignor to self and J. S. McCrum. Spark-arrester for locomotives	Aug. 26, 1873	779	257	4	225
142, 486	Mason, O. R., Binghamton, N. Y. Device for thawing ice from water or gas pipes	Sept. 2, 1873	152	49	4	254
	Mason, R. D. (See Neill, W. J., assignor.)					
145, 885	Mason, S., Hamden, Conn. Carriage-pole tip	Dec. 23, 1873	768	251	4	664
134, 814	Mason, W. B., Boston, Mass. Parallel-ruler	Jan. 14, 1873	298	96	3	44
145, 436	Mason, W. M., Buffalo, N. Y. Apparatus for sweating hides or skins	Dec. 9, 1873	355	119	4	626
	Masseh, B. (See Downing, W. H., assignor.)					
143, 518	Massey, G. B., assignor to self and A. B. Darling, New York, N. Y. Hoisting-apparatus	Oct. 7, 1873	100	35	4	389
143, 519	Massey, G. B., and A. B. Darling, New York, N. Y. Hoisting-apparatus	Oct. 7, 1873	102	35	4	389
	Massey, J. (See Cockcroft & Ackroyd, assignors.)					
142, 640	Massey, J., Chester, Pa. Metallic piston-packing	Sept. 9, 1873	287	94	4	277
145, 669	Massey, W. W., Baltimore, Md. Curtain-fixture	Dec. 16, 1873	569	187	4	655
143, 919	Masten, J., assignor of one-half interest to J. P. Coe, Lee, Ohio. Churn	Oct. 21, 1873	489	165	4	438
135, 436	Masterman, W. H., and W. T. Hooper, Stockton, Cal. Car-stake supporter	Feb. 4, 1873	41	12	3	131
139, 073	Masterman, W., Stockton, Cal. Sacking attachment for thrashing-machines	May 20, 1873	555	174	3	566
	Masury, J. W., Brooklyn, N. Y. Paint-can, &c. (Extension)	July 12, 1873			4	35
141, 061	Same. Paint-vessel and package	July 22, 1873	659	222	4	90

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145, 670	Masury, J. W., Brooklyn, N. Y. Can for paint, &c	Dec. 16, 1873	570	187	4	656
143, 631	Matchet, J. F., and P. W. Smith, Paris, Mo. Wheel cultivator	Oct. 14, 1873	215	72	4	407
135, 234	Mather, E., assignor to F. Sturges & Co., Chicago, Ill. Spittoon	Jan. 28, 1873	698	224	3	104
140, 289	Matherly, J. C., Irvine, Ky. Hemp-brake	June 24, 1873	785	249	3	704
137, 701	Mathews, A. J. (See Perry & Mathews.) Mathews, J. W., Kilbourne, Ohio. Rail-fence	Apr. 8, 1873	385	119	3	400
6, 806	Mathias, D. H., et al. (See Van Derzee, C., assignor.) Mathieu, A. (See Markley & Mathieu) (Design.)					
144, 782	Mathieson, C. A., and J. C. Schrader, New York, N. Y. Seal-press (Design.)	Aug. 19, 1873			4	185
138, 267	Mathis, W., New York, N. Y. Heel-boot for horses	Nov. 18, 1873	589	180	4	544
142, 167	Mathivet, J. V., Cleveland, Ohio. Ventilating water-closet bowls	Apr. 22, 1873	933	295	3	475
141, 721	Matson, A., Quincy, Ill. Steam-engine governor	Aug. 26, 1873	708	234	4	219
134, 911	Matson, M., assignor of one-half interest to J. H. Sundermann, Quincy, Ill. Whiffletree-hook Matfold, H., assignor of half interest to I. Coleman, New York, N. Y. Water-proof wall	Aug. 12, 1873	284	93	4	166
139, 800	Mathews, A. J., Hartwell, Ga. Animal-trap Mathews Brothers. (See Hindman, S. B., assignor.)	Jan. 14, 1873	384	122	3	51
139, 074	Mathews, E. G., Oakham, Mass. Seed-drill Mathews, E. R., et al. (See Hunt, F. B., assignor.)	June 10, 1873	339	105	3	652
137, 226	Mathews, J., New York, N. Y. Metal-lined, copper, and other vessels	May 20, 1873	556	175	3	566
137, 702	Same Soda-water apparatus	Mar. 25, 1873	797		3	338
137, 941	Same Device for closing bottles and other vessels	Apr. 8, 1873	386	119	3	400
138, 171	Same Cap to prevent the bursting of carbonic-acid and other vessels	Apr. 15, 1873	601	189	3	430
138, 421	Same Apparatus for filling bottles	Apr. 22, 1873	818	260	3	457
138, 671	Same Apparatus for cooling and dispensing beverages	Apr. 29, 1873	073	238	3	485
138, 908	Same Carbonic-acid generator, fountain, and other vessels	May 6, 1873	182	58	3	512
139, 722	Same Box for holding and transporting bottles	May 13, 1873	398		3	540
141, 154	Same Apparatus for dispensing soda-water and other beverages	June 10, 1873	266	83	3	646
141, 229	Same Device for dispensing sirup in soda-water apparatus	July 22, 1873	747	246	4	97
141, 571	Same Apparatus for charging liquids with carbonic acid	July 29, 1873	833	272	4	111
144, 913	Same Holder for soda-water tumblers	Aug. 5, 1873	139	44	4	146
135, 927	Mathews, J. R., Cincinnati, Ohio. Canning fruit Mathews, W. J. (See Scott & Mathews.) Mathews, W. N., et al. (See Hunt, F. B., assignor.)	Nov. 25, 1873	648	220	4	565
144, 404	Matthias, J., New York, N. Y. Match-box Matthiessen, F. W. (See Hegeler & Matthiessen.) Mattullath, J. F. H. (See Wagner, H. E., assignor.) Maule, F. I. (See Pancoast & Maule.)	Feb. 18, 1873	504	164	3	193
139, 171	Maurice, C. C., New York, N. Y. Lithographic press	May 20, 1873	647	202	3	573
143, 582	Mawhinney, H. H. (See Wiggin, J. E., assignor.) Maxfield, A. C., Biddeford, Me. Shaft-holding attachment for carriages	Oct. 14, 1873	173	58	4	403
145, 886	Maxheimer, J., New York, N. Y. Bird-cage	Dec. 23, 1873	769	251	4	684
5, 247	Maxim Gas-Machine Company of New York. (See Maxim, H. S., assignor.) (Reissue.) Maxim, H. S., New York, N. Y., assignor by mesne assignment to "Maxim Gas-Machine Company of New York." Carbureter (Reissue.)	Jan. 21, 1873	643	209	3	87
141, 062	Maxim, H. S., Brooklyn, N. Y. Fire-extinguisher	July 22, 1873	661	223	4	90
141, 063	Maxim, H. S., and L. P. Hawes, Brooklyn, N. Y. Steam-trap	July 22, 1873	663	223	4	91
145, 671	Maxon, W. P., Independence, Iowa. Rotary engine	Dec. 16, 1873	572	188	4	656
141, 155	Maxson, W. P., Elmira, N. Y. Rotary pump or engine	July 22, 1873	750	247	4	97
136, 443	May, C., Cincinnati, Ohio. Bureau or wardrobe bedstead	Mar. 4, 1873	77	27	3	251
136, 744	May, E. M., Indianapolis, Ind. Construction of prisons (Extension.)	Oct. 4, 1873			4	353
141, 892	May, E. M., Fond du Lac, Wis. Sign	Mar. 11, 1873	356	117	3	283
5, 416	Same Mold for ice-cream, jellies, &c	Aug. 19, 1873	446	145	4	188
136, 330	May, H. M., Birmingham, Conn. Bustle (Reissue.)	May 20, 1873	700	219	3	578
134, 998	May, R. B., Murfreesborough, Tenn. Animal-trap May, W., Binghamton, N. Y. Apparatus for preparing waxed ends	Feb. 25, 1873	886	278	3	233
140, 208	Mayall, T. J., Boston, Mass. Manufacture of emery wheels and sticks (Extension.)	Jan. 21, 1873	472	151	3	73
140, 209	Same Method of combining emery with caoutchouc (Extension.)	Oct. 11, 1873			4	379
140, 517	Same Manufacture of india-rubber hose (Extension.)	Nov. 29, 1873			4	557
140, 518	Same Rubber and plumbago compound for bearings and other purposes	June 24, 1873	716		3	698
140, 519	Same Manufacture of artificial leather and similar fabrics	June 24, 1873	717	226	3	698
140, 784	Same Bottle-stopper	July 1, 1873	150	51	4	90
140, 933	Same Nursing-bottle	July 1, 1873	151	51	4	90
140, 934	Same Vulcanizing rubber belting, &c	July 1, 1873	151	52	4	21
141, 368	Same Hose-reef	July 15, 1873	393	135	4	60
143, 583	Same Machine for cutting rubber sheets into strips	July 15, 1873	531	177	4	71
143, 705	Same Machine for the manufacture of hose	July 15, 1873	533	178	4	71
144, 977	Same Implement for washing windows, &c	July 29, 1873	968	315	4	192
146, 085	Same Fumigator for hospital and other uses	Oct. 14, 1873	173	59	4	403
135, 437	Same Piston-packing	Oct. 14, 1873	298	95	4	412
143, 920	Same Hose-coupling	Nov. 25, 1873	719	243	4	571
138, 812	Same Apparatus for mixing vulcanizable compounds for rubber, &c	Nov. 25, 1873	721	243	4	571
139, 801	Same Apparatus for delivering sheets from printing-presses	Dec. 30, 1873	961	310	4	710
144, 627	Mayer, A., Detroit, Mich. Automatic relief-valve for steam fire-engines	Feb. 4, 1873	41	12	3	131
140, 935	Same Relief-valve for fire-engines	Oct. 21, 1873	489	165	4	438
143, 366	Mayer, A. M. (See Barker & Mayer.) Mayer, C., Baltimore, Md. Lamp Mayer, F. B. (See Koppitz & Mayer.) Mayer, I. C. (See Christolm & Mayer.)	May 13, 1873	-318	98	3	533
144, 914	Mayer, J., Elmer, N. Y. Spring for vehicles	June 19, 1873	340	105	3	652
135, 923	Mayer, T., Albany, N. Y. Overflow-alarm	Nov. 18, 1873	450	152	4	538
144, 914	Mayfield, W. D., and J. M. Payne, Fort Worth, Tex. Scraper	July 15, 1873	536	178	4	71
136, 081	Mayhew, A. P., and I. D. Leonard, Newark, N. J. Scarf-ring	Sept. 30, 1873	922	312	4	365
136, 082	Maynard, A. M., Savoy, Mass. Weighing and price balances	Nov. 25, 1873	649	220	4	565
140, 150	Maynard, E., New York, N. Y. Breech-loading fire-arm	Feb. 18, 1873	505	164	3	193
136, 529	Maynard, W. (See Taylor, W., assignor.) Maynard, W., Salem, Mass. Apparatus for the manufacture of gases	Feb. 18, 1873	635	208	3	203
5, 295	Same Process for treating hides and skins	Feb. 18, 1873	636		3	203
	Mayne, T. T., Philadelphia, Pa. Manufacture of latch-needles	June 24, 1873	669	210	3	694
	Mayo, J. J. (See Mitchell & Mayo.) Mayo, W. H., Orono, Me. Excelsior machine	Mar. 4, 1873	159	51	3	252
	Mayor, T., Providence, R. I. Flier for roving and spinning frames (Reissue.)	Feb. 25, 1873	891	287	3	235

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 520	Maze, D. B., West Buffalo, Ohio. Harrow	Oct. 7, 1873	103	36	4	389
140, 210	McAdams, G., Vevay, Ind. Cooking-stove	June 24, 1873	719	226	3	628
144, 625	McAllister, W., Lawrence, Mass. Protecting buildings against fire	Nov. 18, 1873	398	133	4	533
136, 083	McAninch, J. C., and G. Atkins, Youngstown, Ohio. Fetting for puddling and boiling furnaces	Feb. 18, 1873	637	.....	3	203
142, 405	McAnulty, J. D., Brooklyn, N. Y. Letter-envelope	Sept. 2, 1873	76	25	4	248
141, 941	McAuliffe, J., New York, N. Y. Umbrella	Aug. 19, 1873	492	163	4	192
138, 339	McAvoy, H. L., Baltimore, Md. Steam-power air-brake	Apr. 29, 1873	999	314	3	480
139, 906	Same. Fire-extinguisher	June 17, 1873	441	137	3	667
139, 723	McBride, J., Ithaca, N. Y. Butter-worker	June 10, 1873	267	84	3	646
138, 909	McBurney, W. H., Sacramento City, Cal. Hay and cotton press	May 13, 1873	399	196	3	540
137, 854	McCabe, G. H., executor. (See Lewis, D. D.) (Extension.)					
	McCafferty, J., New York, N. Y. Composition-paint oils	Apr. 15, 1873	531	.....	3	424
139, 907	McCahill, B. F. (See Shyrma, A. F., assignor.)					
	McCall, M., and R. O. Wood, Buffalo, N. Y. Safe-vault	June 17, 1873	442	138	3	667
	McCallan, W. C. (See Martin, H., assignor.)					
	McCallum, Crease & Sloan. (See Heald, A., assignor.) (Design.)					
137, 614	McCambridge, A., et al. (See Gorton, W., assignor.)					
5, 615	McCandlish, C. N., and J. C. Naginey, West Rushville, Ohio. Harvester	Apr. 8, 1873	308	96	3	393
	McCarthy, E. P., assignor to self and J. B. Grant, San Francisco, Cal. Wagon-spring. (Reissue.)	Oct. 21, 1873	520	174	4	431
134, 556	McCarthy, F., Chicago, Ill. Shade and draught-blower for grates	Jan. 7, 1873	50	15	3	11
140, 211	Same. Cuff-button	June 24, 1873	720	226	3	698
138, 034	McCarthy, W. C., Pittsburg, Pa. Apparatus for cleaning cess-pools, &c.	Apr. 22, 1873	704	{ 222 } { 223 }	3	448
143, 414	McCarty, T. J., Salem, Ohio. Stock-car	Oct. 7, 1873	18	7	4	382
139, 593	McCarver, T. J., J. Athey, and B. Jennings, Oregon City, Ore. Telegraph-pole	June 3, 1873	129	43	3	619
137, 308	McCauley, J., Elkton, Md. Changeable-gage railway-truck	Apr. 1, 1873	26	8	3	353
	McCauley, J. D., et al. (See Kugler, O., assignor.)					
134, 999	McCauley, R. A., Baltimore, Md. Attachment for wash-boilers	Jan. 21, 1873	472	151	3	73
136, 745	McCaullay, J. E., Philadelphia, Pa. Hose-bridge	Mar. 11, 1873	357	118	3	283
144, 626	McChesney, R., Ilion, N. Y. Wood-joining	Nov. 18, 1873	399	{ 133 } { 134 }	4	533
145, 357	McClean, J., assignor to F. Cook, New Orleans, La. Device for forming bale-ties	Dec. 9, 1873	288	96, 97	4	621
136, 927	McCleary, J., Martin's Ferry, Ohio. Molders' pot or ladle	Mar. 18, 1873	520	171	3	305
	McClelland, J. A. (See Westover, G. C., assignor.)					
143, 772	McClelland, J. A., Louisville, Ky. Collodion compound	Oct. 21, 1873	365	191	4	428
	McClelland, J. C. (See Beach, T., assignor.)					
146, 011	McClelland, W., sr., Fowler, Ill. Draught-equalizer	Dec. 30, 1873	901	292	4	705
5, 404	McClintock, J. R., Mobile, Ala., and J. Cumberland, deceased, assignors by mesne assignment to A. J. Aiken, New Orleans, La. Cotton-bale tie. (Reissue.)	May 13, 1873	456	144	3	545
	McClung, C. L. (See Sharp & McClung.)					
139, 324	McClunie, T., Hartford, Conn. Metallic-gutter	May 27, 1873	793	253	3	593
144, 345	McClure, J. E., San Francisco, and D. H. Ainsworth, Salinas, Cal. Blow-pipe	Nov. 4, 1873	143	48	4	490
144, 551	McClure, J. F., Connersville, Ind. Velocipede	Nov. 11, 1873	329	111	4	516
135, 281	McClure, W., Sinking Spring, Ohio. Rotary churn	Jan. 28, 1873	738	238	3	107
135, 235	McClure, W. B., assignor to self, H. O. Claughton, and J. C. Graham, Alexandria, Va. Back-chain for cart-saddles	Jan. 22, 1873	699	224	3	104
134, 758	McClymond, C. B., Elderton, Pa. Whiffletree	Jan. 14, 1873	247	81	3	40
	McCollin, T. H., et al. (See Schofield, J., assignor.)					
138, 172	McColloch, S. L., Wheeling, West Va. Harvester	Apr. 22, 1873	819	{ 260 } { 261 }	3	457
141, 572	McCollom, A. J., and G. D. Emery, Indianapolis, Ind. Saw-sawage	Aug. 5, 1873	140	45	4	147
5, 616	McComb, D., deceased, by M. A. McComb, administratrix, Memphis, Tenn. Bale-tie. (Reissue.)	Oct. 21, 1873	521	174	4	441
	McComb, J. J. (See Brodie, G., assignor.) (Reissue.)					
144, 999	McComb, J. M., Lancaster, Ohio. Paper-hanger's brush	Nov. 25, 1873	721	243	4	571
	McComb, M. A., administratrix. (See McComb, D.) (Reissue.)					
139, 172	McCConnell, B., Philadelphia, Pa. Combined heating and cooking stove	May 20, 1873	648	202	3	573
	McCConnell, H. (See Cutter, S., assignor.)					
143, 291	McCConnell, R., W. Truesdell, and F. Mertsheimer, Omaha, Nebr. Self-closing faucet attachment	Sept. 30, 1873	847	292	4	360
141, 573	McCConnell, W., Philadelphia, Pa. Sponge-cup	Aug. 5, 1873	141	45	4	147
	McConnico, A. J., et al. (See Buford, A. G., assignor.)					
138, 422	McCool, W. A., Ashland, Ohio. Screw-forming machine	Apr. 29, 1873	1,074	338	3	485
144, 552	McCool, W. C., Guthrie Centre, Iowa, assignor of one-half interest to D. H. Brumbaugh. Plow	Nov. 11, 1873	330	111	4	516
	McCormick, C. H. (See Young, M., jr., assignor.) (Disclaimer.)					
139, 406	McCormick, G. W., Saint Francis County, Ark. Churn-dasher	May 27, 1873	870	278	3	599
137, 785	McCormick, H. T., Selma, Ala. Automatic fan	Apr. 15, 1873	471	147	3	419
	McCormick, L. J. (See Young, M., jr., assignor.) (Disclaimer.)					
143, 365	McCook, P., assignor of one-half interest to H. Schmidt, Pittsburgh, Pa. Clamp for securing advertising boxes to lamp and other posts	Sept. 30, 1873	921	312	4	365
	McCoy, C. L. (See Heberling, J., assignor.)					
139, 407	McCoy, E., assignor of one-half interest to S. M. Cutcheon and E. P. Allen, Ypsilanti, Mich. Lubricator	May 27, 1873	871	279	3	599
138, 423	McCoy, W. H., Miller's Falls, Mass. Tool-handle	Apr. 29, 1873	1,074	338	3	486
136, 064	McCracken, E. D., New York, N. Y., assignor to L. A. Bigelow, trustee, Boston, Mass. Gas-lighter	Feb. 18, 1873	637	209	3	203
138, 340	McCray, W., Black Oak, Mo. Pruning-shears	Apr. 29, 1873	1,000	315	3	480
5, 630	McCreary, J., Middletown, Pa. Coupling and steering apparatus. (Reissue.)	Oct. 28, 1873	739	246	4	469
134, 912	McCreary, N. B., Phelps City, Mo. Grocers' sample-case	Jan. 14, 1873	384	122	3	51
136, 847	McCreight, A., and R. W. Glasgow, Tranquility, Ohio. Cider and wine mill	Mar. 18, 1873	454	150	3	30.0
	McCrum, J. S. (See Mason, M. B., assignor.)					
	McCullough, J. G. (See Tucker, W. B., assignor.)					
	McCully, N. (See Shalea & McCully.) (Design.)					
	McCune, J. S. (See Bisbing & McCune.)					
137, 227	McCutchen, J. F., Philadelphia, Pa. Eccentric-rod for steam-engines	Mar. 25, 1873	798	263	3	338
	McDermott, J. J., et al. (See Cuddy, J., assignor.)					
	Same. (See Herron, W. M., assignor.)					
135, 653	McDermott, J. W., New York, N. Y. Revolving paddle	Feb. 1, 1873	252	80	3	159
145, 000	McDonald, A., Cumberland, Md. Means for operating screw-propellers	Nov. 25, 1873	722	244	4	571
135, 236	McDonald, A. R., Chicago, Ill. Steam-generator	Jan. 28, 1873	700	224	3	104
135, 136	McDonald, C., Ottawa, Ill. Table cutlery	Jan. 21, 1873	589	191	3	82
138, 572	McDonald, D. C., Rushford, N. Y. Horse hay-fork	May 6, 1873	95	30	3	505

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 936	McDonald, E. H., Wytheville, Va., assignor of one-half interest to S. Y. Towson, Saint Louis, Mo. Wash-boiler	July 15, 1873	537	179	4	71
	McDonald, F. L. (See Henderson & McDonald.)					
5, 500	McDonald, H., Pittsburgh, Pa. Puddling-furnace	July 22, 1873	793	260	4	101
139, 683	Same. Reverberatory-furnace	June 10, 1873	223	79	3	643
137, 703	McDonald, I. R., Nevada, Iowa. Cultivator	Apr. 8, 1873	387	120	3	400
	McDonald, J. W. (See Beery & McDonald.)					
139, 966	McDonald, P. J., San Francisco, Cal. Steam-plow	June 17, 1873	485	153	3	671
	McDonald, T. (See Weston, E. R., assignor.)					
135, 237	McDonald, T. E., Trenton, N. J. Clothes-wringer	Jan. 28, 1873	701	{ 224 } { 225 }	3	104
144, 627	McDonald, T. E., New Brunswick, N. J. Clothes-wringer	Nov. 18, 1873	400	134	4	533
137, 557	McDonald, W. D., Randolph, N. Y. Milk-cooler	Apr. 8, 1873	260	80	3	389
	McDonald, W. H. (See Smith, B. B., assignor.)					
144, 346	McDonell, A. S., Osgoode Township, Canada. Cultivator	Nov. 4, 1873	144	48	4	490
5, 292	McDougall, A., Manchester, England, assignor by mesne assignment to J. S. Millar, Montreal, Canada. Insect-destroying and disinfecting compound	Feb. 18, 1873	687		3	206
135, 995	McDougall, J., London, England. Fertilizer	Feb. 18, 1873	560		3	197
135, 755	McDowell, W. L., Philadelphia, Pa. Window-sash	May 13, 1873	269	83	3	529
135, 137	McDuffey, W. N., and B. F. Jaques, assignors of one-third interest to D. W. Lassiter, Petersburg, Va. Coupling for steam-heating apparatus for railway-cars	Jan. 21, 1873	589	191	3	82
137, 309	McElhiney, J. T., Moberly, Mo. Combined corn-planter and plow	Apr. 1, 1873	27	8, 9	3	359
	McEvers, C. N. (See Long & McEvers.)					
144, 405	McEvoy, D. J., Charlestown, Mass. Medical compound or salve	Nov. 11, 1873	205		4	506
141, 722	McEvoy, J., Brooklyn, N. Y. Adjustable treadle for sewing-machines, &c.	Aug. 12, 1873	285	93	4	166
	McFarlan, W. W. (See Bock, H., assignor.)					
140, 425	McFarland, J. M., Golden City, Colo. Stamp for crushing ores	July 1, 1873	69	25	4	14
143, 706	McFarland, N. S., Williamsburgh, N. Y. Hoisting-apparatus	Oct. 14, 1873	290	95	4	412
135, 238	McGarrah, J. H., assignor to S. Ward, Princeton, Ind. Breeching loop-buckles	Jan. 28, 1873	702	225	3	104
137, 942	McGarth, R. M., La Fayette, Ind. Corn-sheller	Apr. 15, 1873	602	189	3	430
134, 913	McGaughey, A. E., East Minneapolis, Minn. Steam-plow	Jan. 14, 1873	385	{ 122 } { 123 }	3	51
	McGaw, H. L. (See Bryant, S. H. and J. M., and McGaw.)					
144, 915	McGee, B. J., assignor to J. W. Tuttle, Watertown, Mass. Knit fabric	Nov. 25, 1873	650	221	4	566
	McGee, S. (See Buron, F. P., assignor.)					
135, 570	McGee, S., Madison, assignor of one-fourth interest to J. S. Adams and F. H. Fairchild, Morristown, N. J. Hub for vehicles	Feb. 4, 1873	163	53	3	140
140, 717	McGeorge, J., Bellaire, Ohio. Drop-hammer	July 8, 1873	333	113	4	47
143, 521	McGill, C., New Haven, Conn. Machine for wiring blinds	Oct. 7, 1873	103	36	4	389
7, 003	McGill, G. W., New York, N. Y. Inkstand	Nov. 25, 1873			4	558
	Same. Letter-clip and paper-binder combined	Dec. 23, 1873	760	230	4	678
145, 809	McGill, W. C., Cincinnati, Ohio. Combination lock	Mar. 11, 1873	239	81	3	274
136, 606	Same. Button-hole cutter	June 3, 1873	26	8	3	611
139, 472	Same. Spring bed-bottom	Nov. 18, 1873	451	153	4	538
144, 688	McGilvray, L. T., Staunton, Va. Velocipede	June 24, 1873	786	249	3	704
140, 290	McGinniss, C., and W. Naylor, Chicago, Ill. Smoke-burning furnace	Aug. 5, 1873	141	45	4	147
141, 574	McGinniss, L. H. (See Thornburg, J. W., assignor.)					
136, 444	McGinty, J. M., and T. Nolan, Moulton, Tex. Machine for making plow-irons	Mar. 4, 1873	78	27	3	252
143, 632	McGinty, R. H., Moulton, Tex. Picket-fence	Oct. 14, 1873	216	73	4	407
141, 156	McGlenn, M., Aurora, Ill. Compound for cleaning polished metals	July 22, 1873	751		4	97
140, 837	McGlew, T., Austin, Nevada. Shaft furnace for roasting ores	July 15, 1873	440	150	4	63
140, 520	McGonegal, H. G., Washington, D. C. Apparatus for preserving wood	July 1, 1873	152	52	4	21
5, 456	McGovern, H. D., Brooklyn, N. Y. Sun-shield for horses	June 17, 1873	625	196	3	682
140, 058	Same. Nose-bag for horses	June 17, 1873	567	179	3	678
138, 511	McGovern, P., assignor to G. L. Davis, J. A. Wiley, J. M. Stone, G. G. Davis, J. H. Stone, and J. H. Davis, North Andover, Mass. Self-acting spinning-mute	May 6, 1873	38	13, 14	3	500
143, 292	McGowan, J. H., and D. B. Caldwell, Cincinnati, Ohio. Crank-connection for steam-engines	Sept. 30, 1873	848	292	4	360
	McGowan Pump Company. (See Morton, J., assignor.)					
145, 001	McGrath, T. H., San Antonio, Tex. Saddle	Nov. 25, 1873	723	244	4	571
140, 718	McGraw, G. V., Mankato, Minn., assignor to C. Parker, Meriden, Conn. Cartridge capping and uncapping device	July 8, 1873	335	113	4	47
145, 887	McGregor, F. B., Pontiac, Mich. Piano-truck	Dec. 23, 1873	769	251	4	684
5, 253	McGregor, G., and G. Vall, Cincinnati, Ohio, assignors by mesne assignment to W. A. Hopkins and F. Z. Dickinson. Sash-lock	Jan. 21, 1873	650	210	3	87
142, 033	McGregory, C. E., East Corinth, Me. Machine for notching shingle-bands	Aug. 19, 1873	573	189	4	199
139, 594	McGrew, J., Ravenswood, W. Va. Machine for cutting hoop-locks	June 3, 1873	129	43	3	619
142, 712	McGroder, B., and H. Tiedemann, Cleveland, Ohio. Wrecking-apparatus	Sept. 9, 1873	346	{ 116 } { 117 }	4	282
145, 437	McGuffie, A., Buffalo, N. Y. Angle-iron cutter	Dec. 9, 1873	356	119	4	626
140, 212	McGuire, D., Northampton, Mass. Machine for cutting screws	June 24, 1873	721	227	3	698
145, 959	McGuire, J. R., Ansonia, Conn. Fifth wheel for vehicles	Dec. 30, 1873	855	278	4	701
138, 672	McGuire, T. D., Brooklyn, N. Y. Cigar mold	May 6, 1873	183	58	3	512
137, 015	McHarg, J. B., Rome, N. Y. Fishing-rod	Mar. 18, 1873	596	197	3	311
140, 059	McHarg, W. S., and A. B. Hill, New Haven, Conn. Sewer-cleaning truck	June 17, 1873	568	179	3	678
137, 704	McIlhenney, G. A., Washington, D. C. Gas-retort closings	Apr. 8, 1873	388	120	3	460
142, 253	Same. Closing gas-retorts	Aug. 26, 1873	780	357	4	225
145, 672	Same. Gas-retort	Dec. 16, 1873	572	188	4	656
136, 607	McIntire, S., Brooklyn, N. Y. Baby-carriage	Mar. 11, 1873	240	81	3	274
	McIntire, S. C. (See Baker & McIntire.)					
138, 910	McIntosh, O. T., New York, N. Y. Hoisting and conveying apparatus	May 13, 1873	400	126	3	540
137, 310	McIntosh, P. E., Chicago, Ill. Wrench	Apr. 1, 1873	29	9	3	359
142, 489	McIntyre, J. C., Fort Edward, N. Y. Lath-bolting machine	Sept. 2, 1873	153	49, 50	4	254
136, 530	McIntyre, M. F., Girard, Pa. Railway-rail joint	Mar. 4, 1873	160	52	3	258
136, 848	Same. Washer for nut-locks	Mar. 18, 1873	454	150	3	300
137, 463	Same. Railway-rail	Apr. 1, 1873	164	52	3	370
130, 035	McIntyre, P., Hartford, Conn. Mold for earthen pipe	Apr. 22, 1873	705	223	3	448
142, 168	Same. same	Aug. 26, 1873	709	234	4	219
141, 603	McIntyre, T. K., assignor to H. A. Penlee and J. R. Arnold, Salem, Mass. Loom-shuttle	Aug. 12, 1873	361	119	4	172
	McKay, C. (See Bush, I., assignor.)					
	McKay, E. E. (See Anderson, T. D., assignor.)					
	McKay, G., trustee. (See Blake & Libby, assignors)					
	Same. (See Keith, C. A., assignor.)					
	Same. (See Weason, M., assignor.)					
141, 008	McKay, W., assignor to self and C. E. Bayley, Newburyport, Mass. Lantern	July 22, 1873	616	208	4	87
6, 636	McKee, H. S., Pittsburgh, Pa. Bread-plate	May 6, 1873			3	497

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 846	McKeever, S., United States Army. Cartridge-box.....	June 10, 1873	377	117	3	655
139, 847	Same..... same.....	June 10, 1873	378	117	3	655
140, 151	Same..... Sword-hanger.....	June 24, 1873	670	210	3	694
137, 705	McKeever, W., Staunton, Va. Harvester cutter.....	Apr. 8, 1873	388	120	3	400
	McKellip, W. A. (See Baxter, S. T., assignor.)					
	McKenna, A. (See McKenna, J. A., & T.)					
141, 942	McKenna, J., Cambria, Pa. Mold or box for brick-presses.....	Aug. 19, 1873	493	163	4	102
144, 213	McKenna, J. A., & T., Pittsburgh, Pa. Faucet.....	Nov. 4, 1873	39	12	4	481
5, 663	McKenna, R., White's Station, Tenn. Cotton-gin..... (Reissue.)	Nov. 18, 1873	567	192	4	547
	McKenna, T. (See McKenna, J. A., & T.)					
143, 021	McKenna, W., Boston, Mass. Setting diamonds or carbon points in the faces of metal tools.....	Sept. 23, 1873	622	212	4	325
5, 307	McKenney, A., Maumee City, Ohio. Railway-rail..... (Reissue.)	Mar. 4, 1873	209	69	3	262
5, 308	Same..... Nut-locking device for railway-rail joints..... (Reissue.)	Mar. 4, 1873	210	69	3	262
139, 802	McKenzie, D., Brooklyn, N. Y. Baker's oven.....	June 10, 1873	340	105	3	652
143, 522	Same..... same.....	Oct. 7, 1873	105	36, 37	4	389
140, 152	McKenzie, J., Saint Clair, Mich. Pitman-lubricator for saw-mills.....	June 24, 1873	671	210	3	694
141, 284	McKenzie, W. S., Rockwall, Tex. Farm-fence.....	July 29, 1873	884	290	4	116
	McKeown, M. C. (See Sinclair, J. A., assignor.)					
	McKibbin, J. C., et al. (See West & Fish, assignors.)					
	McKiernan & Finnegan. (See McKiernan, S. G., assignor.)					
145, 116	McKiernan, S. G., assignor to McKiernan & Finnegan, Paterson, N. J. Extensible brace for supporting trenches.....	Dec. 2, 1873	71	22	4	591
134, 914	McKimm, E. N., and J. R. Gearhart, Lathrop, Mo. Feather-renovator.....	Jan. 14, 1873	386	123	3	51
139, 013	McKinley, R., Hyde Park, N. Y. Rotary cultivator.....	May 20, 1873	498	157	3	561
	McKinnie, W. S. (See Williams & McKinnie.)					
142, 169	McKinnon, D., assignor to E. Brown, Wappinger's Falls, N. Y. Head-band.....	Aug. 26, 1873	710	235	4	219
136, 254	McKinnon, K., Pleasant Hill, Ala. Cultivator.....	Feb. 23, 1873	798	259	3	228
145, 222	Same..... Cultivator-plow.....	Dec. 2, 1873	165	57	4	598
135, 832	McKinstry, J. A., and W. Walden, Springfield, Mass. Miter-box.....	Feb. 11, 1873	413	134	3	171
140, 060	McKnight, A. C., Philadelphia, Pa. Machine for making boot and shoe heels.....	June 17, 1873	569	180 181	3	678
	McKnight, D. M. (See Freed, W. H., assignor.)					
144, 855	McKnight, J. J., assignor to self and A. Storms, Tarrytown, N. Y. Hat-conformator.....	Nov. 25, 1873	605	206	4	561
	McLagon, J., et al. (See Duckworth, W. B., assignor.)					
143, 830	McLanahan, J. K., Hollidaysburgh, Pa. Lubricating pulley.....	Oct. 21, 1873	417	139	4	432
	McLane, D. W. (See Israel & McLane.)					
141, 575	McLaughlin, T. G., Glen Riddle, Pa. Bobbin.....	Aug. 5, 1873	142	46	4	147
138, 173	McLaughlin, W., Lee, Mass. Suction-apparatus for paper-machine.....	Apr. 22, 1873	921	261	3	457
137, 558	McLean, J., Meadville, Pa. Harness-buckle.....	Apr. 8, 1873	261	80	3	389
	McLean, J. N. (See Benner, J., assignor.)					
135, 000	McLean, J. N., and J. Benner, Philadelphia, Pa. Sewing-machine.....	Jan. 21, 1873	473	152	3	73
142, 114	Same..... Brick-machine.....	Aug. 26, 1873	664	219	4	216
143, 088	McLean, J. P., Brooklyn, N. Y. Book and paper clamp.....	Sept. 23, 1873	677	233	4	329
142, 802	McLean, O. R., New Orleans, La. Cotton-bale tie.....	Sept. 16, 1873	435	147	4	299
140, 291	McLendon, E. W., Griffin, Ga. Hoe.....	June 24, 1873	786	249	3	704
135, 654	McLennan, J. K., Elmira, Ill. Gang-plow.....	Feb. 11, 1873	253	80	3	159
	McLeod, C. A. (See Bussey, E., assignor.)					
	McLurd, R. L. (See Shipp, Peterson & McLurd.)					
134, 759	McLure, J. B., Wheeling, W. Va. Sewing-machine table.....	Jan. 14, 1873	248	81	3	40
136, 746	McMahon, H. J., Philadelphia, Pa. Combined globe-valve and trap.....	Mar. 11, 1873	357	118	3	283
141, 064	McMahon, J., Ann Arbor, Mich. Clothes-reel.....	July 22, 1873	664	223	4	91
135, 996	McMahon, P. J., New Orleans, La. Steam-generator.....	Feb. 18, 1873	561	185	3	197
143, 367	McMaster, A. D., assignor of one-half interest to I. Smith, Rochester, N. Y. Wrench.....	Sept. 30, 1873	922	313	4	365
	McMaster, J., et al. (See Foglesong, W., assignor.)					
144, 279	McMaster, J., Dayton, Ohio. Cooking-stove.....	Nov. 4, 1873	92	30	4	465
141, 576	McMillan, A., Cincinnati, Ohio. Hemmer for sewing-machines.....	Aug. 5, 1873	143	46	4	147
141, 8-14	McMillan, D., Osage, Iowa. Line-loop.....	Aug. 12, 1873	362	119	4	172
142, 115	McMillan, E. G., Berlin, Ohio. Horse-power.....	Aug. 26, 1873	667	219	4	216
142, 490	McMillan, J. B., North Vernon, Ind. Harvester-rake.....	Sept. 2, 1873	154	50	4	254
	McMillan, S. D., trustee. (See Karcheski, X., assignor.)					
	McMillan, W. H. (See Tasher & McMillan.)					
146, 086	McMillen, D. J., Chillicothe, Mo. Water-elevator.....	Dec. 30, 1873	964	311	4	710
143, 523	McMillen, W. T., Cincinnati, Ohio. Carbureter.....	Oct. 7, 1873	105	37	4	389
	McMiller, J., executor. (See Fritz, G.)					
137, 311	McMullen, J., Brooklyn, N. Y. Fabric for dress-protectors, &c.....	Apr. 1, 1873	29	9	3	359
137, 378	McMullen, R., Titusville, Pa. Drill-jar.....	Apr. 1, 1873	88	29	3	364
135, 351	McMullin, J., Casey, Iowa. Plow for unloading cars.....	Jan. 28, 1873	801	259	3	112
	McMurphy, C. C. (See Aston and McMurphy.)					
	McMurray, L. (See Hollingsworth, R. J., assignor.)					
139, 585	McMurray, L., Baltimore, Md. Process for preserving corn.....	June 3, 1873	130	.....	3	619
135, 352	McMurray, O. E., Lansingburgh, N. Y. Combined stop and check valves.....	Jan. 28, 1873	801	259	3	112
5, 457	McMurtry, J., Fayette County, Ky., assignor by mesne assignments to F. Cook, New Orleans, La. Cotton-bale tie.....	June 17, 1873	696	196	3	683
5, 617	McMurtry, J., Lexington, Ky., assignor to F. Cook. Cotton-bale tie..... (Reissue.)	Oct. 21, 1873	522	175	4	441
142, 803	McMurtry, J., Lexington, Ky. Bale-tie.....	Sept. 16, 1873	435	147	4	289
141, 577	McNabb, J. A., Olathe, Kans. Door-check.....	Aug. 5, 1873	144	46	4	147
6, 486	McNair, D., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet. (Design).....	Mar. 4, 1873	.....	.....	3	245
6, 936	Same..... same..... (Design).....	Oct. 7, 1873	.....	.....	4	390
6, 937	Same..... same..... (Design).....	Oct. 7, 1873	.....	.....	4	380
	McNair, W. W. (See Nilson, N., assignor.)					
136, 928	McNalley, M., Houston, Tex. Wheel for vehicles.....	Mar. 18, 1873	520	172	3	305
	McNally, F. F. (See McNally, J. T. & F. T.)					
134, 607	McNally, J. T., Brooklyn, and F. T. McNally, East New York, N. Y. Washboard.....	Jan. 7, 1873	103	33	3	15
137, 228	McNally, J. T., Brooklyn, N. Y. Bran-duster.....	Mar. 25, 1873	798	263	3	338
	McNamar, J. H. (See Scheidler & McNamar.)					
135, 138	McNamara, M., Philadelphia, Pa. Folding cradle or orb.....	Jan. 21, 1873	590	192	3	82
137, 943	McNamee, J., assignor to self and E. W. Cloud, Philadelphia, Pa. Window frame and sash.....	Apr. 15, 1873	603	190	3	430
135, 571	McNeal, C. E., Silver Creek, N. Y. Middlings-purifier.....	Feb. 4, 1873	164	53	3	140
	McNeal, S. D., et al. (See Green, C., assignor.)					
143, 022	McNeely, J., Pittsburgh, Pa. Nail-plate feeder.....	Sept. 23, 1873	624	212	4	325
140, 838	McNeil, O., and P. W. Dalton, Jersey City, N. J. Apparatus for scraping hogs.....	July 15, 1873	441	150	4	63
139, 724	McNeil, T. E., New York, N. Y. Sectional steam-boiler.....	June 10, 1873	267	84	3	646
142, 034	McNeile, A., London, England. Spoke-machine.....	Aug. 19, 1873	571	189 190	4	199

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	McNeill, H. (See Straazer, G., assignor.)					
139, 803	McNeill, J. Wells, Minn. Device for detaching horses from vehicles	June 10, 1873	341	106	3	652
138, 673	McNeill, T. E., New York, N. Y. Apparatus for feeding and returning water of condensation to steam-boilers	May 6, 1873	184	59	3	519
139, 908	McNeill, T. E., and R. N. Pratt, New York, N. Y. Feed-water heater and condenser	June 17, 1873	443	138	3	667
141, 578	Same. Steam-generator	Aug. 5, 1873	144	46	4	147
139, 173	McNair, A. S., and W. D. Stockton, Philadelphia, Pa. Vegetable-grater	May 20, 1873	650	203	3	573
	McNitt, M. (See Ballagh, A. H., assignor.)					
138, 174	McPherson, W., Manchester, N. H. Artesian-well boring	Apr. 22, 1873	822	261	3	457
137, 016	McPherson, W. H., assignor to W. A. T. Godfroy and D. Bennett, Nashville, Tenn. Burglar-alarm	Mar. 18, 1873	597	198	3	319
	McQuiston, T., Morning Sun, Ohio. Cultivator (Extension)	Oct. 18, 1873			4	400
	McSherry, J. F. (See Rand & McSherry.)					
141, 369	McVicar, M., Potsdam, N. Y. Apparatus for teaching in schools	July 29, 1873	969	315	4	122
5, 337	McWhorter, F. S., Saint George's, Del. Grain-weighing machine (Reissue)	Mar. 25, 1873	848	278	3	342
140, 292	McWilliams, A. S., Colusa, Cal. Sheep-shears	June 24, 1873	787	250	3	704
143, 023	McWilliams, J., Providence, R. I. Jewelers' hand-press	Sept. 23, 1873	625	212	4	325
6, 366	Meacham, G. F., Newton, assignor to J. W. Tufts, Medford, Mass. Casing for soda-water apparatus (Design)	Jan. 21, 1873			3	71
6, 367	Same. same (Design)	Jan. 21, 1873			3	71
6, 690	Same. same (Design)	May 27, 1873			3	586
7, 063	Same. same (Design)	Dec. 16, 1873			4	641
140, 153	Mead, E. B., Pittsfield, Mass. Cigar	June 24, 1873	672	211	3	694
142, 035	Mead, I. S., Blue Earth City, Minn. Water-heater	Aug. 19, 1873	577	190	4	199
140, 785	Mead, J. H., New York, N. Y. Lemon-squeezer	July 15, 1873	395	135	4	60
144, 406	Mead, T. H., assignor to R. Hoe & Co., New York, N. Y. Miter-box for cutting printers' rules	Nov. 11, 1873	205	69	3	507
139, 014	Meaker, J. W., Detroit, Mich. Elevator-hatchway protector	May 20, 1873	499	157	3	561
140, 213	Mears, H. A., Rockford, assignor to self, S. Salisbury, and B. Sanborn, Peconica, Ill. Agricultural boiler	June 24, 1873	721	227	3	698
142, 254	Mears, H. A., Peconica, Ill. Stove-pipe coupling	Aug. 26, 1873	781	258	4	225
145, 517	Mears, H. A., Rockford, Ill. Agricultural boiler	Dec. 16, 1873	441	144	4	645
141, 370	Mears, J. H., Oshkosh, Wis., assignor of one-half interest to W. G. and W. Barnes, Freeport, Ill. Horse hay-rake	July 29, 1873	969	315	4	122
140, 214	Mears, W., and H. Davies, Newport, Ky. Lamp-chimney support	June 24, 1873	722	227	3	698
136, 747	Meckert, A., Guttenberg, N. J. Stone pavement	Mar. 11, 1873	358	118	3	283
	Medbery, Stevens & Co. (See Dedrick, J. H., assignor.)					
142, 927	Medcalf, W. C., Rochester, N. Y. Lawn-seat	Sept. 16, 1873	536	183	4	308
136, 331	Meddows, I. O., Bonham, Tex. Running-gear for vehicles	Feb. 25, 1873	866	279	3	233
140, 154	Same. Running-gear for wagons	June 24, 1873	672	211	3	694
	Medenwald, A. F. (See Von Kessler & Medenwald.)					
	Meehan, J. (See Lunkenheimer & Meehan.)					
	Same. same (Design)					
137, 379	Meehan, J. C., Springfield, Mass. Fire-extinguisher	Apr. 1, 1873	89	29	3	364
	Meehl, J. (See Richards & Meehl.)					
	Meek, P. G. (See Moore, J. W., assignor.)					
141, 157	Meek, W., Anderson, Ind. Potters' lathe	July 22, 1873	751	247	4	97
142, 804	Meeker, E., Bridgeport, Conn. Die for forming carriage-clips	Sept. 16, 1873	436	147	4	299
137, 706	Mefford, D. M., Norwalk, Ohio. Machine for grinding saws	Apr. 8, 1873	389	120 121	3	400
146, 012	Mége, H., Paris, France. Treating animal fats	Dec. 30, 1873	902		4	705
143, 293	Mégy, L., J. De Echeverria and F. Bazan, Paris, France. Internal spring coupling and brake	Sept. 30, 1873	850	292	4	360
	Mehaffey, S. (See Marcar & Mehaffey.)					
141, 579	Méhu, A., Paris, France. Metallic rope clamp	Aug. 5, 1873	145	47	4	147
136, 445	Meidinger, H., Karlsruhe, Germany. Apparatus for cooling liquids, &c	Mar. 4, 1873	79	27	3	252
137, 855	Meidinger, H., Karlsruhe, Germany, assignor to F. Gutzkow, San Francisco, Cal. Coal-stove	Apr. 15, 1873	531	165	3	424
140, 521	Meier, G. H., Cincinnati, Ohio. Device for releasing horses from carts	July 1, 1873	153	52	4	21
	Meier, H. (See Mueller & Meier.)					
139, 909	Meigs, G. W., Hartford, Conn. Temple for spectacles	June 17, 1873	444	138	3	667
5, 433	Meigs, J. V., Lowell, Mass. Breech-loading fire-arm (Reissue)	June 3, 1873	179	59	3	623
139, 408	Same. Bracket for shelving	May 27, 1873	872	279	3	599
	Meikle, J. W. (See Meikle, T. and J. W.)					
142, 713	Meikle, T. and J. W., Louisville, Ky. Car-coupling	Sept. 9, 1873	347	117	4	282
138, 424	Meinera, C., Indianapolis, Ind. Mechanical movement	Apr. 29, 1873	1,075	339	3	486
	Meir, M. (See Conrad, E. E., assignor.)					
140, 937	Meisse, J., New Albany, Ind. Stone and glass polishing machine	July 15, 1873	538	179	4	71
140, 215	Meldrum, J. E., assignor to the Barbour Flax-spinning Company, Paterson, N. J. Evener for thread	June 24, 1873	723	227	3	699
137, 229	Mellen, P. W., Saint Louis, Mo. Reversing-valves for steam-engines	Mar. 25, 1873	799	263	3	338
137, 464	Same. Elevator	Apr. 1, 1873	165	52, 53	3	370
140, 786	Same. Hoisting-machine	July 15, 1873	395	135	4	60
134, 692	Mellinger, C. K., Lebanon, Pa., assignor to self and J. Reinoehl, jr., Harrisburgh, Pa. Carriage-seat	Jan. 7, 1873	182	60	3	91
143, 034	Mellisb, H., Walpole, N. H. Clothes-pin	Sept. 23, 1873	626	213	4	325
140, 938	Melloe, C. H., and M. L. Orum, Philadelphia, Pa. Rotary-cutter	July 15, 1873	539	179	4	71
140, 727	Melone, T. L., Mount Gilead, Ohio. Sewing-machine	July 15, 1873	396	136	4	60
	Melton, R. M., Criglersville, Va. Cultivator (Extension)	May 31, 1873			3	585
	Melville, M. L. (See Kidd & Melville.)					
	Melvin, J. B., et al. (See Hobart, G. W., assignor.)					
	Mendenhall, E., et al. (See Getty, G. B., assignor.)					
144, 467	Mendenhall, N. M., Dublin, Ind. Traction-engine	Nov. 11, 1873	255	86	4	511
	Mendham, W. (See Chambers & Mendham.)					
143, 294	Mendham, W., assignor to self and W. P. Davis, Philadelphia, Pa. Ball-valve	Sept. 30, 1873	854	292	4	360
	Menegay, J. (See Laurent & Menegay.)					
	Merchant, A. P., administratrix. (See Merchant, N. R., assignor) (Reissue.)					
	Merchant, M., administrator. (See Merchant, N. R.) (Reissue.)					
5, 222	Merchant, N. R., deceased, assignor of part interest to A. P. Merchant, said A. P. and M. Merchant, administrators, Guilford, N. Y. Boring-machine (Reissue)	Jan. 7, 1873	212	68	3	23
139, 967	Merchen, J., Broosville, Ind. Animal trap	June 17, 1873	487	154	3	671
145, 518	Mercier, E., Springfield, Mass. Railway-switch	Dec. 16, 1873	442	144	4	645
	Meriden Britannia Company. (See Wilcox, H. C., assignor) (Design.)					
137, 144	Mern, J. P., New York, N. Y. Stop-cock	Mar. 25, 1873	719	239	3	332
138, 512	Merrell, E. A., East Lyme, Conn. Insulator for telegraph-lines	May 6, 1873	41	14	3	501

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7, 081	Merriam, A., and C. L. Little, West Meriden, Conn. Pin-cushion..... (Design)	Dec. 30, 1873			4	698
141, 285	Merriam, F. M. and J. B., West Meriden, Conn. Attaching knobs to spindles.....	July 29, 1873	885	290	4	116
145, 673	Merriam, G. H., Portland, Me. Automatic attachment for car-couplings.....	Dec. 16, 1873	573	188	4	656
	Merriam, J. B. (See Merriam, F. M. & J. B.)					
	Merriam, J. O. (See Chamberlin, E., assignor)..... (Reissue.)					
	Same..... (See Morehouse, C. B., assignor)..... (Reissue.)					
137, 312	Merriam, J. O., et al. (See Morehouse, C. B., assignor)..... (Reissue.)	Apr. 1, 1873	30	9	3	359
138, 425	Merriam, L. W., Fitchburgh, Mass. Shingling-bracket.....	Apr. 29, 1873	1, 075	339	3	486
	Same.....					
	Merriam Manufacturing Company. (See Harwood, W. A., assignor)..... (Design.)					
	Same..... (See Hubbard & Severance, assignors.)					
142, 406	Merrick, D. E., assignor of one-half interest to J. B. Smith, Milwaukee, Wis. Joint for iron ships and tanks.....	Sept. 2, 1873	76	25	4	248
	Merrick, T. (See Church, D. M., assignor.)					
	Merrihew, P. E. (See Ladd, D. O. B., assignor.)					
138, 911	Merriken, J. S., Baltimore, Md. Bricklayer's pointer.....	May 13, 1873	401	126	3	540
	Merrill, C. J. (See Vaughn, Camp & Merrill.)					
142, 576	Merrill, C. J., Upper Alton, Ill. Tile-machine.....	Sept. 9, 1873	236	77	4	273
	Merrill, E. P. (See Boody & Merrill.)					
	Merrill, F. C. (See Pettengill, C. B., assignor.)					
139, 174	Merrill, F. H., San Francisco, Cal. Pipe-tongs.....	May 20, 1873	650	203	3	573
134, 761	Merrill, G., East Orange, N. J. Fastening for shoes, &c.....	Jan. 14, 1873	250	82	3	40
140, 635	Same..... Knitting-machine.....	July 8, 1873	265	90	4	41
145, 581	Merrill, G. L. and O. F. Soule, Syracuse, N. Y. Preserving green corn and other vegetables.....	Dec. 16, 1873	495	162	4	649
138, 036	Merrill, H., Brooklyn, N. Y. Car-wheel.....	Apr. 22, 1873	706	223	3	448
138, 175	Same..... Grain-elevator.....	Apr. 22, 1873	623	261	3	458
	Merrill, H. E. (See Vaughn, Camp & Merrill.)					
141, 230	Merrill, H. E., Akron, Ohio. Machine for molding clay smoking-pipes.....	July 29, 1873	834	{ 272 } { 273 }	4	112
	Merrill, H. S. (See Annan, C. F., assignor.)					
137, 786	Merrill, I., Springfield, Mass. Hook attachments to bands of fire-arms.....	Apr. 15, 1873	472	148	3	419
	Merrill, J., et al. (See Merrill, R. S., assignor.)					
143, 524	Merrill, J. A. and D. W. Kompton, Denver, Colorado Ter. Car-coupling.....	Oct. 7, 1873	106	37	4	389
140, 585	Merrill, W. M., Boston, Mass. Abdominal supporter.....	July 8, 1873	223	75	4	38
143, 525	Merrill, P. H., Pardeeville, Wis. Steam-heater.....	Oct. 7, 1873	108	37	4	389
145, 438	Merrill, R. S., Hyde Park, assignor to self and W. B. & J. Merrill, Boston, Mass. Lamp-burner.....	Dec. 9, 1873	356	119	4	626
145, 068	Merrill, T., Portland, Me. Combined ruler and blotter.....	Dec. 2, 1873	26	9	4	587
	Merrill, W. B., et al. (See Merrill, R. S., assignor.)					
139, 409	Merriman, A. T., Chicago, Ill. Machine for sawing stone..... (Extension)	June 21, 1873			3	662
	Same..... Machine for planing stone.....	May 27, 1873	872	279	3	599
	Merriman, C. H., trustee. (See Vanstone, S., assignor.)					
134, 760	Merriman, M. H. (See Huffer, A., assignor.)					
	Merritt, B., Newton, Mass. Jig-saw.....	Jan. 14, 1873	249	81, 82	3	40
	Merritt, D. (See Coe & Merritt.)					
	Merritt, E., et al. (See Kimball, E. A., assignor.)					
139, 410	Merritt, I., assignor to self and W. A. Sweetser, North Bridgewater, Mass. Fire-escape.....	May 27, 1873	873	280	3	599
140, 061	Merritt, J. C., West Point, N. Y., assignor to self and J. J. Walton, Newark, N. J. Shoulder-strap.....	June 17, 1873	572	181	3	678
142, 036	Merritt, J. E., Bangor, Me. Saw-hanging.....	Aug. 19, 1873	578	190	4	199
143, 773	Merritt, W., Weymouth, Mass. Lumber-marker.....	Oct. 21, 1873	367	121	4	428
	Merritt, W. L. (See Hastings, Nichols & Merritt.)					
6, 709	Mersereau, J., Port Chester, N. Y. Flower-vase..... (Design)	June 17, 1873			3	663
6, 615	Mersereau, W. T., Orange, N. J. Stair-rod..... (Design)	Apr. 29, 1873			3	471
5, 278	Mershon, A. H., Philadelphia, Pa., assignor to self and G. B. Mershon. Gas fire-log..... (Reissue.)	Feb. 11, 1873	451	147	3	174
	Mershon, G. B. (See Mershon, A. H., assignor.)					
	Mertsheimer, F. (See McConnell, Truesdell & Mertsheimer.)					
	Mertz, E. (See Maring & Mertz.)					
136, 379	Merveap, J. J., New York, N. Y. Calk for horseshoes.....	Mar. 4, 1873	25	8	3	247
	Merz, H. (See Arnold & Merz.)					
142, 805	Mesick, P. (See Barnes, W. F. & J., and Mesick.)					
	Messer, J. L., Troy, N. Y. Lime-kiln.....	Sept. 16, 1873	436	147	4	299
	Messer, W. W., jr. (See Fairfield & Messer.)					
137, 465	Messer, W. W., jr., Boston, Mass., assignor to W. W. Messer, Northwood, N. H. Buffing-machine.....	Apr. 1, 1873	167	53	3	370
141, 009	Messinger, R. G., Norwich, Conn. Toy.....	July 22, 1873	617	208	4	87
	Metallic Suspension-Wheel Company. (See Vreeland, S., assignor.)					
	Same..... (Reissue.)					
134, 915	Metcalfe, A., and W. Gibbons, Preston, Great Britain. Self-acting spinning-mule.....	Jan. 14, 1873	386	123	3	51
141, 286	Metcalfe, E., Rome, N. Y. Inside blind.....	July 29, 1873	885	290	4	116
152, 256	Metcalfe, G., Somonauk, Ill. Windmill.....	Aug. 26, 1873	783	258	4	225
137, 787	Metcalfe, O., Mitchell, assignor to J. Harlan, Lexington, Ind. Fruit-press.....	Apr. 15, 1873	472	148	3	420
143, 415	Metcalfe, H., United States Army. Means of attaching cartridge-magazine blocks to fire-arms.....	Oct. 7, 1873	19	8	4	382
	Metropolitan Washing-Machine Company. (See Page, A. H., assignor)..... (Reissue.)					
	Same..... (See Pool, T., assignor)..... (Reissue.)					
142, 928	Metaker, J. G., Logansport, Ind. Bake-pan.....	Sept. 16, 1873	536	183	4	308
134, 693	Mettals, C. J., assignor to G. Sackett, New York, N. Y. Coloring pictures.....	Jan. 7, 1873	183		3	21
140, 839	Mettler, I. S., Jersey City, N. J. Fire-proof shutter.....	July 15, 1873	442	150	4	63
142, 641	Same..... Metallic roof.....	Sept. 9, 1873	287	94	4	277
135, 353	Metz, J. W., Stout's P. O., Ohio. Brick-machine.....	Jan. 28, 1873	802	250	3	112
	Metzger, J. C. (See Bladon, T., assignor.)					
	Meucci, A. (See Agresta & Meucci.)					
140, 719	Meunier, L. F., Fives-Lille, France. Heater and filter.....	July 8, 1873	335	113	4	47
143, 707	Newborn, L. J., Kinston, N. C. Potato cutter and planter.....	Oct. 14, 1873	291	95	4	412
139, 015	Mewes, H., Binghamton, N. Y. Fruit-picker.....	May 20, 1873	500	158	3	562
6, 270	Meyenberg, S. M. and R. Collinge, Paterson, N. J. Veil..... (Design)	Sept. 2, 1873			4	241
6, 431	Meyer, C. T. & V. E., Lyons Farms, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design)	Feb. 18, 1873			3	189
6, 432	Same..... same..... (Design)	Feb. 18, 1873			3	189
6, 433	Same..... same..... (Design)	Feb. 18, 1873			3	189
6, 434	Same..... same..... (Design)	Feb. 18, 1873			3	189

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6, 435	Meyer, C. T. & V. E., Lyons Farms, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design)	Feb. 18, 1873			3	189
6, 436	Same..... same..... (Design)	Feb. 18, 1873			3	189
6, 494	Same..... Floor oil-cloth..... (Design)	Mar. 18, 1873			3	297
6, 495	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 496	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 497	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 498	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 499	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 500	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 501	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 502	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 503	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 504	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 505	Same..... same..... (Design)	Mar. 18, 1873			3	297
6, 526	Same..... Floor oil-cloth, &c..... (Design)	Mar. 25, 1873			3	325
6, 527	Same..... same..... (Design)	Mar. 25, 1873			3	325
6, 546	Same..... same..... (Design)	Apr. 1, 1873			3	357
6, 547	Same..... same..... (Design)	Apr. 1, 1873			3	357
6, 656	Same..... Floor-cloth..... (Design)	May 20, 1873			3	559
6, 657	Same..... same..... (Design)	May 20, 1873			3	559
6, 661	Same..... same..... (Design)	May 20, 1873			3	559
6, 662	Same..... same..... (Design)	May 20, 1873			3	559
6, 663	Same..... same..... (Design)	May 20, 1873			3	585
6, 786	Same..... Oil-cloth..... (Design)	July 29, 1873			4	108
6, 787	Same..... same..... (Design)	July 29, 1873			4	108
6, 788	Same..... same..... (Design)	July 29, 1873			4	108
6, 789	Same..... same..... (Design)	July 29, 1873			4	108
6, 871	Meyer, C. T. & V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design)	Sept. 2, 1873			4	242
6, 885	Same..... same..... (Design)	Sept. 16, 1873			4	296
6, 951	Same..... Floor oil-cloth..... (Design)	Oct. 7, 1873			4	380
6, 980	Meyer, C. T. & V. E., Bergen, N. J., assignors to E. C. Sampson, Philadelphia, Pa. Floor oil-cloth..... (Design)	Nov. 4, 1873			4	478
6, 981	Same..... same..... (Design)	Nov. 4, 1873			4	478
6, 998	Meyer, C. T. & V. E., Bergen, N. J., assignor to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design)	Nov. 18, 1873			4	531
6, 999	Same..... same..... (Design)	Nov. 18, 1873			4	531
7, 000	Same..... same..... (Design)	Nov. 18, 1873			4	531
7, 001	Same..... same..... (Design)	Nov. 18, 1873			4	531
7, 035	Same..... Floor oil-cloth and carpet..... (Design)	Dec. 9, 1873			4	614
7, 036	Same..... same..... (Design)	Dec. 9, 1873			4	614
7, 037	Same..... same..... (Design)	Dec. 9, 1873			4	614
145, 960	Meyer, F., assignor to D. M. Osborne & Co., Auburn, N. Y. Apparatus for tempering sickle-sections.....	Dec. 30, 1873	856	278	4	701
137, 856	Meyer, G., New Richmond, Mich. Motive-power.....	Apr. 15, 1873	532	166	3	424
135, 139	Meyer, G., assignor of one-half interest to J. Dick, Quincy, Ill. Machines for pitching barrels, casks, &c.....	Jan. 21, 1873	591	192	3	83
141, 449	Meyer, G., and J. Dick, Quincy, Ill. Apparatus for pitching casks, barrels, &c.....	Aug. 5, 1873	35	11	4	138
139, 411	Meyer, H. H., Denver, Col. Drawing-board.....	May 27, 1873	874	280	3	599
142, 491	Same..... Governor cut-off gear.....	Sept. 2, 1873	155	50	4	254
6, 691	Meyer, J., assignor to D. Powers & Sons, Lansingburgh, N. Y. Floor-cloth..... (Design)	May 27, 1873			3	586
145, 674	Meyer, L., Saint Louis, Mo. Range.....	Dec. 16, 1873	574	188	4	656
6, 382	Meyer, P. P., New York, N. Y. Urn for hot water, &c..... (Design)	Feb. 4, 1873			3	127
141, 580	Meyer, V. E. (See Meyer, C. T. & V. E.)..... (Design)					
141, 581	Meyers, L., assignor to self and J. Adler, New York, N. Y. Glove-fastener.....	Aug. 5, 1873	145	47	4	147
135, 001	Meyersberg, A., New York, N. Y., assignor to E. B. Finch & Son, Peekskill, N. Y. Match-box.....	Aug. 5, 1873	146	47	4	147
136, 446	Meylert, A. P., New Britain, Conn. Method of purifying carbonic-acid gas.....	Jan. 21, 1873	476		3	73
137, 615	Same..... Process for the manufacture of white-lead.....	Mar. 4, 1873	80	27	3	252
140, 522	Same..... Process of purifying carbonic-acid gas.....	Apr. 8, 1873	308		3	393
135, 239	Michael, A. F., and H. N. Duncan, Lockport, N. Y. Carpet-stretcher.....	July 1, 1873	154	52	4	91
136, 849	Michaels, J. P., and L. W. Broadwell, assignors to selves and P. S. Post, Vienna, Austria. Railway-car heater.....	Jan. 28, 1873	702	225	3	104
136, 426	Michaels, L., Covington, Ky. Lamp.....	Mar. 18, 1873	455	151	3	300
143, 174	Same..... Locomotive head-light.....	Apr. 29, 1873	1,076	339	3	486
136, 360	Same..... Attaching knobs to latches.....	Sept. 23, 1873	742	255	4	335
143, 025	Michaux, H., Hockanum, Conn. Mowing-machine.....	Mar. 4, 1873	26	9	3	247
	Michener, E. P. (See Powell, J. B., assignor.).....	Sept. 23, 1873	626	213	4	325
	Michener, W. R., et al. (See Milroy, J. W., assignor.).....					
	Michtle, C. C. (See Pavonarius & Michtle.).....					
	Mickel, W. (See Hoagland & Mickel.).....					
138, 674	Mickels, F., assignor of one-half interest to H. A. Grimmer, Quincy, Ill. Sausage-stuffer.....	May 6, 1873	185	59	3	512
	Mickle, J. W. (See Thomas S., assignor.).....					
	Middleton, A., jr. (See Clime, J. C., assignor.).....					
138, 675	Same..... (See Middleton, N. & A., jr.).....					
142, 492	Middleton, A., jr., Philadelphia, Pa. Car-spring.....	May 6, 1873	186	59	3	512
	Same..... Car-coupling.....	Sept. 2, 1873	156	51	4	254
135, 929	Middleton, E. C. (See Winchell, J. F., assignor.).....					
143, 989	Middleton, N. & A., jr., Philadelphia, Pa. Manufacture of car-springs.....	Feb. 18, 1873	506	165	3	193
	Middleton, S., assignor to self and J. Troop, Dunkirk, Ind. Feeding-device for grinding-mills..... (Reissue.)	Oct. 28, 1873	572	190	4	455
	Mignon, J. B. J., et al. (See Carré, F. P. E., assignor.).....					
	Same..... (See Gauduin, Mignon & Rouart.).....					
6, 168	Mikinas, C. (See Haberstick, F., assignor.).....					
136, 850	Milbank, I. M., Greenfield Hill, Conn. Metallic cartridge.....	Feb. 25, 1873	729	235	3	222
139, 725	Same..... Breech-loading fire-arm.....	Mar. 18, 1873	456	151	3	300
	Milbourn, J., Millport, Ohio. Horse-power..... (See Baldwin, J. P., assignor.)	June 10, 1873	270	84	3	647
	Miles Alarm-Till Manufacturing Company..... (See Baldwin, J. P., assignor.)					
137, 313	Miles, F. B., et al. (See Hahn, F. E., assignor.).....					
142, 493	Miles, F. B., assignor to Ferris & Miles, Philadelphia, Pa. Steam drop-hammer.....	Apr. 1, 1873	30	10	3	359
142, 494	Miles, F. B., assignor to self and O. C. Ferris, Philadelphia, Pa. Planing-machine.....	Sept. 2, 1873	157	51	4	254
	Miles, F. B., assignor to O. C. Ferris and F. B. Miles, Philadelphia, Pa. Automatically-operating shaft.....	Sept. 2, 1873	158	51	4	254

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135, 043	Miles, H. R. (See Wright, Holley & Miles.)					
	Miles, J. A., Charleston, Ill. Inking-pad	Jan. 21, 1873	514	166	3	76
	Miles, O. E. (See Marsh & Miles.)					
144, 553	Miles, W. H., jr., Brooklyn, N. Y. Lather-brush handle	Nov. 11, 1873	330	111	4	516
143, 921	Millar, H. M., Louisville, Ky. Bosom-pad	Oct. 21, 1873	491	165	4	438
	Millar, J. S. (See McDougall, A., assignor) (Reissue.)					
138, 912	Millard, H., Philadelphia, Pa. Car-coupling	May 13, 1873	402	127	3	540
136, 929	Milligan, W. E., McKinney, Tex. Washing-machine	Mar. 18, 1873	521	172	3	305
139, 175	Miller, A., New York, N. Y., assignor to G. T. Nutter, Jersey City, N. J. Elevating ladders	May 20, 1873	651	203	3	574
	Miller, A. A. (See Manson, G. W., assignor.)					
142, 714	Miller, A. S., Nottingham, Ind. Clothes-drier	Sept. 9, 1873	348	117	4	282
	Miller Brothers. (See Miller, J. N., assignor.)					
137, 145	Miller, B. & M., Lowell, Wis. Sieve for separators	Mar. 25, 1873	720	239	3	332
142, 037	Miller, C. G., assignor to O. S. Judd and C. Blakeslee, New Britain, Conn. Match-plane	Aug. 19, 1873	579	190	4	199
142, 715	Miller, C. L., Cuba, N. Y. Car-coupling	Sept. 9, 1873	348	118	4	282
	Miller, C. M., et al. (See Spencer, J. C., assignor.)					
141, 656	Miller, C. M., Phelps, N. Y. Vertical steam-boiler	Aug. 12, 1873	232	73	4	162
143, 831	Miller, D. K., Philadelphia, Pa. Seal-lock, &c.	Oct. 21, 1873	418	139	4	432
143, 990	Same. Padlock, &c.	Oct. 28, 1873	572	190	4	455
143, 368	Miller, D. M., South Bend, Ind. Car-coupling	Sept. 30, 1873	923	313	4	366
139, 726	Miller, D. Y., Huntsville, Ill. Scaffold	June 10, 1873	270	85	3	647
	Miller, E., et al. (See Ambrose, J. E., assignor) (Reissue.)					
	Miller, E., & Co. (See Perkins, O. N., assignor.)					
	Same. (See Perkins, W. H., assignor) (Design.)					
135, 572	Miller, F. C., assignor to self and H. C. Peters, Cincinnati, Ohio. Cigar-mold	Feb. 4, 1873	185	53	3	140
142, 170	Miller, F. C., Blue Earth City, Minn. Seed-separator	Aug. 26, 1873	710	235	4	219
	Miller, F. E., et al. (See Durini, A., assignor.)					
145, 439	Miller, F. L., Brooklyn, N. Y. Paint-can and device for removing the contents	Dec. 9, 1873	357	119	4	626
	Miller, G., et al. (See Miller, H., assignor)					
143, 295	Miller, G., Battle Ground, Wash. Bee-hive	Sept. 30, 1873	854	293	4	360
144, 468	Miller, G. C., Detroit, Mich., assignor to J. C. Maloy, Oil City, Pa. Extension-dividers	Nov. 11, 1873	257	86	4	511
140, 523	Miller, G. H., Leavenworth, Kans. Hot-air furnace	July 1, 1873	154	53	4	21
142, 642	Miller, G. H., Binghamton, N. Y. Centering-chuck	Sept. 9, 1873	288	94	4	277
	Miller, G. W., et al. (See Anderson, J. J., assignor.)					
	Miller, G. W. (See Smith, G. K., assignor.)					
	Miller, H. (See Hewet, H. W., assignor.)					
	Same. (See Miller, S., assignor.)					
136, 085	Miller, H., New York, N. Y. Can for paint, liquids, &c.	Feb. 18, 1873	639	209	3	203
145, 069	Miller, H., assignor to G. and H. Miller and A. A. Irons, Johnston, R. I. Sink	Dec. 2, 1873	27	9	4	587
145, 440	Miller, H., New York, N. Y. Can for paint, &c.	Dec. 9, 1873	356	120	4	626
139, 513	Miller, H. H., and T. Bennett, Saint Louis, Mo. Card-case	June 3, 1873	60	20	3	613
	Miller, H. P. (See Miller, J. A., assignor.)					
139, 176	Miller, H. S., Philadelphia, Pa. Rotary paper-cutter	May 20, 1873	653	204	3	574
	Miller, J. (See Miller, L. & J.) (Extension.)					
	Miller, J. (See Ponce, J. P., assignor.)					
137, 944	Miller, J., New York, N. Y. Apparatus for heating oranks	Apr. 15, 1873	603	190	3	431
138, 176	Same. Casting bearings on shafting	Apr. 22, 1873	824	262	3	458
138, 914	Miller, J., West Salem, Ohio. Wood fillings and paint compound	May 13, 1873	404		3	541
142, 495	Miller, J., assignor of one-half interest to C. H. Delamater, New York, N. Y. Planing-machine	Sept. 2, 1873	158	51, 52	4	254
135, 656	Miller, J. A., assignor of one-half interest to H. P. Miller, Paducah, Ky. Device for discharging bilge-water	Feb. 11, 1873	254	80	3	160
135, 655	Miller, J. C., and E. S. Armstrong, Sunbury, Ohio. Table	Feb. 11, 1873	254	80	3	160
146, 087	Miller, J. C., Rockport, Ind. Clothes-frame	Dec. 30, 1873	965	311	4	710
6, 506	Miller, J. E., Pittsburgh, Pa. Beer-mug (Design.)	Mar. 18, 1873				297
138, 913	Miller, J. H., Frederickton, New Brunswick. Track-clearer	May 13, 1873	403	127	3	540
134, 916	Miller, J. M., Cincinnati, Ohio. Spring-vehicle	Jan. 14, 1873	388	123	3	51
141, 065	Miller, J. N., assignor to Miller Brothers, Bellefontaine, Ohio. Carriage-seat	July 22, 1873	665	224	4	91
	Miller, L., Akron, and J. Miller, Canton, Ohio. Harvester (Extension.)	July 5, 1873				6
138, 268	Miller, L. J., Orrville, Ohio. Nut-lock	Apr. 29, 1873	934	295	3	475
	Miller, L. N., et al. (See Patterson, N. A., assignor.)					
	Miller, M. (See Baird & Miller.)					
	Same. (See Miller, B. & M.)					
	Miller, M. F. (Patterson, N. A., assignor.)					
138, 094	Miller, N. C., Stroudsburg, Pa. Egg-beater	Apr. 22, 1873	756	240	3	452
141, 582	Miller, N. E., Canaan Center, Ohio. Cider-mill	Aug. 5, 1873	146	47	4	147
	Miller, P. (See Price & Miller.)					
139, 412	Miller, R. P. and W. L., Lineville Station, Pa. Fly-trap	May 27, 1873	875	280	3	599
135, 657	Miller, R. R., assignor to self and J. B. Savage, Southington, Conn. Martingale	Feb. 11, 1873	255	81	3	160
139, 413	Miller, R. R., Plantsville, Conn. Die for swaging carriage-clips	May 27, 1873	875	280	3	599
	Miller, S. (See Stevens & Miller.)					
140, 720	Miller, S., Holley, N. Y., assignor of one-half interest to H. Miller, Hudson, N. Y. Car-coupling	July 8, 1873	336	114	4	47
145, 223	Miller, S., Gratis, Ohio. Permutation-lock	Dec. 2, 1873	166	57	4	598
137, 707	Miller, S. B., Stanwood, Iowa. Stalk-cutter	Apr. 8, 1873	390	121	3	400
137, 708	Same. Seeding-machine	Apr. 8, 1873	391	121	3	400
	Miller, S. H. (See Wilson & Miller.)					
142, 257	Miller, S. H., assignor to self and J. E. Folk, Brooklyn, N. Y. Signal-lantern	Aug. 26, 1873	784	258	4	225
144, 554	Same. same	Nov. 11, 1873	331	111, 112	4	516
137, 017	Miller, S. J., and L. Wright, Economy, Ind. Wheel for vehicles	Mar. 18, 1873	598	198	3	312
144, 690	Miller, T., New York, N. Y. Fire-extinguishing water-pipe attachment for buildings	Nov. 18, 1873	452	153	4	538
144, 856	Miller, T., Boston, Mass. Oil-cabinet	Nov. 25, 1873	607	206	4	561
	Miller, T. L. (See Ross & Miller.)					
140, 586	Miller, T. L., Philadelphia, Pa. Machine for sewing turned shoes	July 8, 1873	224	75	4	38
139, 910	Miller, T. N., Pittsburgh, Pa. Manufacture of illuminating gas	June 17, 1873	445		3	667
140, 293	Miller, W., Boston, Mass., assignor to self and J. J. Hatlinger, Hyde Park, Mass. Carpet-sweeper	June 24, 1873	788	250	3	704
145, 582	Miller, W. A., Paterson, N. J. Book-clamp	Dec. 16, 1873	496	163	4	649
	Miller, W. F. (See Griffith & Miller.)					
139, 727	Miller, W. F., East Walpole, Mass. Propelling canal-boats	June 10, 1873	271	85	3	647
	Miller, W. I. (See Miller, R. P. and W. I.)					
	Miller, W. K. (See Batty, L. M., assignor) (Reissue.)					
	Miller, W. K., Canton, Ohio. Harvester (Extension of No. 2,266)	Feb. 8, 1873				100

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	Miller, W. K., Canton, Ohio. Harvester (Extension of No. 2, 267) ..	Feb. 8, 1873	3	100
	Same same (Extension of No. 2, 268) ..	Feb. 8, 1873	3	100
	Same same (Extension of No. 2, 269) ..	Feb. 8, 1873	.....	.....	3	100
	Same same (Extension of No. 2, 270) ..	Feb. 8, 1873	.....	.....	3	100
139, 596	Same same	June 3, 1873	131	43, 44	3	619
139, 597	Same same	June 3, 1873	132	44	3	620
139, 911	Miller, W. P., New York, N. Y. Machine for grinding hay	June 17, 1873	445	138	3	667
142, 258	Same Saw-tooth	Aug. 26, 1873	784	259	4	226
	Miller's Falls Company. (See Goodell, A. D., assignor.)					
	Miller's Falls Manufacturing Company. (See Goodell, A. D., assignor.)					
	Millett, G. V. (See Austin, H. K., assignor.)					
	Milligan, N., et al. (See Gearing, C., assignor.)					
143, 455	Milliken, D., New York, N. Y. Machine for splitting wood	Oct. 7, 1873	49	17	4	385
	Millot, J. (See Millot, T. and J.)					
144, 916	Millot, T. and J., New York, N. Y. Flower-makers' grass-cutting machine	Nov. 25, 1873	651	221	4	565
	Mills, G., et al. (See Hills, H. C., assignor.)					
138, 037	Mills, G. E., New York, N. Y. Mining-pump	Apr. 22, 1873	707	223	3	448
	Mills, G. M. (See Mills, T. and G. M.)					
	Mills, H. (See Rager, C. B., assignor.)					
135, 140	Mills, J., Keosauqua, N. Y. Horseshoe-nail machine	Jan. 21, 1873	592	192	3	83
135, 997	Mills, J., Johnstown, Wis. Cultivator	Feb. 18, 1873	562	185	3	197
143, 369	Mills, J. D., Alexandria, Va. Car-coupling	Sept. 30, 1873	924	313	4	366
	Mills, J. H. (See Wightman and Mills.)					
138, 269	Mills, J. H., Boston, Mass. Steam-generator	Apr. 29, 1873	935	295	3	475
145, 961	Same Indirect steam-radiator	Dec. 30, 1873	857	279	4	701
145, 962	Same System of steam and water-piping for buildings	Dec. 30, 1873	858	279	4	701
	Mills, L. (See Bean and Mills.)					
	Mills, L., et al. (See Foster, J. T., assignor.)					
138, 177	Mills, L., Jersey City, N. J. Box opener	Apr. 22, 1873	824	262	3	458
	Mills, S. (See Urdahl, T., assignor.)					
139, 804	Mills Shoe Machine and Manufacturing Company. (See Mills, W. J. B., assignor.)					
144, 214	Mills, T. and G. M., Philadelphia, Pa. Machine for granulating cocoa-nuts	June 10, 1873	343	106	3	652
	Mills, T. O., Rockford, assignor of one-half interest to W. H. Mills, Freeport, Ill. Gear-cutting attachment to lathes	Nov. 4, 1873	40	12	4	481
145, 745	Mills, W., and D. J. Wolfe, Jersey City, N. J. Toy-gun	Dec. 23, 1873	648	212	4	674
	Mills, W. H. (See Mills, T. O., assignor.)					
137, 616	Mills, W. J. B., Philadelphia, Pa., assignor to Mills Shoe Machine and Manufacturing Company, New York, N. Y. Last	Apr. 8, 1873	309	96	3	393
140, 721	Milner, E., Warrington, England. Manufacture of white lead for pigments	July 8, 1873	337	.....	4	47
135, 002	Milroy, J. W., assignor to self, W. R. Michener, and C. L. Howard, Haywood, Cal. Rotary cultivator	Jan. 21, 1873	476	152	3	73
141, 158	Milstead, A. J., Woodbury, assignor of one-half interest to W. E. Hooper & Sons, Baltimore, Md. Stopping-mechanism for twisting-machines	July 22, 1873	752	247 } 248 }	4	97
145, 224	Miltimore, A. E., United States Army. Battery-gun	Dec. 2, 1873	167	57	4	598
144, 347	Miltimore, G. W., Janesville, Wis. Car-axle	Nov. 4, 1873	145	48	4	490
138, 513	Milton, C. C., assignor of one-half interest to E. A. Learned, San Francisco, Cal. Fire-escape	May 6, 1873	42	14, 15	3	501
	Mindeleff, D. (See Kloczowski & Mindeleff.)					
	Miner, A. L., et al. (See Hardenbergh, Miner and Fender.)					
	Miner, G. D. (See Bayles, Carroll, and Miner.)					
145, 888	Miner, H. H., Boston, Mass. Shutter-fastening	Dec. 23, 1873	770	252	4	684
140, 062	Miner, J. G., Morrisania, N. Y. Street-lamp	June 17, 1873	573	181	3	679
	Miner, J. R., et al. (See Dorman, L., assignor.) (Reissue.)					
	Miner, T. F. (See Harris, S. W., assignor.)					
	Miner, T. F., et al. (See Harris, S. W., assignor.)					
143, 584	Miner, W. H., Boston, Mass. Calipers	Oct. 14, 1873	174	59	4	403
5, 712	Mingay, E., Boston, Mass. Design for heating-stove	Dec. 30, 1873	1,006	.....	4	713
6, 965	Mingay, E., assignor to Boston and Maine Foundry Company, Boston, Mass. Cooking-stove	Oct. 21, 1873	.....	.....	4	425
	Minka, J. (See Sullivan & Minka.)					
135, 240	Minniss, T. S., assignor of two-thirds interest to E. W. Shippen, Meadville, Pa. Traction locomotive	Jan. 28, 1873	704	226	3	104
145, 889	Minor, D. N., Chariton, Iowa. Seed-drill	Dec. 23, 1873	771	252	4	684
145, 441	Minot, H. P., Chicago, Ill. Ore-separator	Dec. 9, 1873	359	120	4	626
5, 458	Minter, T. W., New York, N. Y. Engraving and carving machine	June 17, 1873	626	197	3	683
135, 998	Same same	Feb. 18, 1873	562	186	3	197
145, 519	Minthorn, D., Gouverneur, N. Y., assignor of three-fourths interest to D. P. Smook, New York, N. Y. Die for forming rock-drills and other tools	Dec. 16, 1873	443	145	4	645
136, 531	Mitchel, O. M., Marathon, N. Y., assignor to Nellis, A., Fort Plain, N. Y. Head-rest	Mar. 4, 1873	161	52	3	258
	Mitchell, C. A. (See Heffey, W. H., assignor.)					
	Mitchell, D. L. H. (See Hunter & Mitchell.)					
140, 063	Mitchell, D. L. H., Forest, Miss. Lifting-jack	June 17, 1873	574	181	3	679
	Mitchell, H. M., et al. (See Flanders, J. P., assignor.)					
	Mitchell, J. H., Clarksville, Tenn. Cotton-scraper	Sept. 13, 1873	.....	.....	4	270
139, 728	Mitchell, J. H., San Francisco, Cal. Cooking-range	June 10, 1873	272	85	3	647
142, 250	Same Laundry stove	Aug. 26, 1873	785	259	4	226
141, 583	Mitchell, J. J., Livingston, Ala. Shovel-plow	Aug. 5, 1873	148	48	4	147
146, 088	Mitchell, J. J., Hopkinsville, Ky. Plow	Dec. 30, 1873	966	312	4	710
138, 676	Mitchell, J. M., Cincinnati, Ohio. Whip-rack	May 6, 1873	187	59	3	512
145, 358	Mitchell, J. M., Dunlap, Iowa. Brick-machine	Dec. 9, 1873	289	97	4	621
6, 881	Mitchell, M. V., Zanesville, Ohio. Monument	Sept. 9, 1873	.....	.....	4	270
145, 117	Mitchell, T. P., Haverhill, Mass. Boot or bootee	Dec. 2, 1873	72	23	4	591
141, 010	Mitchell, W., London, and J. J. Mayo, Sutton, England. Flash-light signal	July 22, 1873	618	209	4	87
145, 594	Mitchell, W. B., Chicago, Ill. Car-coupling	Dec. 16, 1873	498	163	4	650
135, 141	Mitcheson, E. B. A., Philadelphia, Pa. Moustache-spoon	Jan. 21, 1873	593	193	3	83
136, 169	Mitendorf, H., Stony Hill, Mo. Revolving-harrow	Feb. 25, 1873	730	235	3	222
136, 170	Mixer, L. L., Louisville, Ky. Smoothing-iron	Feb. 25, 1873	730	235	3	222
143, 245	Mixer, A. A., assignor of one-half interest to F. Black, Hamilton, Ohio. Potato-bug destroyer	Sept. 30, 1873	810	278	4	357
138, 427	Mixer, W. M., New York, N. Y. Refrigerator building	Apr. 29, 1873	1,077	339 } 340 }	3	486
144, 917	Moeller, P. W., New York, N. Y. Adjustable blackboard	Nov. 25, 1873	652	221	4	565
7, 004	Moeslein, L., New York, N. Y. Ornamental mat	Nov. 25, 1873	.....	.....	4	558
143, 089	Moffat, D., New Orleans, La. Apparatus for extracting cane-juice	Sept. 23, 1873	678	213	1	330
140, 587	Moffat, M., Watertown, Mass. Spinning-mule	July 8, 1873	225	76	4	38

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr & G.	Vol.	Page.
142, 860	Moffet, J., New York, N. Y. Cock for drawing beer.	Sept. 16, 1873	481	164	4	303
142, 260	Moffett, J. K., Watertown, N. Y. Table-leaf support.	Aug. 26, 1873	786	259	4	226
	Moffitt, J. (See Kennedy, J., assignor.)					
140, 064	Moffitt, D. J., Thorntown, Ind. Fastener for shutters and doors.	June 17, 1873	575	182	3	679
138, 514	Moffitt, J. W., Harrisburgh, Pa. Brake-shoe.	May 6, 1873	43	15	3	501
136, 086	Mohr, W., New York, N. Y. Rocking-chair.	Feb. 18, 1873	640	209	3	203
137, 230	Molan, P., New York, N. Y. Dinner-pail.	Mar. 25, 1873	799	264	3	338
138, 915	Molnoux, E. L., Brooklyn, N. Y. Preparing and packing water-colors.	May 13, 1873	404	127	3	541
7, 064	Molnar, A., New York, N. Y. Fur trimming. (Design.)	Dec. 16, 1873			4	641
139, 177	Moloney, G. P., Detroit, Mich. Pipe-wrench.	May 20, 1873	654	204	3	574
142, 861	Moloney, J., assignor of one-fourth interest to P. Saxton and J. C. Welch, Oil City, Pa. Tubing for oil-wells.	Sept. 16, 1873	482	164	4	303
134, 694	Molt, G., Millbury, Mass. Indigo-blue vat for coloring wool and cotton.	Jan. 7, 1873	185		3	21
140, 496	Monce, S. G., Bristol, Conn. Glasiers' tool.	July 1, 1873	70	25	4	14
	Moncrieff, G. (See Dugan & Moncrieff.)					
144, 120	Moncrieff, A., Culfargie, Scotland. Means for operating heavy guns.	Oct. 28, 1873	683	226	4	464
135, 142	Monouse, E., New York, N. Y. Steam-boiling apparatus.	Jan. 21, 1873	594	193	3	83
	Mongee, G. (See Palmierie, H., assignor.) (Reissue.)					
137, 314	Monk, J., Norwich, Conn. Hub for wheels of vehicles.	Apr. 1, 1873	32	10	3	359
135, 721	Monk, W. G., Brooklyn, N. Y. Drain-pipe.	Feb. 11, 1873	313		3	164
145, 002	Monro, G. F., Leon, Iowa. Medical compound.	Nov. 25, 1873	723		4	571
145, 675	Monroe, B. C., Newburgh, N. Y. Masous' hod.	Dec. 16, 1873	575	189	4	656
	Monroe, B. F. S., Utica, N. Y. Bed-bottom. (Extension.)	Jan. 21, 1873			3	70
	Monson, C., New Haven, Conn. Holder for lamps. (Extension.)	Jan. 18, 1873			3	37
5, 501	Montague, C., assignor to C. C. Child, Boston, Mass. Rotary printing-press. (Reissue.)	July 22, 1873	794	260	4	101
135, 003	Montague, D. B., Springfield, Mass. Hot-air furnace.	Jan. 21, 1873	477	153	3	73
141, 450	Montague, H. P., Belchertown, Mass. Printers' furniture.	Aug. 3, 1873	37	11	4	138
135, 241	Montandon, C. A., Locle, Switzerland. Stem winding and setting watches.	Jan. 22, 1873	706	226	3	104
143, 832	Montfort, R., Butler, Ga. Seed-planter and fertilizer-distributor.	Oct. 21, 1873	419	139	4	432
136, 851	Montgomery, H. C., Boston, Mass. Stop-valve-cock, &c.	Mar. 18, 1873	457	151	3	300
	Montgomery, J., Sing Sing, N. Y. Construction of steam-vessels. (Extension.)	Mar. 1, 1873			3	189
	Same. Screw-propeller. (Extension.)	Apr. 12, 1873			3	386
	Same. same. (Reissue.)	Apr. 22, 1873	870	275	3	461
5, 364	Montgomery, J. A. (See Schneider & Montgomery.) (Reissue.)					
	Montgomery, J. A., Springfield, N. Y. Journal-box. (Extension.)	Aug. 2, 1873			4	108
144, 555	Montgomery, L., Akron, assignor of one-half interest to L. Newman, Newstead, N. Y. Lime-kiln.	Nov. 11, 1873	332	112	4	516
	Mood, L. (See Clinton & Mood.)					
136, 930	Moodie, E. L. B., New York, N. Y. Balloon-advertiser.	Mar. 18, 1873	521	172	3	305
139, 016	Moody, B. D., Darksville, Mo. Car-coupling.	May 20, 1873	501	158	3	562
140, 294	Moody, B. D., Darksville, Mo., assignor of one-half interest to J. M. Fullerton and G. W. Snyder, Memphis, Tenn. Self-feeding tank for railways.	June 24, 1873	789	250	3	704
141, 883	Moody, C., assignor to W. Griffith, Toronto, Canada. Reversible knob-latch.	Aug. 19, 1873	447	146	4	188
142, 261	Moody, F. G., assignor of one-half interest to G. S. Fairbanks, North Monmouth, Me. Martingale.	Aug. 26, 1873	786	259	4	226
142, 643	Moody, N. C., Manistee, Mich. Gage for gang-saws.	Sept. 9, 1873	288	95	4	277
137, 315	Moody, W. F., assignor of two-thirds interest to E. Stone and C. Swift, Chicago, Ill. Dove-tailing machine.	Apr. 1, 1873	32	10, 11	3	359
145, 304	Moody, W. F., assignor to self, A. H. Frost, and C. L. Ames, Chicago, Ill. Rotary steam-engine.	Dec. 9, 1873	243	81	4	617
	Mooney, G., et al. (See Barney, C. H., assignor.)					
134, 917	Mooney, G., assignor to self and J. Shaw, jr., Providence, R. I. Fishing-reel.	Jan. 14, 1873	389	124	3	51
	Mooney, L. (See Young, Hewitt, and Mooney.)					
145, 676	Mooney, L., assignor to R. Mooney, Allegheny, Pa. Sad and fluting iron.	Dec. 16, 1873	575	189	4	656
143, 526	Mooney, M., T. D. Van Dorn, and C. C. Winterberg, Edinburgh, Ind. Railway-car stove.	Oct. 7, 1873	109	32	4	389
145, 677	Mooney, M. T., Johnstown, Pa. Ingot-mold.	Dec. 16, 1873	577	189	4	656
	Mooney, R. (See Mooney, L., assignor.)					
137, 316	Moore, A. F., Florence, Ind. Machine for turning axles.	Apr. 1, 1873	34	11	3	360
	Moore, A. J. (See Moore, J. A., assignor.)					
134, 695	Moore, B., Seaford, Del. Car-coupling.	Jan. 7, 1873	185	60	3	21
	Moore, B. C. (See Worrell & Moore.)					
140, 524	Moore, C., assignor of part interest to C. Baechler and G. Sommer, Jersey City, N. J. Hydraulic air-compressing apparatus.	July 1, 1873	156	53	4	21
135, 732	Moore, C. C., New York, N. Y. Pulley.	Feb. 11, 1873	313	99	3	164
145, 359	Same. Curtain-fixture.	Dec. 9, 1873	290	97	4	631
141, 805	Moore, C. E., Boston, and M. L. Wyman, Melrose, assignors to C. A. Kiblgren, Boston, Mass. Steam and air brake for railway-cars.	Aug. 12, 1873	363	119	4	172
141, 159	Moore, C. J., Joliet, Ill. Car-starter.	July 22, 1873	753	248	4	98
137, 466	Moore, C. T., White Sulphur Springs, assignor of one-half interest to T. L. Feamster, Lewisburgh, W. Va. Type-setting machine.	Apr. 1, 1873	168	53, 54	3	371
145, 118	Moore, D., Brooklyn, N. Y. Lock for fire-arms.	Dec. 2, 1873	73	23	4	591
5, 674	Moore, D. & E., Brooklyn, N. Y., assignors to the Bissell and Moore Manufacturing Company, New York, N. Y. Saw-frame. (Reissue.)	Dec. 2, 1873	210	72	4	602
	Moore, D. G. (See Waldron & Moore.)					
140, 939	Moore, D. R., Owego, N. Y. Stove-pipe shelf, &c. (Reissue.)	July 15, 1873	539	180	4	71
	Moore, E. (See Moore, D. & E.)					
	Moore, E. C. (See Moore, G. H., assignor.)					
5, 573	Moore, E. C., Yonkers, N. Y., assignor to Tiffany & Co., New York, N. Y. Design for spoon and fork handles. (Reissue.)	Sept. 16, 1873	582	196	4	312
6, 721	Same. Jewelry-box. (Design.)	June 24, 1873			3	691
6, 773	Same. same. (Design.)	July 15, 1873			4	58
6, 982	Same. Paper-box. (Design.)	Nov. 4, 1873			4	478
136, 663	Moore, E. L., San Francisco, Cal. Accouchement-couch. (Design.)	Mar. 11, 1873	288	96	3	277
	Moore, F. M. (See Moore, T. W. & F. M.)					
	Moore, F. N. (See Moore, T. W., assignor.)					
134, 918	Moore, F. N. (See Moore, T. W., assignor.) (Reissue.)					
	Moore, G., assignor to M. Moore, Scotch Plains, N. J. Device for aiding cutting goods on bias.	Jan. 14, 1873	390	124	3	51
134, 919	Same. Device for marking goods on bias.	Jan. 14, 1873	391	124	3	51
141, 943	Moore, G. H., Norwich, Conn., and L. Bagger, Washington, D. C., said Moore assignor to E. C. Moore, Norwich, Conn. Lithographic stone.	Aug. 19, 1873	494		4	192
135, 723	Moore, G. R., Lyons, Iowa. Drain.	Feb. 11, 1873	313	99	3	164
136, 608	Same. Sediment-drain.	Mar. 11, 1873	241	81	3	274
137, 467	Moore, G. R., Philadelphia, Pa. Heating-stove.	Apr. 1, 1873	171	54	3	371
137, 798	Same. Sink-drain.	Apr. 15, 1873	473	148	3	420

Alphabetical list of patents for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
140, 155	Moore, G. R., Philadelphia, Pa. Heating-stove	June 24, 1873	673	211	3	694
143, 774	Same..... Sewer inlet-trap	Oct. 21, 1873	368	122	4	426
145, 360	Same..... Stove-grate	Dec. 9, 1873	291	98	4	621
145, 746	Same..... Car-coupling	Dec. 23, 1873	648	213	4	674
137, 231	Moore, G. W., Philadelphia, Pa. Package-register	Mar. 25, 1873	800	264	3	338
136, 664	Moore, H. R., Erie, Pa. Operating the stops of organs	Mar. 11, 1873	289	96	3	277
143, 456	Moore, J., Brooklyn, N. Y. Fountain and aquarium	Oct. 7, 1873	50	17	4	325
6, 644	Moore, J., and W. H. Wilkinson, Brooklyn, N. Y. Fountain-basin (Design)	May 6, 1873			3	497
134, 920	Moore, J., and S. W. Day, Oak Creek, Wis. Machine for making baskets	Jan. 14, 1873	392	124	3	51
145, 225	Moore, J., and W. George, Philadelphia, Pa., and A. L. Holley, Brooklyn, N. Y. Rolling-mill	Dec. 2, 1873	168	57, 58	4	599
141, 451	Moore, J. A., assignor of one-half interest to A. J. Moore, Bethlehem, Pa. Apparatus for sausage-stuffing and other purposes	Aug. 5, 1873	38	12	4	138
144, 918	Moore, J. A., Salem, N. J. Corn coverer	Nov. 25, 1873	653	221	4	565
135, 930	Moore, J. C., Madison, Ind. Sewing-machine	Feb. 18, 1873	507	165	3	193
138, 270	Moore, J. C., Ypsilanti, Mich. Log-turner	Apr. 29, 1873	937	296	3	475
	Moore, J. D. (See Hiron & Moore.)					
	Moore, J. D. (See Pierson, Macy & Moore.)					
	Moore, J. G., et al. (See Flora, O. V., assignor.)					
141, 944	Moore, J. W., assignor to self and P. G. Meek, Bellefonte, Pa. Apparatus for preserving beer on draft	Aug. 19, 1873	495	163	4	192
	Moore, M. (See Moore, G., assignor.)					
144, 469	Moore, R., Nashville, Tenn. Portable-stove	Nov. 11, 1873	258	87	4	511
	Moore, S., et al. (See Brigham, C. H., assignor.)					
	Moore, S. (See Rogers & Felton, assignors.)					
139, 257	Moore, S., assignor of two-thirds interest to M. D. Hathaway and E. Gardner, Rochelle, Ill. Grain-cleaner	May 27, 1873	736	233	3	588
139, 598	Moore, S., assignor to self and H. Rogers, Sudbury, Mass. Manufacture of leather-board	June 3, 1873	133		3	620
144, 556	Same..... Heel-stiffener for boots and shoes	Nov. 11, 1873	333	112	4	517
144, 557	Moore, S., and R. H. Hurlbut, assignors to selves and H. Rogers, Sudbury, Mass. Paper-pulp engine	Nov. 11, 1873	333	112	4	517
	Moore, T. L. (See Howland & Moore.)					
5, 603	Moore, T. W., New York, N. Y., assignor to F. N. Moore. Bedstead-fastening (Reissue)	Oct. 14, 1873	328	109	4	415
137, 350	Same..... Combined bureau washstand, and wardrobe (Design)	Apr. 1, 1873	89	29	3	364
6, 722	Moore, T. W. & F. M., New York, N. Y. Furniture (Design)	June 24, 1873			3	691
	Moore, T. W. C. (See Morrison, A. J., assignor.)					
	Moore, W. A. (See Branch, G. M., assignor.)					
144, 215	Moore, W. Z., Vallejo, Cal. Compound for cleansing metals, &c	Nov. 4, 1873	41		4	481
141, 637	Moorhouse, R. O., and S. L. Wiegand, said Wiegand assignor to said Moorhouse, Philadelphia, Pa. Boring-machine	Aug. 12, 1873	232	73	4	162
142, 806	Moor, J., Philadelphia, Pa. Refrigerator for transporting ice-cream, &c	Sept. 16, 1873	437	148	4	300
139, 684	Morahan, B., Brooklyn, assignor to self, F. Tefft, and G. G. Kellogg, New York, N. Y. Stationary wash-tub	June 10, 1873	225	72	3	643
139, 685	Same..... same	June 10, 1873	225	72	3	643
140, 588	Moran, J. D., New York, N. Y. Metal window-sash	July 8, 1873	226	76	4	38
141, 606	Moran, T., New York, N. Y. Shade-holder	Aug. 12, 1873	364	119	4	172
134, 557	Morawetz, L. F., Baltimore, Md. Music-leaf turner	Jan. 7, 1873	51	16	3	11
135, 652	Mörchen, C., and P. Doerfer, Eaton, Wis. Stump-extractor	Feb. 11, 1873	256	81	3	160
135, 044	Morden, W. J., Indianapolis, Ind. Construction of buildings	Jan. 21, 1873	515	166	3	76
	More, E. P. (See Anderson, Walden & More.)					
134, 558	Moreau, E., San Francisco, Cal. Button-holing attachment for sewing-machines	Jan. 7, 1873	52	16, 17	3	11
5, 235	Morehouse, C. B., Newcastle, Ind., assignor by mesne assignment to E. Chamberlin and J. O. Merriam. Whip-socket (Reissue)	Jan. 14, 1873	435	138	3	55
5, 713	Same..... Device for clamping whip-sockets to vehicles (Reissue)	Dec. 30, 1873	1,007	324	4	713
	Morehouse, G. E. (See Wells & Morehouse.)					
137, 945	Moreland, D. R., and C. Blocher, Broad Ford, Pa. Nail-extractor	Apr. 15, 1873	604	190	3	431
135, 650	Morey, D., Watsonville, Cal. Straw-feeding attachment for furnaces	Feb. 11, 1873	256	81	3	160
139, 075	Same..... same	May 20, 1873	557	175	3	566
145, 119	Morey, H., Cameron, Tex. Machine for building earth-works	Dec. 2, 1873	74	23	4	591
	Morgan, A. (See Davie & Morgan.)					
	Morgan & Dore. (See Hawkins, L. P., assignor.)					
141, 066	Morgan, B., San Francisco, Cal. Candle-guard	July 22, 1873	666	224	4	91
144, 470	Morgan, C., assignor to self and F. Manning, Philadelphia, Pa. Fire-escape for safes	Nov. 11, 1873	258	87	4	511
	Morgan, D. S. (See Seymour & Morgan.)					
135, 143	Morgan, E. B., Paterson, N. J. Postage-stamp affixer	Jan. 21, 1873	594	193	3	83
	Morgan, E. J. (See Clinton & Morgan.)					
	Morgan, G. C. (See Prosser & Morgan.)					
	Same..... (See Prosser, T. T., assignor.)					
136, 852	Morgan, G. C., Chicago, Ill. Railway-rail	Mar. 18, 1873	458	152	3	300
144, 471	Morgan, J. S., Brooklyn, N. Y. Curling-iron	Nov. 11, 1873	259	87	4	511
139, 912	Morgan, M. C., Boston, Mass. Organ-reed	June 17, 1873	446	139	3	668
139, 017	Morgan, P. H., assignor to Granite Roofing Company, Baltimore, Md. Water-proofing compound for canvas and other fabrics	May 20, 1873	502		3	562
	Morgan, T. K., et al. (See Dilworth, J., assignor.) (Reissue)					
	Morgan, T. R. (See Marchand, C. E., assignor.)					
	Morgan, W. F., (See Hawkins, L. P., assignor.)					
	Morgan, W. F., et al. (See Ross & Miller, assignors.)					
	Same..... (See Ross, J. G., assignor.)					
138, 178	Morgan, W. F., New York, N. Y. Construction of vessels	Apr. 22, 1873	825	262	3	458
138, 677	Same..... Railway-crossing gate	May 6, 1873	187	60	3	512
141, 160	Morgan, W. F., Buffalo, assignor to the Great American Malt and Grain Drying Company, New York, N. Y. Grain-drier	July 22, 1873	754	248	4	98
142, 262	Morgan, W. F., New York, N. Y. Removable ceiling for vessels	Aug. 26, 1873	787	260	4	226
142, 496	Same..... Boat-detaching device	Sept. 2, 1873	159	52	4	254
5, 618	Morgeneier, J. W., Sheboygan, Wis. Varnish for coating photographic negatives (Reissue)	Oct. 21, 1873	522		4	441
146, 013	Morin, J., New York, N. Y. Lubricating journal-boxes	Dec. 30, 1873	903	292	4	705
	Morisette, J. (See Darozir, L., assignor.)					
137, 559	Morley, F. A., Syracuse, N. Y. Liquid meter	Apr. 8, 1873	261	80	3	390
134, 762	Morley, T., Cambridge, Mass. Medical compound	Jan. 14, 1873	251		3	41
138, 038	Morley, T., Newark, N. J. Toy	Apr. 22, 1873	708	224	3	448
137, 946	Morningstar, B., Pittsburgh, Pa. Combined door-plate and letter-chute	Apr. 15, 1873	605	190	3	431
141, 067	Morrell, J. A., New York, N. Y. Manufacture of sugar	July 22, 1873	667		4	91
141, 068	Same..... Process for delaying the fermentation of saccharine solutions	July 22, 1873	668		4	91

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141, 807	Morrell, J. A., and J. Brewer, New York, N. Y. Submerged pump.....	Aug. 12, 1873	364	120	4	172
142, 497	Morrell, J. A., assignor to self, J. H. Wheatley, L. P. Williams, and G. H. Baxter, New York, N. Y. Heating air for use in the arts.....	Sept. 2, 1873	160	.....	4	254
136, 609	Morrell, J. C., Manchester, England. Ash-screener and commode.....	Mar. 11, 1873	242	82	3	274
134, 763	Morrill, C. E., Deering, Me. Device for fastening ends of shoe-binding strips.....	Jan. 14, 1873	251	82	3	41
142, 498	Morrill, F. (See Elliott, G. R., assignor.) Morrill, J. A., assignor to self, J. H. Wheatley, L. P. Williams, and G. H. Baxter, New York, N. Y. Granulating sugar.....	.....	160	.....	4	255
135, 660	Morrill, J. P. (See Lombard, Morrill & Sweat.) Morrill, S., Vienna, Me. Sleigh.....	Feb. 11, 1873	257	81	3	160
137, 468	Morrill, S. S., Fulton, N. Y. Main-spring attachment for watches..... Morris & Ireland. (See Hawkins, G. C., assignor.)	Apr. 1, 1873	171	54	3	371
134, 921	Morris, A. H., Boston, Mass. Horse-cover.....	Jan. 14, 1873	392	125	3	51
138, 179	Morris, A. T., Bloomfield, N. J. Dumping-scow.....	Apr. 22, 1873	827	263	3	458
145, 890	Morris, C. N., Cincinnati, Ohio. Feed-gauge for printing-presses.....	Dec. 23, 1873	772	252	4	684
146, 089	Morris, D. B., Pittsburgh, Pa. Hot-air furnace.....	Dec. 30, 1873	967	312	4	710
137, 617	Morris, D. C., New Sharon, Iowa. Car-coupling.....	Apr. 8, 1873	309	96	3	394
140, 840	Morris, E., Burlington, N. J. Preparation of solder for sealing oyster and fruit cans.....	July 15, 1873	443	151	4	64
145, 305	Same.....	Dec. 9, 1873	243	82	4	617
136, 746	Morris, E., and W. H. Kimball, Burlington, N. J., said Kimball assignor to said Morris. Soldering-machine.....	Mar. 11, 1873	359	118	3	283
145, 442	Morris, E. M., Baltimore, Md. Gas-cook.....	Dec. 9, 1873	360	120	4	626
137, 088	Morris, F., San Francisco, Cal. Amalgamator.....	Mar. 25, 1873	673	223	3	329
138, 678	Morris, G. W., Pittsburgh, Pa. Railway-car brake.....	May 6, 1873	188	60	3	513
144, 472	Morris, G. W., and W. Lenhart, Corry, Pa. Combined carpet-rag looper and button-hole cutter.....	Nov. 11, 1873	260	87	4	511
136, 447	Morris, H. C., assignor to T. H. Hazard, Richmond, Va. Artificial food.....	Mar. 4, 1873	81	.....	3	252
143, 585	Morris, J. A., Atlanta, Ga. Shutter-fastening.....	Oct. 14, 1873	175	59	4	403
6, 743	Morris, J. E., Minneapolis, Minn. Flower-stand..... (Design)	July 1, 1873	.....	.....	4	8
134, 696	Morris, J. R., Houston, Tex. Lubricating car-axle.....	Jan. 7, 1873	187	60	3	21
138, 916	Same.....	May 13, 1873	405	127	3	541
144, 216	Morris, J. S., Mosiertown, Pa. Beefsteak-tenderer.....	Nov. 4, 1873	42	12	4	481
138, 341	Morris, Tasker & Co. (See Newsham, W. L., assignors.) Same..... (See Tasker & McMillan, assignors.)	Apr. 29, 1873	1,001	315	3	480
137, 381	Morris, W. D. (See Downs & Morris.) Morris, W. J., New York, N. Y. Gun-lock.....	Apr. 1, 1873	90	29	3	364
140, 940	Morris, W. H., Brooklyn, assignor to self and A. B. Ross, New York, N. Y. Smoking-pipe. Morris, W. H. H. (See Eastman & Morris.)	July 15, 1873	540	180	4	71
143, 246	Morrison, A., Harrisburgh, Pa. Apparatus for separating nails.....	Sept. 30, 1873	811	279	4	357
144, 407	Same.....	Nov. 11, 1873	205	69	4	507
142, 807	Morrison, A. J., Troy, assignor of one-half interest to T. W. C. Moore, Mohawk, N. Y. Car-ventilator.....	Sept. 16, 1873	438	148	4	300
144, 348	Morrison, C. F., Thompsonville, Conn., assignor to self, J. Morrison, G. S. Harwood, and G. H. Quincy. Evener for wool-cards.....	Nov. 4, 1873	146	49	4	490
135, 354	Morrison, E. R., assignor to self and J. S. Stites, Washington, D. C. Fire-escape.....	Jan. 28, 1873	803	259	3	112
137, 317	Morrison, F. L., New Albany, Pa. Stencil-plate.....	Apr. 1, 1873	35	11	3	360
138, 039	Morrison, H. B., Le Roy, N. Y. Breast-collar for harness.....	Apr. 22, 1873	708	224	3	448
142, 929	Morrison, H. B., Le Roy, assignor to Sargent & Greenleaf, Rochester, N. Y. Machine for forming sheet-metal pipe-elbows.....	Sept. 16, 1873	537	183	4	308
141, 371	Morrison, J., et al. (See Morrison, C. F., assignor.) Morrison, J., Joliet, Ill. Reverberatory furnace.....	July 29, 1873	971	315	4	122
144, 349	Morrison, J., and H. M. Hutchinson, Philadelphia, Pa. Chair.....	Nov. 4, 1873	147	49	4	490
142, 263	Morrison, J. A. (See Collins & Morrison.) Morrison, J. B., Brooklyn, N. Y. Adjustable bracket.....	Aug. 26, 1873	787	260	4	226
139, 178	Morrison, J. C., assignor of one-half interest to N. C. Gridley and F. F. Warner, Chicago, Ill. Polishing device.....	May 20, 1873	654	204	3	574
139, 018	Morrison, J. E., Wellington, Conn. Driven or bored well.....	May 20, 1873	503	158	3	569
136, 087	Morrison, J. H., Marlborough, Mass. Sole edge-setting-tool.....	Feb. 18, 1873	640	209	3	203
137, 560	Morrison, J. L., and T. H. Fletcher, North Hollis, Me. Scythe-stone holder.....	Apr. 8, 1873	262	81	3	390
5, 646	Morrison, J. W. (See Coffin, C. H., assignor.) Morrison, L., and A. G. Harms, Allegheny City, Pa. Saw-hangings..... (Reissue)	Nov. 4, 1873	180	61	4	493
5, 647	Same..... (Reissue)	Nov. 4, 1873	181	61	4	493
145, 443	Morrison, R. D., et al. (See Bushfield, S. B., assignor.) Same..... (Reissue.)	Dec. 9, 1873	360	120	4	626
141, 452	Morrison, R. H. D., assignor of one-half interest to J. Taisey, Winona, Minn. Seed-drill.....	Aug. 5, 1873	38	12	4	138
146, 014	Morrison, S. G., Williamsport, Pa. Coal-stove grate.....	Dec. 30, 1873	904	293	4	705
139, 805	Morrison, T. F., Findley, Ohio. Eave-trough support.....	June 10, 1873	344	106	3	652
137, 789	Morrison, T. W., New Brunswick, N. J. Sewing-machine table..... Morrison, W. A., et al. (See Cherrington, W. P., assignor.)	Apr. 15, 1873	474	148	3	420
141, 884	Morrow, R. (See Paine, J. F., assignor.) Morrow, W. H., et al. (See Walker, J. A., assignor.)	Aug. 19, 1873	448	146	4	188
145, 520	Morse, B., Ithaca, N. Y. Horse hay-rake.....	Dec. 16, 1873	444	145	4	645
138, 040	Same..... Seed-sower.....	Apr. 22, 1873	709	224	3	448
142, 577	Morse, B. R., Galesburgh, Ill. Ear-coverings for hats and caps..... Morse, H. O., et al. (See Palmer & Spencer, assignors.)	Sept. 9, 1873	237	77	4	273
5, 380	Morse, J. F., Oshkosh, Wis. Dredger.....	.....	.....	.....	.....	.....
135, 573	Morse, L. (See Morse, L. B., assignor.) Same..... (Reissue.) Morse, L. B., Athol, Mass., assignor of one-half interest to L. Morse. Cot-bed..... (Reissue)	Apr. 29, 1873	1,111	351	3	489
136, 088	Same..... (Reissue)	Feb. 4, 1873	166	53	3	140
136, 532	Morse, T. G. (See Booner, Morse & Boschert.) Morse Twist-Drill and Machine Company. (See Johnson, M. C., assignor.) Morse, J. (See Marston, F. W., assignor.)	.....	.....	.....	.....	.....
5, 544	Morthland, R. J., administratrix. (See Kaufman, J. G.) Morton, E. W., Brooklyn, N. Y. Mechanical power.....	Feb. 18, 1873	641	210	3	203
141, 808	Morton, F. G., Bermondsey, Great Britain. Treating tinner's clippings.....	Mar. 4, 1873	162	.....	3	258
145, 291	Morton, G. W., et al. (See York, J. W., assignor.) Morton, J., Cincinnati, Ohio, assignor by mesne assignment to the McGowan Pump Company. Water-tank for railways..... (Reissue)	Aug. 19, 1873	622	205	4	202
145, 291	Same..... (Reissue)	Aug. 19, 1873	623	205	4	203
145, 291	Morton, J., Cincinnati, Ohio, assignor to self and G. S. Huntington. Road-scraper.....	Aug. 12, 1873	366	120	4	172
145, 291	Morton, S. A., Wadesborough, N. C. Curry-comb.....	Dec. 23, 1873	772	252	4	684
145, 291	Morton, T. C. (See Stever, J., assignor.)

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135, 999	Moseley, C. H., Winchester, Mass. Machine for deaiccating tan	Feb. 18, 1873	564	186	3	198
	Moseley, L. E. (See Culver & Moseley.)					
136, 533	Moseley, T. W. H., Hyde Park, Mass. Lifting-jack	Mar. 4, 1873	163	52	3	258
140, 941	Same..... Construction of houses	July 15, 1873	541	181	4	71
140, 942	Same..... same	July 15, 1873	542	182	4	71
140, 943	Same..... Gage for erecting plank walls	July 15, 1873	543	182	4	72
143, 175	Moses, A. W., Philadelphia, Pa. Car-spring	Sept. 23, 1873	742	256	4	335
141, 584	Mosher, A., Canton, Mo. Portable fence	Aug. 5, 1873	149	48	4	147
137, 790	Mosher, C. D., Cook County, Ill. Photographic sky-light	Apr. 15, 1873	475	149	3	420
142, 808	Mosher, D. C., Washington, D. C. Needle for weaving cane-seats for chairs	Sept. 16, 1873	440	148	4	300
137, 469	Mosher, D. G., Mosherville, Mich. Insect-destroyer	Apr. 1, 1873	172	55	3	371
138, 917	Moshier, W., assignor of one-third interest to C. T. Merry, Norwalk, Ohio. Rubber cement	May 13, 1873	406		3	541
136, 255	Mosler, J. L. H., assignor to Brewster & Co., New York, N. Y. King-bolt for carriages	Feb. 25, 1873	799	259	3	228
136, 342	Same..... King-bolt for perch-carriages	Apr. 29, 1873	1,002	315	3	460
6, 490	Mosman, D., West Meriden, Conn. Lamp-stand	Mar. 11, 1873			3	272
6, 577	Mosman, M. H., Waterbury, Conn. Fork and spoon handle	Apr. 8, 1873			3	387
6, 616	Mosman, M. H., Chicopee, Mass. Lamp-stand	Apr. 29, 1873			3	471
138, 573	Moat, W., Greenville, N. J. Picket fence	May 6, 1873	96	30	3	505
142, 038	Motard, F. M. H., Paris, France. Mode of recovering and regenerating steam in motive-power engines	Aug. 19, 1873	579	191	4	199
	Mott, J. L. (See Demarest, J., assignor.)					
143, 090	Mott, S. D., Milford, Pa. Boy's sled	Sept. 23, 1873	679	234	4	330
141, 372	Mott, T. H., New York, N. Y. Apparatus for heating and ventilating railroad-cars	July 29, 1873	971	316	4	122
138, 679	Mott, T. P., and S. Gardiner, jr., said Gardiner assignor of one-sixth interest to T. P. Mott, New York, N. Y. Electrical gun-cartridge	May 6, 1873	189	60	3	513
136, 381	Motter, G. L., Bloomington, Ill. Dining-table	Mar. 4, 1873	97	10	3	247
135, 144	Motz, E., Woodward, Pa. Paper-file	Jan. 21, 1873	595	193	3	83
	Moulthrop, C. W. (See Allen, Brown & Moulthrop.)					
134, 922	Moulton, A. R., Falls Branch, Tenn. Pruning-shears	Jan. 14, 1873	393	125	3	51
136, 069	Moulton, E. S., Chelsea, Mass. Pipe-wrench	Feb. 18, 1873	642	210	3	203
	Moulton, G. W. (See Johnson & Moulton.)					
136, 610	Moulton, J., Moultonville, N. H., assignor to self and W. P. B. Brooks, Chelsea, Mass. Car-coupling	Mar. 11, 1873	242	82	3	274
	Moulton, J. H. (See Perkins, Moulton & Sawyer.)					
141, 658	Moulton, L. V., Beaver Dam, Wis. Machine for washing photographs	Aug. 12, 1873	233	73	4	162
145, 226	Moulton, W. J. L., San Francisco, Cal., assignor to Jeinson Lubricator Company. Lubricating device for car-axes	Dec. 2, 1873	170	58	4	599
145, 227	Same..... Car-axle box	Dec. 2, 1873	171	59	4	599
	Mount, J. A. (See Conover S. R., assignor.)					
	Mount, W. R. (See Ingels & Mount.)					
136, 749	Mountain, H. B., New York, N. Y. Life-preserving mattress	Mar. 11, 1873	359	119	3	283
140, 065	Mouret, L. J. N., Paris, France. Clock-work globe	June 17, 1873	575	182	3	679
144, 783	Mowbray, A. G. & H. W., Stockton, Minn. Middlings-bolt	Nov. 18, 1873	589	180	4	544
139, 686	Mowbray, G. M., North Adams, Mass. Electric fuse	June 10, 1873	227	73	3	643
	Mowbray, H. W. (See Mowbray, A. G. & H. W.)					
	Mowry, E. C., et al. (See Ross, L. E., assignor.)					
140, 525	Mowry, W. G., and C. Fuls, New York, N. Y. Carpet-beater	July 1, 1873	158	54	4	91
135, 438	Moyel, E., Wyandotte, Kans. Feed-water heater for locomotives	Feb. 4, 1873	43	13	3	131
139, 179	Moyel, E., and J. Howell, Wyandotte, Kans. Railway-axle-box cover	May 20, 1873	655	204	3	574
140, 944	Mozart, D. J., Ann Arbor, Mich. Escapement for watches	July 15, 1873	544	183	4	72
141, 161	Same..... Calendar watch	July 22, 1873	756	249	4	98
141, 373	Same..... Self-winding watch	July 29, 1873	972	316	4	123
140, 945	Mueller, C., Warren, Mass. Roofing-composition	July 15, 1873	544		4	72
139, 599	Mueller, C. G., and H. Meier, said Meier assignor to said Mueller, Hanover, Germany. Electrical gas-lighting	June 3, 1873	134	44	3	620
137, 791	Mueller, E. L., Saint Louis, Mo. Egg-carrier	Apr. 15, 1873	476	149	3	420
	Mueller, F. (See Quincke, L., assignor.)					
140, 066	Mühleisen, A., Ottawa, Ohio. Hound for vehicles	June 17, 1873	577	182	3	679
144, 558	Same..... Thill for vehicles	Nov. 11, 1873	334	113	4	517
138, 085	Mulcahy, D., Boston, Mass. Refrigerator	Apr. 22, 1873	757	240	3	452
140, 722	Muldaur, E. H., Dover, Del. Alphabet-block	July 8, 1873	337	114	4	47
139, 414	Mulford, J. E., New York, N. Y. Fire-proof safe	May 27, 1873	876	281	3	599
139, 415	Same..... Fire-proof building	May 27, 1873	877	281	3	599
137, 470	Mulhollen, H., Fostoria, Pa. Car-coupling	Apr. 1, 1873	173	55	3	371
141, 723	Mull, W., Rantoul, Ill. Corn-planter	Aug. 12, 1873	226	93	4	166
136, 853	Mullaly, J., New York, N. Y. Machine for melting snow	Mar. 18, 1873	458	152	3	301
136, 854	Same..... same	Mar. 18, 1873	459	152	3	301
136, 931	Same..... same	Mar. 18, 1873	523	172	3	305
136, 932	Same..... same	Mar. 18, 1873	523	173	3	305
137, 018	Same..... same	Mar. 18, 1873	599	198	3	312
137, 019	Same..... same	Mar. 18, 1873	599	198	3	312
137, 020	Same..... same	Mar. 18, 1873	600	199	3	312
139, 180	Same..... Angling-fly	May 20, 1873	655	205	3	574
143, 833	Same..... Means of keeping open the navigation of canals	Oct. 21, 1873	420	140	4	433
143, 834	Same..... Machine for melting snow	Oct. 21, 1873	421	140	4	433
136, 448	Müller, G., New York, N. Y. Combined latch and lock	Mar. 4, 1873	81	28	3	252
144, 350	Same..... Elevator for buildings, &c	Nov. 4, 1873	148	49	4	490
136, 332	Mullay, J., Somerville, Mass. Prepared lumber for joiners' use	Feb. 25, 1873	868	279	3	233
138, 918	Mullenex, H. W., Alpine, New York. Farm gate	May 13, 1873	406	128	3	541
142, 930	Müller, A., Jersey City, N. J. Machine for making drain-pipes, &c	Sept. 16, 1873	538	184	4	308
143, 922	Same..... Manufacture of asphalt pipe	Oct. 21, 1873	491	165	4	438
	Müller, D. (See Goetze & Müller.)					
5, 338	Müller, F., Boston, Mass. Tassel-clip for window-shades	Mar. 25, 1873	850	278	3	342
140, 295	Same..... Tassel-clip for curtains	June 24, 1873	789	250	3	704
135, 439	Müller, J., Nacogdoches County, Tex. Horse-power	Feb. 4, 1873	43	13	3	131
143, 586	Same..... Hay and cotton press	Oct. 14, 1873	175	59	4	403
145, 892	Muller, J., Philadelphia, Pa. Bridle for horses	Dec. 23, 1873	773	253	4	624
145, 810	Müller, J. G. & W., Dayton, Ohio. Apparatus for manufacturing illuminating-gas	Dec. 23, 1873	701	230	4	678
143, 416	Muller, L., Hartford, Conn. Shutter-worker	Oct. 7, 1873	20	8	4	382

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143, 835	Muller, N., New York, N. Y. Toy-block for object-teaching.	Oct. 21, 1873	432	140	4	433
137, 089	Müller, T. H., Yonkers, N. Y. Lead-pencil	Mar. 25, 1873	674	224	3	329
140, 946	Same. Machine for finishing pencils.	July 15, 1873	545	183	4	72
6, 528	Müller, W. (See Müller, J. G. and W.)					
142, 407	Mullin, R. J., assignor to self and M. R. Hanley, Providence, R. I. Manufacture of dies for punching	Mar. 25, 1873			3	325
145, 228	Muldowny, J. F., Pittsburgh, J. Cope, Connelleville, and S. R. Brooks, Pittsburgh, Pa. Car-coupling.	Sept. 2, 1873	77	25	4	248
136, 449	Mumford, T. T. (See Brooke, J. M., assignor.)					
141, 069	Muncester, O. M., Washington, D. C. Pessary adjuster.	Dec. 2, 1873	171	59	4	599
141, 453	Same. Pessary.	Mar. 4, 1873	82	28	3	252
142, 499	Muude, P., East Hampton, Mass. Folding-table.	July 22, 1873	668	224	4	91
144, 691	Mundella, J. (See Beven, T., assignor.)	Aug. 5, 1873	39	12	4	138
144, 691	Munder, M. P., Baltimore, Md. Medical compound or liniment.	Sept. 2, 1873	161		4	255
138, 041	Munger, A. S., Brooklyn, N. Y., assignor to E. T. Covell, New Bedford, Mass. Seaming machine.	Nov. 18, 1873	453	153	4	538
138, 680	Munger, F. M., United States revenue-service, assignor of one-half interest to E. L. Deane, Hampden, Me. Boat-detaching apparatus.	Apr. 22, 1873	710	224	3	448
138, 919	Munger, W. T., assignor to P. & F. Corbin, New Britain, Conn. Mortise door-lock.	May 6, 1873	190	60	3	513
139, 687	Same. Reversible latch.	May 13, 1873	406	128	3	541
	Same. Bell-pull.	June 10, 1873	228	73	3	643
	Munhall, T. T. (See Pratt & Munhall.)					
135, 574	Munn, W. B., Cleveland, Ohio. Lightning-rod.	Feb. 4, 1873	167	54	3	141
143, 417	Munroe, F. B., Malden, assignor to W. W. Richardson, Westfield, Mass. Whip-socket.	Oct. 7, 1873	21	8	4	382
144, 121	Munroe Organ-Reed Company. (See Munroe, W., assignor.)					
136, 611	Munroe, W., assignor to Munroe Organ-Reed Company, Worcester, Mass. Organ-reed beard.	Oct. 28, 1873	685	227	4	464
140, 723	Munsebauser, G. J., Buffalo, N. Y. Bird-cage.	Mar. 11, 1873	243	82	3	274
140, 067	Munsey, J. H. C. (See Marr, A. D., assignor.)					
140, 526	Munson, C. M., Greenfield, Mass. Carriage-curtain knob.	July 8, 1873	338	114	4	47
140, 527	Munson, D., Indianapolis, Ind. Egg-beater.	June 17, 1873	577	182	3	679
145, 003	Munson, S. B., Jr., Chicago, Ill. Iron window-shutter.	July 1, 1873	159	54	4	21
139, 514	Same. Garbage-tub.	July 1, 1873	159	54	4	21
144, 408	Muntzenberger, A., Kenosha, Wis. Barrel-washer.	Nov. 25, 1873	724	244	4	571
144, 857	Munzinger, P., Philadelphia, Pa. Gas-governor and by-pass.	June 3, 1873	61	20, 21	3	613
136, 450	Same. By-pass for gas-works.	Nov. 11, 1873	207	69	4	507
	Same. Gas-retort mouth-piece.	Nov. 25, 1873	608	207	4	561
135, 004	Murch, I. F., Sumner, assignor of one-half interest to S. Torrey, Deering, Me. Tool-holder.	Mar. 4, 1873	83	28	3	252
143, 091	Murden, E. O., Hightstown, N. J. Hygienic basin and steam-bath.	Jan. 21, 1873	479	154	3	74
143, 991	Murdoch, L., Marble Hill, Mo. Propelling mechanism for vessels.	Sept. 23, 1873	680	234	4	330
143, 992	Murdoch, C., Sarnia, Canada. Stave-jointing machine.	Oct. 28, 1873	573	191	4	455
139, 181	Same. Machine for sawing staves.	Oct. 28, 1873	575	191, 192	4	455
144, 692	Murdoch, C. A., Milwaukee, Wis. Can.	May 20, 1873	656	205	3	574
144, 217	Murdoch, C. F., Detroit, Mich. Valve.	Nov. 18, 1873	454	154	4	538
139, 325	Murgatroyd, F., Cleveland, Ohio. Hoisting-engine.	Nov. 4, 1873	42	12	4	481
138, 271	Murgatroyd, T., Hiawatha, Kans. Carriage-spring.	May 27, 1873	794	253	3	593
136, 171	Murphy, A. A., Montreal, Canada. Store-stool.	Apr. 29, 1873	938	296	3	475
140, 298	Murphy, J., New York, N. Y. Machine for grinding harvester-knives.	Feb. 25, 1873	731	236	3	222
144, 280	Murphy, J., assignor to self and G. W. Carr, Philadelphia, Pa. Skipping-rod.	June 24, 1873	792	252	3	705
142, 264	Murphy, J. A. (See Doyle & Murphy.)					
135, 145	Murphy, J. G., Matteawan, N. Y. Slate-washer.	Nov. 4, 1873	92	30	4	485
136, 333	Murphy, J. W., Baltimore, Md. Packing for hydrants, pumps, &c.	Aug. 26, 1873	789	260	4	226
141, 659	Murphy, M., Cincinnati, Ohio. Paper-bag machine.	Jan. 21, 1873	595	194	3	83
143, 457	Murphy, P., New York, N. Y. Stereoscope.	Feb. 25, 1873	868	279, 280	3	233
142, 171	Murphy, P., South Amherst, Mass. Hub for carriage-wheels.	Aug. 12, 1873	234	73	4	162
134, 565	Murphy, R. Y., assignor to A. James, Chicago, Ill. Toy-gun.	Oct. 7, 1873	50	18	4	385
143, 923	Murphy, T., Pine Bluff, Wis. Harvester-rake.	Aug. 26, 1873	711	235	4	219
140, 296	Murphy, T. G., deceased, by M. A. Scanlon, Akron, Ohio, executrix, and assignor of one-half interest to H. S. Danforth, Middlebury, Ohio. Machine for cutting matches.	Jan. 7, 1873	59	18	3	12
140, 297	Murphy, T. H., New Orleans, La. Machine for rolling fabrics. (Extension).	May 17, 1873			3	527
143, 923	Murray, A. A., Baltimore, Md. Gage-cock.	Oct. 21, 1873	492	166	4	438
140, 297	Murray, C. H., Southwark, England. Brick-machine.	June 24, 1873	790	251	3	704
	Same. Die or mouth for brick-machines.	June 24, 1873	792	251	3	705
139, 600	Murray, Dougall & Co. (See Bates & Murray, assignors.)					
143, 370	Same. (See Murray, S. W., assignor.)					
135, 485	Murray, E. H., Saint Paul, Minn. Food from wheat, and process of preparing the same.	June 3, 1873	136		3	630
142, 116	Murray, J. H., et al. (See York, J. W., assignor.)					
5, 406	Murray, J. H., Hollidaysburgh, Pa. Lubricating car-wheels.	Sept. 30, 1873	925	313	4	366
5, 546	Murray, O. (See Doeg, I., assignor.)					
136, 172	Murray, O., New Market, N. H. Cotton-gin.	Feb. 4, 1873	85	27	3	134
137, 857	Murray, R., New Castle, Del. Machine for splitting wood.	Aug. 26, 1873	667	220	4	216
137, 858	Murray, S. W. (See Bates & Murray.)					
144, 031	Murray, S. W., and R. P. Lamason, Milton, Pa. Railway oil-car. (Reissue).	May 13, 1873	458	144	3	545
144, 032	Same. Ring-bolt for railway car-trucks. (Reissue).	Aug. 19, 1873	624	205	4	203
144, 033	Murray, S. W., assignor to Murray, Dougall & Co., Milton, Pa. Punching-machine.	Feb. 25, 1873	732	236	3	222
144, 122	Murray, W., New York, N. Y. Trimming.	Apr. 15, 1873	533	166	3	425
134, 815	Same. same.	Apr. 15, 1873	534	166	3	425
140, 724	Same. same.	Oct. 28, 1873	611	202	4	458
144, 858	Same. same.	Oct. 28, 1873	611	202	4	458
143, 176	Same. same.	Oct. 28, 1873	612	202	4	458
134, 697	Murset, S., and E. Zuberbuhler, Philadelphia, Pa. Fire-escape.	Oct. 28, 1873	686	227	4	464
144, 629	Muschar, C., Pittsburgh, Pa. Mortising machine.	Jan. 14, 1873	298	96	3	44
145, 004	Muschert, B. F., Morrisville, Pa. Cultivator.	July 8, 1873	338	114	4	47
137, 471	Musgrave, J., Cincinnati, Ohio. Carburetor.	Nov. 25, 1873	609	207	4	561
143, 708	Musgrave, W. E., Fair Play, Colo. Ter. Machine for clearing streets of snow.	Sept. 23, 1873	743	256	4	335
144, 629	Müsseer, F., Cincinnati, Ohio. Hinge.	Jan. 7, 1873	187	61	3	21
145, 004	Mustin, J. G., Pittsburgh, Pa. Chimney-tool for glass-blowers.	Nov. 18, 1873	400	134	4	534
	Muzzey, D., Saint Albans, Vt. Car axle-box.	Nov. 25, 1873	724	244	4	571
	Myer, V. E. (See Myer, C. T. and V. E.)					
137, 471	Myers, A., Salem, Oreg. Metallic case for turbine-wheels.	Apr. 1, 1873	173	55	3	371
143, 708	Myers, B., Chicago, Ill. Railway-rail.	Oct. 14, 1873	291	95	4	412

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
145, 361	Myers, C., Marysville, Cal., assignor to self and F. J. Schaeffer, Davenport, Iowa. Sub-soil gang-plow	Dec. 9, 1873	291	98	4	621
138, 515	Myers, D. (See Spenser, P. I., assignor.)					
143, 177	Myers, D., Chicago, Ill. Pipe-coupling	May 6, 1873	44	15	3	501
136, 334	Myers, D. E., Logansport, Ind. Mechanism for transmitting power	Sept. 23, 1873	743	256	4	335
138, 920	Myers, E., Jersey City, N. J. Car-spring	Feb. 25, 1873	869	280	3	233
144, 559	Myers, E., assignor to A. W. Thompson, New York, N. Y. Rotary-engine	May 13, 1873	407	128	3	541
136, 612	Myers, F., New York, N. Y. Sad-iron	Nov. 11, 1873	335	113	4	517
136, 613	Same. Sad and embossing irons combined	Mar. 11, 1873	244	82	3	274
140, 427	Myers, G. A., Williamsburgh, N. Y. Portable and adjustable hoisting apparatus	Mar. 11, 1873	244	83	3	274
136, 855	Myers, H., Highland, Kans. Washing-machine	July 1, 1873	70	25	4	14
141, 660	Myers, J., Jersey City, N. J. Steering apparatus	Mar. 18, 1873	460	152	3	301
	Myers, J. B. (See Bennor, J., assignor.)	Aug. 12, 1873	235	74	4	162
	Myers, J. B., et al. (See Bennor, J., assignor.)					
	Same. (See Bennor, J., assignor.) (Reissue.)					
135, 833	Myers, M. D., Schuyler, N. Y. Holdback	Feb. 11, 1873	413	134	3	171
136, 681	Myers, M. N., Boston, Mass. Cap	May 6, 1873	190	61	3	513
141, 374	Myers, R. W., New York, N. Y. Seat or back of chairs	July 29, 1873	974	316	4	123
137, 561	Myers, W. H., Philadelphia, Pa. Chimney-cowl	Apr. 8, 1873	263	81	3	390
143, 178	Myers, W. H., Oregon, assignor of one-half interest to B. F. Perry, Madison, Wis. Potato-bug destroyer	Sept. 23, 1873	744	257	4	335
	Nagney, J. C. (See McCandlish & Nagney.)					
139, 601	Nagle, A. F., Providence, R. I. Draftsman's ruling-gage	June 3, 1873	136	45	3	620
137, 382	Nagle, I. E., New Orleans, La. Nut-lock	Apr. 1, 1873	91	30	3	364
142, 500	Nahe, H., Brooklyn, N. Y. Street-lamp	Sept. 2, 1873	161	52	4	255
139, 806	Nance, J. W., and D. Lillard, Cornersville, Tenn. Combination mill-pick	June 10, 1873	345	107	3	652
143, 633	Naramore, E. M., Underhill, Vt. Mop-holder	Oct. 14, 1873	217	73	4	407
	Naramore, J. W., Derby, Conn. Pin-sticking machine (Extension)	July 5, 1873			4	7
145, 070	Nardin, U., Locle, Switzerland. Stem winding and setting watch	Dec. 3, 1873	98	9	4	587
142, 716	Naah, D. R., Brooklyn, N. Y. Furnace for producing malleable iron	Sept. 9, 1873	349	118	4	282
141, 513	Naah, S., Cambridge, Mass. Elevator for passengers and freight	Aug. 5, 1873	91	28	4	142
141, 375	Nason, C. O., assignor to Deere & Co., Moline, Ill. Plow	July 29, 1873	974	316	4	123
	National Horseshoe Nail Company. (See Ross, R., assignor.)					
	National Horseshoe Nail Company. (See Ross, R., assignor.)					
	National Screw Company. (See Pierce & Ayres, assignors.)					
	National Tube Works Company. (See Flagler, H. K., assignor.)					
	Same. (See Jones, D., assignor.)					
	National Water-Wheel Company. (See Case, J. T., assignor.)					
	Same. (See Gray, H., assignor.)					
	National Wire-Mattress Company. (See Turnbull, A., assignor.)					
	Same. (See Turnbull & Webb, assignors.) (Reissue.)					
	Nation, D. H. (See Little & Nation.)					
142, 717	Nation, D. H., Saint Louis, Mo. Reservoir cooking-stove	Sept. 9, 1873	351	118	4	282
138, 682	Nation, D. H., and E. C. Little, Saint Louis, Mo. Reservoir cooking-stove	May 6, 1873	191	61	3	513
142, 931	Same. same.	Sept. 16, 1873	540	184	4	308
142, 932	Same. same.	Sept. 16, 1873	540	184	4	308
142, 933	Same. same.	Sept. 16, 1873	541	184	4	309
142, 934	Same. same.	Sept. 16, 1873	543	185	4	309
142, 935	Same. same.	Sept. 16, 1873	544	185	4	309
136, 534	Naylor, H., Oil City, Pa. Bottle and bottle-stopper	Mar. 4, 1873	164	52	3	258
141, 454	Naylor, J. H., Buffalo, N. Y. Check-valve	Aug. 5, 1873	39	13	4	138
141, 182	Naylor, S., Independence, Iowa. Lantern	July 22, 1873	757	249	4	98
142, 265	Naylor, S., and A. Fairchild, Independence, Iowa. Lamp-wick trimmer	Aug. 26, 1873	790	261	4	226
	Naylor, W. (See McGinnis & Naylor.)					
144, 351	Naylor, W., Mildmay Park, England. Car-brake	Nov. 4, 1873	148	50	4	490
136, 256	Nealey, J., Jr., and T. P. Kemp, Bangor, Me. Elastic check-rein	Feb. 25, 1873	800	260	3	228
144, 281	Neary, M. L., Double Bridge, Tenn. Cotton chopper and cultivator	Nov. 4, 1873	93	31	4	485
135, 353	Neat, A. E., New Albany, Ind. Revolving-sieve	Jan. 22, 1873	804	260	3	112
138, 516	Neibinger, G. R., Philadelphia, Pa. Fruit-dryer	May 6, 1873	45	15	3	501
143, 296	Neckerman, M., Pittsburgh, Pa. Taper-turning attachment to lathes	Sept. 30, 1873	855	293	4	360
140, 528	Needham, E. P., New York, N. Y. Key for piano-fortes, organs, &c.	July 1, 1873	160	54	4	21
143, 924	Neff, G. S., Rochester, N. Y. Filter	Oct. 21, 1873	492	166	4	438
145, 585	Neff, J., Dallastown, Pa. Tree-protector	Dec. 16, 1873	496	164	4	650
135, 575	Neidoffer, W., Mitchell, Ind. Sawing-machine	Feb. 4, 1873	168	54	3	141
146, 015	Neidig, D. A., Paris, Ohio. Farm-gate	Dec. 30, 1873	904	293	4	705
140, 529	Neil, J. R., Wolcottville, Conn. Liquid-cooler	July 1, 1873	160	55	4	21
134, 608	Neil, J. W., Brooklyn, assignor to self, E. Simpson, Glen Cove, and J. W. Wilson, New York, N. Y. Bayonet attachment	Jan. 7, 1873	103	33	3	15
138, 517	Neil, W., San Francisco, Cal. Condenser and refiner for spirituous liquors	May 6, 1873	46	16	3	501
143, 179	Neill, J. E., deceased, by U. U. Neill, administrator, Key West, Fla. Hemp-machine	Sept. 23, 1873	745	257	4	335
	Neill, U. U., administratrix. (See Neill, J. E.)					
145, 963	Neill, W. J., assignor of one-half interest to R. D. Mason, Lawrence, Kans. Spring-shank for boots and shoes	Dec. 30, 1873	860	279	4	701
145, 586	Neilson, J. F., New York, N. Y. Water-closet	Dec. 16, 1873	499	164	4	650
	Neilligh, J. (See Seislove, J., assignor.)					
	Neillis, A. (See Mitchel, O. M., assignor.)					
143, 775	Neillis, A. J., Pittsburg, Pa. Horse hay-rake	Oct. 21, 1873	368	122	4	428
144, 282	Nelson, A. S., assignor of one-half interest to H. F. Hammon, Conneautville, Pa. Slide valve	Nov. 4, 1873	93	31	4	485
134, 559	Nelson, C., Gloucester, Mass. Solution for preserving canvas and cordage	Jan. 7, 1873	55		3	11
136, 000	Nelson, C., East New York, N. Y. Torpedo	Feb. 18, 1873	565	186	3	128
	Nelson, C. P. (See Ball, A., assignor.)					
142, 718	Nelson, D. A., Tyler, Tex., assignor of one-third interest to S. D. Wood. Hay and cotton press	Sept. 9, 1873	351	116	4	282
142, 501	Nelson, E. H., Gainesville, Ala. Cotton-cultivator	Sept. 2, 1873	162	52	4	255
	Nelson, G. F., et al. (See Clarkson, F. E., assignor.)					
139, 729	Nelson, H., New York, N. Y. Paint compounds	June 10, 1873	272		3	647
	Nelson, La Tourette, & Co. (See Jones, W., assignor.)					
142, 936	Nelson, S. W., Worcester, Mass. Planing-machine	Sept. 16, 1873	545	185	4	309
142, 266	Nelson, W. C., Kentland, Ind. Windmill	Aug. 26, 1873	791	261	4	226
136, 535	Nemetz, L., New York, N. Y. Billiard-cue	Mar. 4, 1873	165	53	3	258
144, 919	Nemmers, M. P., Saint Donatus, Iowa. Hand corn-planter	Nov. 25, 1873	653	222	4	565
138, 096	Neracher, W., Cleveland, Ohio. Fire-proof floor and chimney connection	Apr. 22, 1873	757	240	3	452

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 272	Neracher, W., Cleveland, Ohio. Key-fastener	Apr. 29, 1873	938	296	3	475
145, 005	Nea, C. M., York, Pa. Manufacture of steel	Nov. 25, 1873	725		4	572
5, 309	Neabitt, J., East Boston, Mass., assignor to W. G. Ulery. Slide-valve	Mar. 4, 1873	211	70	3	262
5, 310	Same. Slide-valve for steam-engines	Mar. 4, 1873	212	70	3	262
135, 931	Neabitt, J. D., Foxborough, Mass. Cushion and sharpener for sewing-machine needles	Feb. 18, 1873	508	165	3	193
143, 527	Neamith, G. W., Metamora, Ill. Grain-register	Oct. 7, 1873	109	38	4	389
138, 180	Nettleton, J. F., Branford, Conn. Device for capping and uncapping cartridges	Apr. 22, 1873	828	263	3	458
145, 893	Neuber, C. F., New Brunswick, and F. W. Perry, Camden, N. J., assignors to J. L. Mason, New Brunswick, N. J. Machine for forming screw-threads on sheet-metal	Dec. 23, 1873	774	253	4	684
136, 750	Nevers, W., Bridgeton, Me. Slod	Mar. 11, 1873	360	119	3	283
136, 751	Nevill, G. W., Richmond, Va. Drain-tile-laying apparatus	Mar. 11, 1873	361	119	3	283
136, 752	Same. Ditching-machine	Mar. 11, 1873	362	119	3	283
138, 428	Neville, J., Jersey City, N. J., assignor of one-half interest to T. Holiban, Chicago, Ill. Furnace for smelting ores	Apr. 29, 1873	1,077	340	3	486
138, 429	Same. Combined rotary blast and puddling furnaces for making wrought iron direct from the ore	Apr. 29, 1873	1,078	340	3	486
	Neville, R. (See Smith, T., assignor.)					
	New Brunswick Carpet Company. (See Webster, A. T., assignor) (Design.)					
	New England Glass Company. (See Libbey, W. L., assignor) (Design.)					
	Same. (See Lydiatt, J., assignor.)					
	Same. (See Wing, J., assignor.)					
	New Era Organ Company. (See Smith, J. A., assignor.)					
	New York Ottoman and Hassock Company. (See Ladd, J. D., assignor) (Design.)					
143, 836	Newcomb, S. H., Port Williams, Nova Scotia. Standard for stools, tables, &c.	Oct. 21, 1873	422	141	4	433
143, 993	Newcomb, W., Baltimore, Md., assignor of one-half interest to N. W. Allen, Boston, Mass. Windlass	Oct. 28, 1873	578	192	4	456
138, 518	Newell, A., Erie, Pa. Mode of constructing wooden pulley-wheels	May 6, 1873	47	16	3	501
	Newell, F. A. (See Bucklin, E., jr., assignor.)					
145, 521	Newell, J. A., Kalamazoo, Mich. Machine for boring hubs	Dec. 16, 1873	455	145	4	645
141, 231	Newell, J. L., Port Huron, Mich. Compound for mixing paints	July 29, 1873	836		4	112
140, 530	Newell, R., assignor to R. Newell & Son, Philadelphia, Pa. Compound for coating wood and other articles to render them acid-proof	July 1, 1873	161		4	21
	Newell, R. & Son. (See Newell, R., assignor.)					
145, 811	Newhouse, A. S., Hamburg, S. C. Sofa, chair, &c.	Dec. 23, 1873	701	230	4	678
145, 583	Newlin, J. W., and J. S. Simmerman, Millville, N. J. Station-indicator	Dec. 16, 1873	497	163	4	650
140, 428	Newman, E. G., and P. Anderson, New York, N. Y. Piano-action	July 1, 1873	71	25	4	14
136, 933	Newman, J., and N. Brown, Roseville, Ill. Bee-hive	Mar. 18, 1873	524	173	3	305
	Newman, L. (See Montgomery, L., assignor.)					
145, 678	Newman, T., New Orleans, La. Railway-switch	Dec. 16, 1873	578	189	4	656
	Newman, W. (See Happe & Newman.)					
137, 792	Newham, W. L., assignor to Morris Tasker & Co., Philadelphia, Pa. Machine for bending tube-sockets	Apr. 15, 1873	477	149	3	420
143, 371	Newson, G. S., Edgefield, Tenn. Washing-machine	Sept. 30, 1873	928	314	4	366
144, 193	Newton, A. D., New York, N. Y. Bit-stock	Oct. 28, 1873	686	227	4	464
5, 365	Newton, F. W., South Orange, N. J., assignor by mesne assignment to W. L. Pomeroy & J. F. Plummer. Lappet-loom	Apr. 22, 1873	871	276 277	3	461
	Newton, G. S. (See Donald & Newton.)					
137, 021	Newton, G. W., Hubbard, Ohio. Cattle-guard for railways	Mar. 18, 1873	600	199	3	312
141, 661	Newton, L., Cleveland, Ohio. Carriage-bolt	Aug. 12, 1873	236	74	4	162
	Newton, J. (See Hall & Newton.)					
140, 216	Newton, J. H., Faxton, Ill. Mop-wringer	June 24, 1873	724	228	3	699
141, 809	Newton, J. M., Dayton, Ky., assignor to D. D. Martin and J. English. Hand-press for jelly	Aug. 12, 1873	367	120	4	173
	Newton, N. C. (See Kempe, E., assignor.)					
138, 574	Newton, R., Millville, N. J. Can-filler	May 6, 1873	96	31	3	505
6, 437	Ney, E. J., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	Feb. 18, 1873			3	189
6, 438	Same. same	Feb. 18, 1873			3	189
6, 439	Same. same	Feb. 18, 1873			3	189
6, 440	Same. same	Feb. 18, 1873			3	189
6, 441	Same. same	Feb. 18, 1873			3	189
6, 442	Same. same	Feb. 18, 1873			3	189
6, 443	Same. same	Feb. 18, 1873			3	189
6, 444	Same. same	Feb. 18, 1873			3	189
6, 445	Same. same	Feb. 18, 1873			3	189
6, 446	Same. same	Feb. 18, 1873			3	189
6, 447	Same. same	Feb. 18, 1873			3	189
6, 448	Same. same	Feb. 18, 1873			3	189
6, 529	Same. same	Mar. 25, 1873			3	325
6, 530	Same. same	Mar. 25, 1873			3	325
6, 531	Same. same	Mar. 25, 1873			3	325
6, 532	Same. same	Mar. 25, 1873			3	325
6, 606	Same. same	Apr. 22, 1873			3	444
6, 607	Same. same	Apr. 22, 1873			3	444
6, 938	Same. same	Oct. 7, 1873			4	380
6, 939	Same. same	Oct. 7, 1873			4	380
6, 940	Same. same	Oct. 7, 1873			4	380
6, 941	Same. same	Oct. 7, 1873			4	380
7, 038	Same. same	Dec. 9, 1873			4	614
7, 039	Same. same	Dec. 9, 1873			4	614
7, 040	Same. same	Dec. 9, 1873			4	614
7, 041	Same. same	Dec. 9, 1873			4	614
7, 042	Same. same	Dec. 9, 1873			4	614
7, 043	Same. same	Dec. 9, 1873			4	614
136, 753	Nézeraux, P., Paris, France. Apparatus for cooling air	Mar. 11, 1873	363	120	3	283
	Nicholas, J. (See Bradley & Nicholas.)					
	Same. same					
145, 964	Nicholl, Burr & Co. (See Hinzey, J., assignor.) Valve	Dec. 30, 1873	861	279	4	701
	Nichols, J. A., Pittsburgh, Pa. (See Farrell, F., assignor.)					
137, 022	Nichols, A. T., Williamsport, Pa. Sawing-machine	Mar. 18, 1873	601	199	3	312
141, 163	Same. same	July 22, 1873	758	249	4	98
141, 810	Nichols, B. T., Roselle, N. J. Nail	Aug. 12, 1873	367	120	4	173
145, 006	Nichols, C. W., assignor to H. H. Frary, Chicago, Ill. Safety-strap for harness	Nov. 25, 1873	726	245	4	572
136, 934	Nichols, F., New London, Conn. Acid-pump	Mar. 18, 1873	525	173	3	305
143, 994	Nichols, F. W., Lynn, Mass. Shutter-worker	Oct. 28, 1873	520	193	4	456

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 562	Nichols, G. C., Binghamton, N. Y. Modes of connecting cement, water, and gas pipes...	Apr. 8, 1873	264	81	3	390
143, 372	Nichols, H. W. and R. P., Northfield, Ind. Portable fence...	Sept. 30, 1873	927	314	4	366
136, 754	Nichols, J., and E. D. Brown, said Brown assignor to said Nichols, Battle Creek, Mich. Horse-power...	Mar. 11, 1873	364	120	3	283
145, 362	Nichols, J. H., La Fayette, Ill. Gate-fastener	Dec. 9, 1873	292	98	4	621
	Nichols, J. J. (See Delkescamp, A., assignor.)					
	Same (Reissue.)					
136, 257	Nichols, J. R., Bastrop, Tex. Plow	Feb. 25, 1873	800	260	3	228
	Nichols, J. S., et al. (See Waterhouse, A. G., assignor.)					
	Nichols, M., et al. (See Waterhouse, A. G., assignor.)					
144, 409	Nichols, M. O., Clyde, O. Reed-organ reed	Nov. 11, 1873	207	70	4	507
144, 473	Nichols, M. V., Osage, Iowa. Vehicle	Nov. 11, 1873	260	88	4	511
137, 793	Nichols, R. P. (See Nichols, H. W. & R. F.)					
139, 473	Nichols, W. D., Batavia, Ill. Windmill	Apr. 15, 1873	477	150	3	430
	Same	June 3, 1873	27	8	3	611
	Nichols, W. E. (See Hastings, Nichols & Merritt.)					
135, 242	Nichols, W. H., East Hampton, Conn. Lock-nut	Jan. 28, 1873	707	226	3	104
142, 719	Nickerson, A., East Somerville, Mass. Adjustable spray-jet	Sept. 9, 1873	352	119	4	282
	Nickerson, B. F. (See Huntley, A. D., assignor.)					
142, 267	Nicoll, D., London, England. Rendering fabrics uninflamable	Aug. 26, 1873	791		4	226
139, 358	Nicoll, R. G., and G. H. Hollman, Hazlehurst, Miss. Reciprocating steam-engine	May 27, 1873	737	233	3	588
142, 039	Niderkom, G., West Mount Vernon, N. Y. Self-reclining chair	Aug. 19, 1873	581	191	4	199
139, 602	Niemann, F. H., Cincinnati, Ohio. Combined step-cover and wheel-fender	June 3, 1873	137	45	3	620
	Niemann, H. T. (See Gory, E. G., assignor.)					
	Niles, H. E. (See Chapman, A. G., assignor.)					
144, 410	Nilson, N., assignor to self and W. W. McNair, Minneapolis, Minn. Steam-brake for railway-cars	Nov. 11, 1873	208	70	4	507
144, 352	Nimmo, E. B., Brooklyn, assignor to Shepard & Dudley, New York, N. Y. Cannula point for syringes	Nov. 4, 1873	150	50	4	490
	Nimocks, A. H. (See Lang, C., assignor.)					
136, 451	Niabett, C. A., Pontiac, Mich. Fire-kindler	Mar. 4, 1873	84	29	3	252
135, 282	Niasle, A., and J. Schöberl, New York, N. Y. Rocking-chair fan	Jan. 28, 1873	739	238	3	107
137, 372	Nitkey, J., Minneapolis, Minn. Corn-planter	Apr. 8, 1873	264	82	3	360
5, 353	Nittinger, A., jr., Philadelphia, Pa. Oscillating steam-engine	Apr. 15, 1873	653	205	3	435
141, 164	Nix, M. L., Chetopah, Kans. Harvester-rake	July 22, 1873	758	249	4	98
144, 784	Nixon, C. H., Polo, Ill. Cotton-planter	Nov. 12, 1873	530	180	4	544
143, 709	Nixon, F. M., and E. N. Babcock, Lena, Ill. Washing-machine	Oct. 14, 1873	292	96	4	412
5, 289	Noah, G. G., Boston, Mass. Machine and process for making paste	Feb. 18, 1873	684	221	3	206
138, 519	Noah, G. G., Charlestown, Mass. Apparatus for making paste	May 6, 1873	48	16	3	501
5, 619	Nobel, A., Hamburg, Germany, assignor by mesne assignment to the Giant Powder Company, San Francisco, Cal. Explosive compound	Oct. 21, 1873	523		4	441
5, 620	Nobel, A., Hamburg, Germany, assignor by mesne assignment to the Atlantic Giant Powder Company, San Francisco, Cal. Explosing nitro-glycerine. (Reissue.)	Oct. 21, 1873	525	175	4	441
5, 621	Same. Method of exploding nitro-glycerine. (Reissue.)	Oct. 21, 1873	527	175	4	441
141, 455	Nobel, A., Hamburg, Germany, assignor to the Giant Powder Company and the Atlantic Giant Powder Company, San Francisco, Cal. Explosive compound	Aug. 5, 1873	40		4	138
	Noble, A. U., et al. (See Algeo, R. J., assignor.)					
	Noble, C., & Co. (See Coppuck, M. M., assignor.)					
	Same. (See Martino, J., assignor.)					
	Noble, J. (See Sweet & Noble.)					
137, 318	Noble, S. D., Cerro Gordo, Ill. Ditching and grading machine	Apr. 1, 1873	36	11	3	360
143, 026	Noble, O. W., assignor to self and J. W. Harnden, Wakefield, Mass. Sash-fastener	Sept. 23, 1873	696	213	4	325
137, 472	Nobles, M. V., Elmira, N. Y. Sanding device for locomotives	Apr. 1, 1873	174	55	3	371
135, 283	Noe, C. L., Bergen Point, N. J. Angling-reel	Jan. 28, 1873	740	238	3	107
	Noel, T., Memphis, Tenn. Spectacle-frame	Jan. 11, 1873			3	7
	Same. (Extension.)					
137, 146	Nolan, J., Waddington, N. Y. Water-wheel	Mar. 25, 1873	720	239	3	333
135, 146	Nolau, K., assignor of one-half interest to B. Ryan, Galesburgh, Ill. Double-acting pump	Jan. 21, 1873	597	194	3	83
141, 456	Nolan, P. W., New York, N. Y., assignor of one-half interest to J. H. Campbell, Williamantic, Conn. Folding-chair	Aug. 5, 1873	41	13	4	138
	Same	Aug. 5, 1873	43	13	4	138
141, 457	Same	Dec. 2, 1873	172	59	4	589
145, 229	Nolau, P. W., New York, N. Y. Car-seat	Dec. 2, 1873	172	59	4	589
	Nolan, T. (See McGinty & Nolan.)					
142, 502	Nolf, A. L., assignor to self and V. Barjon, New York, N. Y. Galvanic battery	Sept. 2, 1873	163	53	4	255
	Noly, V. (See Cavalli, A., assignor.)					
6, 959	Nonnenbacher, J., New York, N. Y. Picture-frame, &c	Oct. 14, 1873			4	401
6, 965	Same	Nov. 11, 1873			4	505
	Noon, J. & J. (See Conger, W. M., assignor.)					
141, 811	Norden, L., Philadelphia, Pa. Reefing fore and aft sails	Aug. 12, 1873	368	121	4	173
6, 449	Nordmann, H., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	Feb. 18, 1873			3	189
6, 450	Same	Feb. 18, 1873			3	189
6, 533	Same	Mar. 25, 1873			3	325
6, 608	Same	Apr. 22, 1873			3	444
7, 044	Same	Dec. 9, 1873			4	615
7, 045	Same	Dec. 9, 1873			4	615
	Norfeet, T. (See Darrell, A. M., assignor.)					
144, 218	Norfolk, J. R., Salem, Mass. Shuttle-actuating mechanism for looms	Nov. 4, 1873	43	13	4	481
139, 182	Norman, G. A., Baltimore, Md. Animal-trap	May 20, 1873	656	205	3	574
135, 576	Norman, H., and C. F. Dietrich, New Orleans, La. Ice-machine	Feb. 4, 1873	169	54, 55	3	141
136, 259	Same. Pump	Feb. 25, 1873	801	260	3	228
136, 259	Same. Air-engine	Feb. 25, 1873	802	260	3	228
141, 585	Norrbin, J. H., and J. Ohlsson, assignors to A. Liedbeck, Stockholm, Sweden. Explosive compound	Aug. 5, 1873	149		4	147
145, 120	Norris, J. B., Richmond, Va. Plow	Dec. 2, 1873	74	23	4	591
145, 812	Same. Lubricating compound	Dec. 23, 1873	702		4	678
	Norris, L., et al. (See Bisbing & McCune, assignors.)					
	North American Iron-Works. (See Wilkinson, W. H., assignor.)					
	North British Rubber Company. (See Bartlett, W. E., assignor.)					
140, 531	North, O. B., assignor to O. B. North & Co., New Haven, Conn. Snap-hook	July 1, 1873	161	55	4	21
143, 180	Same. Harness-buckle	Sept. 23, 1873	746	258	4	335
	North, O. B., & Co. (See North, O. B., assignor.)					
	Northend & Foster. (See Benner, L. D., assignor.)					
143, 373	Northrup, C. W., Utica, N. Y. Spring bed-bottom	Sept. 30, 1873	928	314	4	366
138, 520	Northrup, N. G., Saint Paul, Minn. Joint for sheathing	May 6, 1873	49	16	3	501

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
5, 557	Norton, C. P., Prairie City, Iowa, assignor to I. P. Pillsbury, Monmouth, Ill. Cultiva- tor..... (Reissue).....	Aug. 26, 1873	850	280	4	231
134, 816	Norton, E., Boston, Mass. Washing-machine.....	Jan. 14, 1873	299	96	3	44
139, 688	Norton, E., Chicago, Ill. Box for spices, &c.....	June 10, 1873	228	73	3	643
	Norton, E. D. (See Stoddard & Norton.)					
	Norton, F. P., et al. (See De Forest, D. W., assignor.)					
136, 586	Norton, H. B., Rochester, N. Y. Potato-digger.....	Mar. 4, 1873	165	53, 54	3	258
134, 923	Norton, J. D., Saint Louis, Mo. Soldering-iron.....	Jan. 14, 1873	394	125	3	59
	Norton, M. P., Troy, N. Y. Post-marking stamp..... (Extension).....	Aug. 9, 1873			4	134
	Norton, S. S., et al. (See De Forest, D. W., assignor.)					
	Norwalk Lock Company. (See Elwell, H. H., assignor.)					
	Norwood, C. J., et al. (See Manning, J., assignor.)					
136, 173	Noton, W., Oldham, England, assignor to E. Kiston, Lowell, Mass. Feed-mechanism for cotton-openers, &c.....	Feb. 25, 1873	733	236	3	222
135, 005	Noté, A. B., assignor of one-half interest to J. E. Card, Fairhaven, Mass. Farmer's boiler	Jan. 21, 1873	480	154	3	74
5, 248	Nourse, L. S., Barre, Mass., assignor to H. A. Hildreth and W. J. Johnson. Flour-sifter. (Reissue).....	Jan. 21, 1873	644	209	3	87
	Nourae, T., et al. (See Arndt, A. F. R., assignor.)					
	Novelty Iron Works Manufacturing Company. (See Presbrey, C. H., assignor.)					
136, 935	Nowlan, S. B. B., New York, N. Y. Construction of bridges.....	Mar. 18, 1873	526	{ 173 174 148 149 }	3	306
142, 809	Noye, J. T., Buffalo, N. Y. Trammig-bolt for grinding-mills.....	Sept. 16, 1873	441	{ 148 149 }	4	300
135, 834	Noyes, B. B., and O. G. Stratton, Greenfield, Mass. Dash-rail for carriages.....	Feb. 11, 1873	414	134	3	171
5, 348	Noyes, C. H., Orange, N. J. Band-comb..... (Reissue).....	Apr. 8, 1873	438	135	3	404
136, 756	Noyes, D. W., Bennington, Vt. Railway-car ventilator.....	Mar. 11, 1873	365	121	3	284
138, 921	Same..... Window-sash.....	May 13, 1873	408	128	3	541
	Noyes, H. H., et al. (See Root, J. B., assignor.)..... (Reissue).....					
143, 027	Noyes, J. P., Binghamton, N. Y. Sewing-machine.....	Sept. 23, 1873	627	{ 213 214 }	4	326
141, 885	Noyes, P., Lowell, Mass. Apparatus for oiling, testing, and washing fire-engine hose....	Aug. 19, 1873	449	146	4	188
	Nugent, E. (See Fanning & Nugent.)					
144, 693	Nugent, E., and J. Fanning, Brooklyn, N. Y. Machine for nicking and shaving screw- blanks.....	Nov. 18, 1873	456	154	4	538
145, 121	Same..... Machine for threading screw-blanks.....	Dec. 2, 1873	75	24	4	591
143, 092	Null, W. H., Blandinsville, Ill. Quilting-attachment for sewing-machines.....	Sept. 23, 1873	680	234	4	330
134, 924	Nunamaker, S., Nineveh, Pa. Railway-rail joint.....	Jan. 14, 1873	394	125	3	52
140, 636	Nusa, G., New York, N. Y. Combined refrigerator and beer-cooler.....	July 8, 1873	267	91	4	41
	Nutrio Manufacturing Company. (See Fitta, R. B., assignor.)..... (Reissue).....					
	Nuttall, W. (See Isherwood & Nuttall.)					
	Nutter, G. T. (See Miller, A., assignor.)					
	Nutting, G. (See Tebbets & Nutting.)					
140, 637	Nutting, G. E., and J. C. Githens, assignors to A. C. Rand, New York, N. Y. Rock-drill..	July 8, 1873	268	91	4	41
135, 932	Nye, S. R., assignor to self and C. J. Rice, Winchendon, Mass. Grain-drill.....	Feb. 18, 1873	508	166	3	193
143, 837	Oakes, B. F., Milford, Me. Car-starter.....	Oct. 21, 1873	423	141	4	433
136, 614	Oakes, E., Danville, Ill. Reed-organ.....	Mar. 11, 1873	245	83	3	274
135, 284	Oakes, F. S., Cattaraugus, N. Y. Milk-cooler.....	Jan. 28, 1873	740	238	3	107
138, 273	Oakley, F. L., New York, N. Y. Mitten.....	Apr. 29, 1873	939	296	3	475
137, 232	Oakley, J. S., Passaic, N. J. Tucker for sewing-machines.....	Mar. 25, 1873	801	264	3	338
139, 183	Oakley, J. S., and B. M. Post, Passaic, N. J. Step-ladder.....	May 20, 1873	657	205	3	574
	Oakley, J. T. (See Jaques, Oakley & Sterne.)					
	Oaks, J. B. (See Burnham & Oaks)..... (Design).....					
	Oaks, S. D. (See Gould, M. B., assignor.)					
141, 070	Oaks, W. A. C., Reading, Pa. Apple-parer.....	July 22, 1873	669	225	4	91
135, 006	Ober, P. E., Beverly, Mass. Coffin.....	Jan. 21, 1873	481	154	3	74
137, 283	Oberndorf, A., jr., Baltimore, Md. Umbrella-handle.....	Mar. 25, 1873	802	264	3	339
144, 124	Same..... Toy building-block.....	Oct. 28, 1873	687	227	4	465
145, 522	O'Blennus, A. W., New York, N. Y. Step-ladder.....	Dec. 16, 1873	455	145	4	645
139, 259	O'Brien, C. M., Hightstown, N. J. Tag-machine.....	May 27, 1873	737	{ 233 234 }	3	588
139, 416	O'Brien, J., assignor to self and C. D. Lamarche, New York, N. Y. Fire-escape.....	May 27, 1873	878	281	3	509
	O'Brien, W. S. (See Dale, W., assignor.)..... (Reissue).....					
139, 396	Obriet, W., New York, N. Y. Ribbon-block.....	May 27, 1873	795	253	3	593
140, 299	O'Bryan, B., Marietta, Pa. Belt shifter and tightener.....	June 24, 1873	793	252	3	705
137, 947	Oburg, F. V., Peoria, Ill. Thread-cutter for sewing-machines.....	Apr. 15, 1873	605	191	3	431
141, 945	O'Callahan, T., Boston, Mass. Metallic lathing.....	Aug. 19, 1873	496	163	4	192
139, 807	Ochiltree, S. P., Orange, Ind., assignor of one-half interest to G. H. Punttenney. Rotary- engine.....	June 10, 1873	346	107	3	652
	Ockington, A. J. (See Ockington, B. B. & A. J.)					
145, 587	Ockington, B. B. & A. J., Stratford Hollow, N. H. Machine for making clothes-pins.....	Dec. 16, 1873	500	164	4	650
143, 776	O'Conner, J., Jackson, Mo. Wheel for vehicles.....	Oct. 21, 1873	369	122	4	428
143, 838	O'Conner, L. J., Chicago, Ill. Street-sweeping machine.....	Oct. 21, 1873	423	141	4	433
137, 709	O'Conner, T., assignor to Saint Louis Rail-Fastening Company, Saint Louis, Mo. Spike- machine.....	Apr. 8, 1873	392	122	3	400
137, 948	O'Connor, W., Berville, Mich. Extension-ladder.....	Apr. 15, 1873	606	191	3	431
142, 503	O'Connor, M., New Brunswick, N. J. Fruit-can.....	Sept. 2, 1873	163	53	4	255
139, 730	Ocurr, H., Milwaukee, Wis. Stool or chair.....	June 10, 1873	273	85	3	647
137, 234	O'Dell, A., Bucyrus, Ohio. Washing-machine.....	Mar. 25, 1873	803	265	3	339
145, 306	Odell, S. W., Saint Louis, Mo. Copying and folding press.....	Dec. 9, 1873	244	82	4	617
135, 724	Odell, T. L., and J. C. Hudson, Iowa Falls, Iowa. Bed-bottom.....	Feb. 11, 1873	314	100	3	164
	Odenatt, W. H. (See Kichner & Odenatt.)					
136, 001	Odgers, C. E., Bloomfield, N. J. Machine for cutting stone.....	Feb. 18, 1873	566	{ 186 187 }	3	198
143, 297	Odiorno, D. W., Elizabeth, N. J. Umbrella-cover.....	Sept. 30, 1873	856	293	4	360
138, 430	O'Donnell, J., Saint Louis, Mo. Hat.....	Apr. 29, 1873	1,079	340	3	486
145, 777	O'Donnell, J. D., Washington, D. C. Draft-cook for soda-water and other liquids.....	Oct. 21, 1873	370	122	4	428
140, 429	O'Donoghue, J. D., and W., New York, N. Y. Tooth-brush.....	July 1, 1873	72	26	4	14
	O'Donoghue, W. (See O'Donoghue, J. D. & W.)					
6, 589	Oesterle, H. A., Philadelphia, Pa. Badge..... (Design).....	Apr. 15, 1873			3	417
6, 583	Oesterling, J., Wheeling, W. Va. Beer-mug..... (Design).....	Feb. 4, 1873			3	127
143, 778	Same..... Manufacture of stemmed glass-ware.....	Oct. 21, 1873	372	123	4	429
145, 122	Offen, G. C., Portland, Me. Safety-attachment for car-trucks.....	Dec. 2, 1873	77	24	4	391
	Olfermann, E. (See Ambrun & Olfermann.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 560	O'Gara, T. Worcester, Mass. Slating-nail.....	Jan. 7, 1873	55	17	3	11
135, 795	Ogborn, H., et al. (See Estell, S. F., assignor.)	Feb. 11, 1873	414	100	3	164
135, 835	Ogborn, H., Richmond, Ind., and A. W. Kendrick, Brooklyn, N. Y. Bed-bottom.....	Feb. 11, 1873	415	135	3	171
135, 933	Same.....	Feb. 18, 1873	509	168	3	193
136, 174	Same..... Broadcast-seeder.....	Feb. 25, 1873	734	238	3	222
136, 382	Same..... Bed-bottom.....	Mar. 4, 1873	98	10	3	247
136, 665	Same..... Spring for bed-bottoms.....	Mar. 11, 1873	290	97	3	278
140, 430	Ogborn, H., Richmond, assignor of one-half interest to S. Watson, Indianapolis, Ind. Staple for securing the ends of barrel-hoops.....	July 1, 1873	73	26	4	14
144, 920	Ogborn, H., Richmond, assignor of one-half interest to S. Watson, Lewisville, Ind. Barrel-hoop.....	Nov. 25, 1873	654	222	4	565
140, 300	Ogden, H. M. (See Smith & Ogden.)					
138, 575	Ogden, Milstead & Co. (See Jenkins, G. E., assignor.)					
137, 235	Ogden, R. C., New York, N. Y. Calendar-catch.....	June 24, 1873	793	252	3	705
142, 810	Oglesby, T. B., Hempstead, Tex. Teeth for cotton-gin saw.....	May 6, 1873	97	31	3	505
139, 968	O'Grady, D., Charleston, Ill. Swinging-crib or hammock.....	Mar. 25, 1873	804	265	3	339
137, 363	O'Haire, J. A., assignor of one-half interest to W. A. Jones, West Troy, N. Y. Operating car-doors.....	Sept. 16, 1873	441	149	4	300
143, 639	O'Hara, C. M., Fall River, Mass. Covering for steam and other pipes.....	June 17, 1873	488	154	3	671
141, 232	Ohlsson, J. (See Norrbin & Ohlsson.)					
141, 233	Ohmer, A. J., Hamilton, Ohio. Dish-cover.....	Mar. 18, 1873	460	153	3	301
141, 233	Ojeda, A. V., San Francisco, Cal. Hydraulic jack.....	July 29, 1873	837	273	4	113
141, 233	O'Kemp, C., et al. (See La Grove, W. A. P., assignor.)					
137, 363	Okerlund, S. P., Omaha, Neb. Apparatus for lowering pipes in wells.....	July 29, 1873	838	273	4	113
143, 639	Okey, J. M. (See Devol & Okey.)					
140, 638	Olander, A., Glen Gardner, N. J., and A. Olander, New York, N. Y. Window-mirror.....	Apr. 1, 1873	91	30	3	364
134, 609	Olbert, G. W., and W. Young, Barr's Store, Ill. Automatic gate.....	Oct. 21, 1873	424	141	4	433
137, 949	Oldham, C. W., Leipsic, Ind. Door-spring.....	July 8, 1873	269	91	4	41
137, 949	Olds, A. M., Greeley, Col. Ter. Washing-machine.....	Jan. 7, 1873	104	34	3	15
137, 949	Same..... Wash-tub holder.....	Apr. 1, 1873	175	56	3	371
138, 756	Olds, A. W., Green Oak Station, Mich. Portable fence.....	Apr. 15, 1873	607	191	3	431
136, 002	Olds, H. D., assignor of two-thirds interest to C. J. Bayer, Cedar Rapids, Iowa. Bedstead.....	May 13, 1873	270	83	3	529
136, 002	Olds, H. H., New Haven, Conn. Pulp-strainer.....	Feb. 18, 1873	567	187	3	198
142, 172	Oleomargarine Manufacturing Company. (See Paraf, A., assignor.)					
145, 813	Olin, E. D. (See Daly, W. F., assignor.)					
136, 936	Olin, G. S., Deer Lodge, Mont. Ter. Stamp-mill for ores.....	Aug. 26, 1873	712	236	4	319
136, 936	Same..... Mechanism for towing boats.....	Dec. 23, 1873	703	231	4	678
135, 836	Oliver, B. A., assignor to self and A. M. Cox, Bunker Hill, Ill. Excavator.....	Mar. 18, 1873	527	174 175	3	306
136, 757	Oliver, C. P., assignor of one-half interest to T. P. Howell, Newark, N. J. Leather-stretching frame.....	Feb. 11, 1873	416	135	3	172
136, 090	Oliver, D. B., McClure Township, Pa. Blank for draw-bolts.....	Mar. 11, 1873	366	121	3	284
136, 857	Oliver, H. N., Rahway, N. J. Raising piano-forte lids.....	Feb. 18, 1873	643	210	3	203
142, 347	Oliver, H. W., jr., Pittsburgh, Pa. Manufacture of rub-iron for carriages.....	Mar. 18, 1873	461	153	3	301
144, 785	Oliver, J., South Bend, Ind. Chill for casting mold-boards..... (Reissue.)	Mar. 11, 1873	412	136	3	287
142, 578	Oliver, J., Toronto, Canada. Preserving and drying lumber.....	Sept. 2, 1873	21	8	4	244
142, 504	Oliver, J., South Bend, Ind. Plow.....	Nov. 18, 1873	531	181	4	544
139, 603	Oliver, W., Haynesville, La. Mechanical movement.....	Sept. 9, 1873	238	77	4	273
141, 826	Olmsted, L. B., Brooklyn, N. Y. Mode of regulating speed in machinery.....	Sept. 2, 1873	164	53	4	255
142, 173	Olney, G. W., Lincoln, R. I. Speeder.....	June 3, 1873	138	45	3	620
142, 937	Olney, J. B., Brooklyn, N. Y. Gas apparatus for railway-cars.....	Aug. 19, 1873	449	146	4	189
142, 937	Olney, S. P., Detroit, Mich. Machine for gumming saws.....	Aug. 26, 1873	713	236	4	219
143, 995	Olsen, T., assignor to Riehlé Bros., Philadelphia, Pa. Apparatus for testing the tensile strength of metals.....	Sept. 16, 1873	547	186	4	309
140, 156	Olsson, S. J., Chicago, Ill. Waste-cock for outlet-valves.....	Oct. 28, 1873	580	193	4	456
138, 683	Olsson, S. J., Chicago, Ill. Governor for steam-heating apparatus.....	June 24, 1873	674	212	3	694
145, 533	Omsenetter, E., and J. F. Parker, Philadelphia, Pa. Compound tool.....	May 6, 1873	192	61	3	513
137, 618	Omsenetter, K. L., Philadelphia, Pa. Combined latch and door-check.....	Dec. 16, 1873	446	146	4	645
144, 474	O'Neil, J., assignor to self and R. A. Schoneman, New York, N. Y. Sewing-machine frame..... (Design)	Feb. 18, 1873			3	189
139, 417	Same..... Sewing-machine.....	Apr. 8, 1873	310	96	3	394
145, 588	O'Neil, J., New York, N. Y. Means for propelling vessels.....	Nov. 11, 1873	261	88	4	511
137, 794	O'Neill, E. V., assignor to self, J. Kelly, and R. Pilkington, Philadelphia, Pa. Reversible rotary cutter.....	May 27, 1873	879	282	3	600
135, 934	O'Neill, E. V., et al. See Palmer, H. L., assignor..... (Reissue.)					
143, 458	O'Neill, J., Brooklyn, N. Y. Car-mat.....	Dec. 16, 1873	501	165	4	650
141, 724	O'Neill, P. H., Saint Louis, Mo. Horseshoe-attachment.....	Apr. 15, 1873	479	150	3	420
143, 458	Onion, J. H. W., and W. H. H. Larduskey, assignors of one-third interest to W. D. F. Larkin, Baltimore, Md. Machine for cutting saw-teeth.....	Feb. 18, 1873	510	166	3	193
141, 724	Oppenheimer, S. (See Hamm, S., assignor.)					
138, 521	Oram, J. M., Gosport, Ind. Watchmaker's lathe.....	Oct. 7, 1873	51	18	4	385
138, 521	Orcutt, H., Amherst, Wis. Door-fastener.....	Aug. 12, 1873	287	94	4	166
138, 521	Ord, W., Brooklyn, Ohio. Governor for steam-engines.....	May 6, 1873	49	17	3	501
138, 757	Ordway, A., et al. (See Dustin, J. E., assignor.)					
139, 808	Ordway, A. H., Haverhill, Mass. Spring for rocking-chairs.....	May 13, 1873	270	84	3	529
141, 287	Ormsber, M., Brooklyn, N. Y. Button-fastening.....	June 10, 1873	346	107	3	652
144, 694	Orndorff, J. S., Virginia City, Nev. Pen-holder.....	July 29, 1873	886	290	4	116
144, 694	Orput, J. M., Malta, assignor of one-half interest to H. Safford, South Grove, Ill. Draw-bar in draft-equalizers for wagons.....	Nov. 18, 1873	457	155	4	538
144, 694	Same..... Clip for wagon-axle skeins.....	Nov. 18, 1873	457	155	4	538
135, 285	Orr, G. J., New York, N. Y. Distributer for extinguishing fires.....	Nov. 18, 1873	458	155	4	538
141, 071	Orr, G. J., and C. E. Gilderaleeve, New York, N. Y. Hose-bridge.....	Jan. 22, 1873	741	239	3	107
141, 071	Orr, J. C., and J. M. Baird, Wheeling, W. Va. Leg for furniture.....	July 22, 1873	670	225	4	91
144, 560	Orr, Painter & Co. (See Painter, J. R., assignor.)					
144, 560	Orr, R. J. (See Welch & Orr.)					
142, 505	Orr, T. M., and A. R. Sears, North Bridgewater, assignors of one-half interest to C. A. Pratt, Clinton, Mass. Jack-center for edge-trimming, and burnishing machines.....	Nov. 11, 1873	336	113	4	517
144, 353	Orr, W. J., Charlotte, N. C. Cotton-bale tie.....	Sept. 2, 1873	165	53	4	255
6, 830	Orton, B. E., and W. Cavert, Sterling, Ill. Shaft-hanger.....	Nov. 4, 1873	151	50	4	490
136, 666	Orton, G. V. (See Roche & Orton.)					
139, 019	Orton, T., Chicago, Ill. Paper-clip..... (Design)	Aug. 26, 1873			4	212
145, 230	Same..... Combined letter-sheet and envelope.....	Mar. 11, 1873	291	97	3	278
	Same..... Paper-clip.....	May 20, 1873	504	158	3	562
	Same..... Bill and paper file.....	Dec. 2, 1873	173	60	4	589

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
	Orum, M. L. (See Mellor & Orum.)					
144, 283	Orum, M. L., Philadelphia, Pa. Match-box	Nov. 4, 1873	94	31	4	486
139, 418	Orvis, A., Ellington, Ill. Flood-fence	May 27, 1873	880	282	3	600
138, 922	Orwig, S. H., Philadelphia, Pa. Type-setting machine	May 13, 1873	409	129	3	541
137, 090	Osborn, J. H., Guelph, Canada. Treadle	Mar. 25, 1873	674	224	3	329
139, 020	Osborn, M., Albion, Mich. Cane	May 20, 1873	504	159	3	562
144, 125	Osborn, O., Cleveland, Ohio. Wrecking-apparatus	Oct. 28, 1873	688	228	4	365
139, 515	Osborn, O. S., New Haven, Conn. Landau carriage-hook	June 3, 1873	62	21	3	614
	Osborn, S. (See Smith & Osborn.)					
142, 579	Osborn, W. F., Burlington, Kans. Wagon-brake	Sept. 9, 1873	238	78	4	273
	Osborne, D. M. (See Kirby, W. A., assignor.)					
	Osborne, D. M., & Co. (See Meyer, F., assignor.)					
	Osborne, E. W. (See Patterson, A. J., assignor.)					
139, 184	Osborne, J. W., Washington, D. C. Speed-gage	May 20, 1873	658	{ 206 207 }	3	574
140, 068	Osborne, O., assignor to T. Dolan & Co., Philadelphia, Pa. Pressing hosiery	June 17, 1873	578	183	3	679
138, 274	Osenbrück, J. A., Hemenlingen, Germany. Lubricator	Apr. 29, 1873	940	297	3	475
135, 577	Osgood, C. M., Amherst, Mass. Device for pressing hats	Feb. 4, 1873	173	55	3	141
137, 474	Osgood, F., New York, N. Y. Manufacture of pigments containing zinc and lead	Apr. 1, 1873	176		3	371
138, 684	Same..... Manufacture of oxide of zinc for pigments	May 6, 1873	193		3	513
138, 685	Same..... Treating zinc dross and skimmings for the manufacture of pigments	May 6, 1873	193		3	513
	Osgood, J. M. (See Sprague & Osgood.)					
143, 247	Osgood, R. R., Troy, N. Y. Mode of fastening the racks of dredging-machine dipper-handles	Sept. 30, 1873	813	279	4	357
143, 418	Osmond, E., Cincinnati, Ohio. Device for retaining fillings in teeth	Oct. 7, 1873	22	8	4	392
143, 925	Ostrander, J. S., Dayton, Ohio. Paper-bag machine	Oct. 21, 1873	493	{ 166 167 }	4	439
	Ostrom, H. P., et al. (See Hermance, J. F., assignor.)					
134, 698	Otis, C. R., Yonkers, N. Y. Guide for elevators	Jan. 7, 1873	188	61	3	21
146, 090	Same..... Hoisting-apparatus	Dec. 30, 1873	968	{ 312 313 }	4	710
134, 699	Otis, C. R. and N. P., Yonkers, N. Y. Steam hoisting-apparatus	Jan. 7, 1873	189	61	3	21
145, 747	Otis, E., assignor to J. Peckham, New Haven, Conn. Machine for making cord	Dec. 23, 1873	649	213	4	674
	Otis, M. E. (See Otis, M. S. and M. E.)					
144, 354	Otis, M. S. and M. E., Rochester, N. Y. Wood-grinder for paper-pulp	Nov. 4, 1873	152	50	4	491
	Otis, N. P. (See Otis, C. R. and N. P.)					
143, 459	Otis, S. A., Boston, Mass. Car-coupling	Oct. 7, 1873	52	18	4	355
5, 263	Otstok, J. D., Springfield, Ohio. Lifting-jack	Jan. 28, 1873	849	273	3	116
137, 859	Ott, A., assignor to T. F. Wells, New York, N. Y. Artificial stone	Apr. 15, 1873	534		3	495
144, 921	Ottenheimer, J., assignor to Ottenheimer, Rothschild & Co., New York, N. Y. Woven corset	Nov. 25, 1873	655	222	4	565
	Ottenheimer, Rothschild & Co. (See Ottenheimer, J., assignor.)					
	Ottner, J. (See Robstok & Ottner.)					
	Same..... same (Reissue.)					
138, 758	Ottner, J., Bridgeport, Conn. Manufacture of door-knobs	May 13, 1873	271	84	3	520
	Otto, F. G., et al. (See Leiter, J., assignor.)					
145, 123	Otto, N. A., Dentz, Germany. Caloric-engine	Dec. 2, 1873	77	25	4	591
	Ough, W. (See Bellairs & Ough.)					
136, 003	Ough, W., Orion, Ill. Sulky-plow	Feb. 18, 1873	567	187	3	198
137, 950	Outtten, G. F., Norfolk, Va. Mortising-machine	Apr. 15, 1873	606	191	3	431
	Outtonson, W. P. (See Keely, N., assignor.)					
136, 091	Overend, J. A. T., San Francisco, Cal. Type-casting machine	Feb. 18, 1873	643	211	3	203
143, 374	Overend, W., Cincinnati, Ohio, assignor to E. and C. Chambers, jr., Philadelphia, Pa. Register-point perforating device	Sept. 30, 1873	929	314	4	366
135, 837	Overholser, A. W., Duchoyquet Township, Ohio. Portable extension fence	Feb. 11, 1873	417	135	3	172
142, 862	Overton, E., Utica, N. Y. Water-wheel	Sept. 16, 1873	483	165	4	303
137, 619	Owen, C. N., Salem, Ohio. Door and gate spring	Apr. 8, 1873	310	97	3	394
138, 275	Owen, D. J., Springville, Pa. Animal-trap	Apr. 29, 1873	042	297	3	475
135, 661	Owen, D. J., and J. G. Brydges, Springville, Pa. Broom-head	Feb. 11, 1873	258	82	3	160
136, 335	Same..... Washing-machine	Feb. 25, 1873	870	280	3	233
	Owen, F. N. (See Baker, Doney & Owen.)					
	Owen, J. D. (See Duncan, S., assignor.)					
	Same..... (See Pomroy & Owen.)					
145, 007	Owen, S. R., Stewartville, Mo. Earth-boring machine	Nov. 25, 1873	727	245	4	572
145, 894	Owen, W. S., Oskaloosa, Iowa. Reaming-machine	Dec. 23, 1873	776	253	4	684
145, 895	Same..... Lining for pump-cylinders	Dec. 23, 1873	777	254	4	684
	Owens, C. L. (See Gash & Owens.)					
142, 644	Owens, J. L., Cambria, Wis. Harvester-rake	Sept. 9, 1873	289	95	4	277
139, 185	Owens, T. B., Gatesville, Tex. Medical compound or bitters for treating chills and fever	May 20, 1873	660		3	574
143, 587	Owens, T. D., Pittsburgh, Pa. Stone-pavement	Oct. 14, 1873	176	60	4	403
144, 859	Pacand, E. J., assignor to F. A. Jones, Schaffhausen, Switzerland. Stem winding and setting watch	Nov. 25, 1873	610	207	4	561
144, 860	Packard, C., Eureka, Nev., and S. Standish, Pacheco, Cal. Fly-trap	Nov. 25, 1873	610	{ 207 208 }	4	561
143, 926	Packard, D. H., North Bridgewater, Mass. Apparatus for molding box-toes for boots and shoes	Oct. 21, 1873	494	167	4	439
139, 186	Packard, G. L., Everett, Mass. Combined refrigerator and sideboard	May 20, 1873	660	207	3	574
140, 381	Packard, I. T., Fort Wayne, Ind. Reed-organ stop-action	July 1, 1873	39	13	4	11
134, 817	Packard, R. G., Brooklyn, N. Y. Dredger	Jan. 14, 1873	300	97	3	44
134, 764	Paddock, O., Watertown, N. Y. Match-box	Jan. 14, 1873	252	82	3	41
142, 408	Paddock, S. E., Delaware, Ohio. Medical compound	Sept. 2, 1873	77		4	248
5, 438	Paddon, J. B., Troy, Ill. Rewinnowing attachment for thrashers	June 3, 1873	187	60	3	624
137, 710	Paden, S. K., Pulaaki, Pa., assignor to self and R. V. Pierce, Buffalo, N. Y. Nail-plate feeder	Apr. 8, 1873	393	122	3	400
136, 175	Padon, J. B., Troy, Ill. Rewinnowing attachment for thrashers	Feb. 25, 1873	735	237	3	223
139, 969	Paff, J., Lawrenceburgh, Pa. Binder for loaded wagons and sleighs	June 17, 1873	489	154	3	671
140, 431	Pagan, J., Yonkers, N. Y. Shirt-boom	July 1, 1873	73	26	4	14
5, 223	Page, A. H., assignor by mesne assignment to the Metropolitan Washing-Machine Company, Manchester, N. H. Clothes-wringer	Jan. 7, 1873	213	68	3	23
5, 224	Same..... same (Reissue.)	Jan. 7, 1873	214	69	3	24
5, 225	Same..... same (Reissue.)	Jan. 7, 1873	215	69	3	24
	Page, A. W. (See Bullard, J. H., assignor.)					
141, 165	Page, C., Meriden, Conn. Adjustable car-window stop	July 22, 1873	759	250	4	98
146, 091	Page, S. N., Lamar Mills, Pa. Washing-machine	Dec. 30, 1873	970	313	4	710
	Page, W. H., & Co. (See Page, W. H., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
7, 072	Page, W. H., assignor to W. H. Page & Co., Norwich, Conn. Printing-type.... (Design)	Dec. 23, 1873	.....	.....	4	671
7, 073	Same..... same..... (Design)	Dec. 23, 1873	.....	.....	4	671
7, 074	Same..... same..... (Design)	Dec. 23, 1873	.....	.....	4	671
141, 376	Paige, D. O., Detroit, Mich. Fire-proof safe.....	July 29, 1873	975	317	4	123
142, 506	Paige, J. C., Stoneham, Mass. Manufacture of horseshoe-nails.....	Sept. 2, 1873	166	54	4	255
141, 011	Paige, W. H., assignor of one-half interest to S. T. Hammond, Springfield, Mass. Rail-way-car wheel.....	July 22, 1873	619	209	4	87
5, 565	Paicca, J., Ledyard, N. Y. Tire-setter..... (Reissue)	Sept. 9, 1873	390	130	4	285
141, 662	Paine, G. C., Boston, Mass. Reclining-chair.....	Aug. 12, 1873	237	75	4	162
139, 327	Paine, H. J., et al. (See Lord, T., assignor.) Paine, J. F., assignor by meane assignment of one-half interest to R. Morrow, Providence, R. I. Shoe-nail.....	May 27, 1873	795	.....	3	593
142, 863	Paine, N., Milford, Mass. Machine for forming the hooks of machine-needles.....	Sept. 16, 1873	483	165	4	303
136, 336	Paine, S. W., Rochester, N. Y. Shot-cartridge.....	Feb. 25, 1873	871	281	3	233
141, 586	Painter, J. R., Reading, Pa., assignor to Orr, Painter & Co. Magazine for stoves.....	Aug. 5, 1873	150	48	4	147
141, 587	Painter, W., assignor of one-half interest to L. R. Keizer, Baltimore, Md. Pump-valve..... Palfry, W. (See Swett, C., assignor.)	Aug. 5, 1873	150	48	4	147
143, 375	Palm, T. F., assignor to I. H. Hampton and T. F. Palm, Toledo, Ohio. Eave-trough hanger.....	Sept. 30, 1873	929	315	4	366
142, 645	Palmberg, A. J., Boston, Mass. Ironing-table.....	Sept. 9, 1873	290	95	4	277
143, 460	Palmberg, A. J., assignor to C. S. Hicks, Boston, Mass. Shutter-fastening.....	Oct. 7, 1873	52	18	4	285
137, 711	Palmer, B. F., Philadelphia, Pa. Artificial leg..... Palmer, C. (See Palmer, G. & C.) Palmer, C. B. (See Hinden, M. J., assignor.)	Apr. 8, 1873	394	122	3	400
135, 243	Palmer, C. H., New York, N. Y. Machine for pressing and shaping cigar-fillers.....	Jan. 28, 1873	707	227	3	104
135, 662	Palmer, C. H., assignor to the Pamphlet-Stitching-Machine Company, New York, N. Y. Machine for sewing books.....	Feb. 11, 1873	258	82	3	160
136, 452	Palmer, C. H., New York, N. Y., assignor to A. M. Loryea, Portland City, Oreg. Water-wheel attachment for sewing-machines.....	Mar. 4, 1873	84	29	3	252
136, 615	Palmer, C. H., New York, N. Y. Cigar-mold.....	Mar. 11, 1873	246	83	3	274
139, 516	Same..... Blind-slat staple.....	June 3, 1873	63	21	3	614
145, 814	Same..... Sewing-machine.....	Dec. 23, 1873	704	231 232	4	679
139, 474	Palmer, C. W., Cleveland, Ohio. Brush.....	June 3, 1873	27	8	3	611
139, 913	Same..... Reed-organ.....	June 17, 1873	447	139	3	668
140, 725	Same..... Portfolio.....	July 8, 1873	339	115	4	47
138, 923	Palmer, F. G., assignor to self and J. J. Palmer, Pittsburgh, Pa. Vapor-burner.....	May 13, 1873	411	129	3	541
140, 157	Palmer, F. H., Whitefield, N. H. Adjustable saw-guide.....	June 24, 1873	675	212	3	694
144, 561	Palmer, G. & C., Morris Run, Pa. Life-preserving cape.....	Nov. 11, 1873	337	113	4	517
139, 731	Palmer, G. H., Monmouth, Ill. Knapsack.....	June 10, 1873	274	86	3	647
139, 604	Palmer, G. N., assignor to H. A. Lyon and L. E. St. John, Greene, N. Y. Endless-chain for animal-power.....	June 3, 1873	139	45	3	620
134, 700	Palmer, H., Barnesville, Ohio. Chimney-top.....	Jan. 7, 1873	190	61	3	22
146, 016	Palmer, H. A., Hingham, and A. H. Spencer, Boston, assignors to J. J. Haley, Newton, and H. C. Morse, Boston, Mass. Carpet-sweeper.....	Dec. 30, 1873	905	293	4	705
5, 471	Palmer, H. L., Stillwater, N. Y., assignor to E. W. O'Neill and M. Fitzgibbons. Apparatus for the manufacture of pasteboard..... (Reissue)	July 1, 1873	199	66	4	24
5, 562	Palmer, H. L., assignor of one-half interest to C. C. Skilton, New York, N. Y. Non-conducting tablet, platform, or mat..... (Reissue)	Sept. 2, 1873	206	67	4	258
134, 765	Palmer, H. L., New York, N. Y. Hot-water heating-apparatus for ranges.....	Jan. 14, 1873	253	83	3	41
135, 356	Same..... Heating and cooking range.....	Jan. 28, 1873	804	260	3	112
135, 838	Same..... Hot-air furnace.....	Feb. 11, 1873	417	135	3	172
136, 755	Same..... Stove-pipe.....	Mar. 11, 1873	365	121	3	283
141, 812	Palmer, H. L., assignor of one-half interest to C. C. Skilton, New York, N. Y. Non-conducting-tablet, platform, or mat.....	Aug. 12, 1873	369	121	4	173
143, 376	Palmer, I. E., Hackensack, N. J. Tackle-block..... (Extension)	Nov. 1, 1873	.....	.....	4	452
5, 381	Same..... Coil-holder for wire, &c.....	Sept. 30, 1873	930	315	4	366
137, 951	Palmer, J., Concord, N. H. Power-hammer..... (Reissue)	Apr. 29, 1873	1, 113	352	3	489
143, 461	Palmer, J., Cincinnati, Ohio. Spring-hinge.....	Apr. 15, 1873	609	192	3	431
143, 461	Palmer, J., Sandisfield, Mass. Means for forcing ashes from vessels.....	Oct. 7, 1873	53	19	4	385
5, 571	Palmer, J. J. (See Palmer, F. G., assignor.) Palmer, J. S., Providence, R. I. Rolling metal for jewelry..... (Extension)	June 14, 1873	.....	.....	3	640
140, 947	Same..... Bracelet..... (Reissue)	Sept. 9, 1873	397	133	4	286
135, 244	Palmer, J. W., Pana, Ill. Table-hinge.....	July 15, 1873	546	183	4	72
139, 517	Palmer, Knox & Co. (See Knox, R. F., assignor.) Palmer, N., Athens, assignor to Davis Wheel and Palmer Fork Company, New York, N. Y. Wheel for vehicles.....	Jan. 28, 1873	709	227	3	105
5, 608	Palmer, N. W., New York, N. Y. Cigar-drying mold.....	June 3, 1873	63	21	3	614
136, 537	Palmieri, H., New York, N. Y., assignor of one-half interest to G. Mongea. Stationary fire-pipe for buildings..... (Reissue)	Oct. 14, 1873	333	111	4	415
136, 537	Palmieri, H., Philadelphia, Pa. Stationary fire-pipe for buildings.....	Mar. 4, 1873	168	54	3	259
24, 484	Palser, J. B., Aiken, S. C., and G. Howland, Troy, N. Y. Apparatus for the manufacture of paper-pulp..... (Extension)	June 21, 1873	.....	.....	3	662
24, 484	Same..... Manufacture of paper-pulp..... (Extension)	June 21, 1873	.....	.....	3	662
24, 484	Same..... Preparation of straw for paper-pulp..... (Extension)	June 21, 1873	.....	.....	3	662
24, 484	Palser, J. B., Aiken, S. C., and G. Howland, Mechanicsville, N. Y. Apparatus for the manufacture of paper-pulp..... (Disclaimer filed)	June 20, 1873	.....	.....	4	477
24, 484	Same..... Apparatus for the manufacture of paper-pulp..... (Disclaimer filed)	June 20, 1873	.....	.....	4	478
136, 453	Pamphlet-Stitching-Machine Company. (See Palmer, C. H., assignor.) Pancoat, H. B., and F. L. Maule, Philadelphia, Pa. Sectional steam-boiler.....	Mar. 4, 1873	85	29	3	252
135, 578	Panton, H., New York, N. Y. Treating tin-scrap and obtaining useful products.....	Feb. 4, 1873	173	55	3	141
137, 712	Same..... Recovering tin from waste-tin scrap.....	Apr. 8, 1873	396	123	3	401
137, 319	Panyard, A., Massillon, Ohio. Portable earth-closet.....	Apr. 1, 1873	37	12	3	360
137, 952	Paquette, N., Summerfield, assignor of one-half interest to N. Davis, Ida, Mich. Machine for cutting leather.....	Apr. 15, 1873	610	192	3	431
137, 564	Paraf, A., New York, N. Y., assignor to Oleomargarine Manufacturing Company. Purifying and separating fats.....	Apr. 8, 1873	265	.....	3	390
143, 634	Pardee, R. S., San Diego, Cal. Apparatus for compressing air.....	Oct. 14, 1873	217	73	4	407
136, 667	Pardoe, J., Worcester, Mass. Furnace for heating iron bars, &c.....	Mar. 11, 1873	292	97	3	278
135, 579	Parham, C., Philadelphia, Pa. Feeding-mechanism for sewing-machines.....	Feb. 4, 1873	176	55	3	141
144, 284	Parham, S. P., New York, N. Y. Composition for purifying illuminating-gas.....	Nov. 4, 1873	94	.....	4	486
141, 288	Parish, J. W., McFarland's, Va. Machine for dressing millstones.....	July 29, 1873	886	291	4	116
139, 076	Park, A. R., Columbia, Tex. Turning-lathe for wood.....	May 20, 1873	558	175	3	566
144, 219	Park, C. (See Hazeltine & Park.) Park, F., Deerfield, Mass., assignor to self, H. A. Axtell, and F. B. Kervan. Hammock-support.....	Nov. 4, 1873	44	13	4	481

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'e.	Vol.	Page.
137, 565	Park, J. B., North Platte, Nebr. Windmill.....	Apr. 8, 1873	266	82	3	390
138, 924	Park, J. E., La Vergne, Tenn. Manufacture of cement.....	May 13, 1873	412	.....	3	541
5, 579	Park, J. K., Marlborough, N. Y., assignor by means assignment to the American Basket Company, New Britain, Conn. Fruit-basket..... (Reissue.)	Sept. 23, 1873	782	269	4	338
136, 856	Park, L., Brady, Pa. Window-blind.....	Mar. 18, 1873	462	153	3	301
134, 766	Park, W., Norwich, Conn. Mechanical movement.....	Jan. 14, 1873	254	83	3	41
142, 174	Parke, I., Mineral Point, Mo. Automatic fire-escape for safes.....	Aug. 26, 1873	714	236	4	220
143, 635	Parke, I. S., Virginia City, Nev. Amalgamating-pan.....	Oct. 14, 1873	218	73	4	407
	Parker and Whipple Company. (See Jennings, C. S., assignor.)					
	Parker, C. (See Bishop, J., assignor.)					
	Same..... (See Dorsett, F., sr., assignor.)					
	Same..... (See Fosket, W., assignor.)					
	Same..... (See Gaines, L. J., assignor.)					
	Same..... (See McGraw, G. V., assignor.)					
	Same..... (See Parker, J., assignor.)					
	Same..... (See Porter, H. K. and T. W., assignors)..... (Reissue.)					
	Same..... (See Raub, J. L., assignor.)					
138, 813	Parker, C., Wenona, Ill. Fire-proof roofing.....	May 13, 1873	319	98	3	534
145, 231	Parker, C. C., Kildville, Mo. Lubricating device for vehicle-axles.....	Dec. 2, 1873	174	60	4	599
	Parker, E. (See Spencer & Parker.)					
135, 147	Parker, E., assignor to the Russell and Erwin Manufacturing Company, New Britain, Conn. Knob-latch.....	Jan. 21, 1873	597	.....	3	83
139, 077	Parker, E., New Britain, Conn. Wire mattress.....	May 20, 1873	560	175	3	566
142, 730	Parker, E., Chambersburgh, Pa. Drawing-knife.....	Sept. 9, 1873	353	119	4	282
138, 686	Parker, E. A., West Meriden, Conn. Ice-pitcher.....	May 6, 1873	194	81	3	513
137, 091	Parker, F. A., Gardner, Mass. Tilting-chair.....	Mar. 25, 1873	675	224	3	329
144, 697	Parker, G., Poughkeepsie, N. Y. Middlings-purifier.....	Nov. 18, 1873	459	155	4	538
140, 726	Parker, G. C., Worcester, Mass. Mode of siding boot-legs.....	July 8, 1873	339	115	4	47
145, 589	Same..... Boot.....	Dec. 16, 1873	502	165	4	650
140, 069	Parker, G. E., Newark, N. J., assignor to M. Slater, New York, N. Y. Musical wind-instrument.....	June 17, 1873	578	183	3	679
138, 522	Parker, G. W., Gardner, Mass. Speed-regulator.....	May 6, 1873	50	17	3	501
142, 580	Parker, G. W., assignor of one-half interest to C. L. Poorman, Bellaire, Ohio. Vegetable cutter.....	Sept. 9, 1873	239	78	4	273
145, 748	Parker, H., Gananoque, Canada. Device for forming cores.....	Dec. 23, 1873	650	213	4	674
141, 813	Parker, J., Pontiac, assignor of one-half interest to J. A. Hubbs, Cato, Mich. Draft-equalizer.....	Aug. 12, 1873	369	121	4	173
144, 126	Parker, J., assignor to C. Parker, Meriden, Conn. Shutter-fastening.....	Oct. 28, 1873	689	228	4	465
144, 746	Parker, J., Pontiac, assignor of one-half interest to J. A. Hubbs, Cato, Michigan. Whiffle-tree.....	Nov. 18, 1873	531	181	4	544
5, 296	Parker, J., and I. Cook, San Francisco, Cal., said Parker assignor of one-half interest to S. P. Taylor. Hydraulic telescopic-platform elevator..... (Reissue.)	Feb. 25, 1873	892	287	3	235
	Parker, J. F. (See Omensetter & Parker.)					
137, 795	Parker, L., Davenport, Iowa. Rotary steam-engine.....	Apr. 15, 1873	479	150	3	420
	Parker, O. M. (See West & Parker.)					
134, 701	Parker, R. M. C., Memphis, Tenn. Car-frame.....	Jan. 7, 1873	190	62	3	22
138, 097	Parker, R. R., Indianapolis, Ind. Neck-tie.....	Apr. 22, 1873	758	241	3	452
	Parker, W., et al. (See Rodier & Bates, assignors.)					
142, 268	Parker, W., assignor of one-half interest to A. Corse, Rolla, Mo. Washing-machine.....	Aug. 26, 1873	792	261	4	226
140, 532	Parker, W. F., Meriden, Conn. Pigeon-trap.....	July 1, 1873	162	55	4	21
135, 726	Parker, W. T., Verona, Miss. Cultivator.....	Feb. 11, 1873	315	100	3	164
139, 021	Parker, W. W., Minneapolis, Minn. Folding-seat.....	May 20, 1873	505	159	3	562
	Parker, White & Co. (See White, H. K., assignor.)					
137, 384	Parkhurst, A. G., Appleton, Wis. Machine for cutting hoops.....	Apr. 1, 1873	92	30	3	364
143, 298	Parkhurst, D. L., San Francisco, Cal. Mechanical key and sounder for telegraphs.....	Sept. 30, 1873	857	293	4	360
139, 022	Parkhurst, J. H., Saint Louis, Mo. Thill-coupling.....	May 20, 1873	506	159	3	562
145, 679	Parkinson, J. C., Vineland, N. J. Medical inhaler.....	Dec. 16, 1873	578	190	4	656
6, 664	Parke, J. W., assignor to T. Dolan & Co., Philadelphia, Pa. Stocking fabric. (Design).....	May 20, 1873	.....	.....	3	585
144, 127	Parkman, H., Philadelphia, Pa. Hoe.....	Oct. 28, 1873	690	229	4	465
138, 759	Parlow, D., Philadelphia, Pa. Medical compound or blood-purifier.....	May 13, 1873	272	.....	3	529
145, 232	Parmelee, H. C., and S. M. Johns, assignors of one-third interest to C. D. Everett, Cleveland, Ohio. Spark-arrester.....	Dec. 2, 1873	175	60	4	599
	Parmelee, A. A. (See Parmelee, W. J., assignor.)					
146, 092	Parmelee, D. D., New York, assignor to C. Runyon, Yonkers, and F. Robinson, New York, N. Y. Working scrap-iron or other metals into ingots.....	Dec. 30, 1873	971	314	4	710
143, 377	Parmelee, L., assignor to self and M. Hine, New Haven, Conn. Drill-chuck.....	Sept. 30, 1873	930	315	4	366
144, 128	Same..... Chuck.....	Oct. 28, 1873	690	229	4	465
137, 475	Parmelee, W. J., assignor to A. A. Parmelee, Fort Plain, N. Y. Manufacture of carriage axle-boxes.....	Apr. 1, 1873	177	56	3	371
	Parmenter, Z., et al. (See Howard, A. F., assignor.)					
140, 432	Parmentier, E., Clifton, Ill. Corn-planter.....	July 1, 1873	74	26	4	14
145, 965	Parmiter, B., and W. Bradley, Morgan County, Ohio. Vehicle.....	Dec. 30, 1873	862	280	4	701
135, 007	Parr, F. C. G., Carter's Creek Station, Tenn. Sawing-machine.....	Jan. 21, 1873	481	154	3	74
135, 357	Parr, S. E., Smithville, Ill. Gang-plow.....	Jan. 28, 1873	806	260	3	112
135, 286	Parry, J., Manchester, Great Britain. Furniture-oaster.....	Jan. 26, 1873	742	239	3	107
137, 953	Parsell, D., Saundersfoot, Wales. Steam-generator.....	Apr. 15, 1873	610	192	3	431
143, 779	Parsons, N. J., Cortland, N. Y. Washing-machine.....	Oct. 21, 1873	373	123	4	429
142, 721	Parsons, W., assignor of one-half interest to W. B. Brown, Palmyra, N. Y. Buckle.....	Sept. 9, 1873	353	119	4	282
136, 454	Same..... Check-loop for harness.....	Mar. 4, 1873	86	29	3	252
142, 409	Parsons, W. W., Stanstead, Canada. Fire-escape ladder.....	Sept. 2, 1873	78	25	4	348
146, 017	Same..... Saw-filing machine.....	Dec. 30, 1873	906	293	4	705
135, 358	Partello, C., Watertown, N. Y. Saah-holder.....	Jan. 28, 1873	807	260	3	112
141, 289	Partridge, A., Springfield, Mass. Wrench.....	July 29, 1873	857	291	4	116
	Partridge, A. H. (See Balcom, H., assignor.)					
135, 440	Partridge, B. F., Syracuse, N. Y. Cupboard and extension-table combined.....	Feb. 4, 1873	44	13	3	131
139, 078	Partz, A. F. W., Oakland, Cal. Manufacture of sugar.....	May 20, 1873	560	.....	3	566
	Parvis, A. (See Davidson & Parvis.)					
142, 348	Passé, E., Fort Wayne, Ind. Universal joiner.....	Sept. 2, 1873	23	8, 9	4	244
	Passoz, A. L. (See Wilkinson, Passoz, Lafague & Dutrich.)					
135, 245	Pasteur, L., Paris, France. Brewing beer and ale.....	Jan. 28, 1873	710	227	3	105
141, 072	Same..... Manufacture of beer and yeast.....	July 22, 1873	671	225	4	91
	Patchen, R. M. (See Colvin & Patchen.)					
139, 732	Paterson, G., Waynesborough, Ga. Cotton-planter.....	June 10, 1873	270	86	3	647
	Faton, T. C. M. (See Root, J. B., assignor.)..... (Reissue.)					
136, 260	Patric, C. E., Springfield, Ohio. Grain-drill.....	Feb. 25, 1873	804	261	3	223

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
138, 814	Patric, J. S., Rochester, N. Y. Machine for making laminated pipe for gas, water, &c.	May 13, 1873	320	99	3	534
139, 970	Patrick, W. W., Midway, S. C. Cotton-press	June 17, 1873	489	154	3	671
135, 148	Pattee, H. H., et al. (See Pattee, J. H., assignor.)					
5, 303	Pattee, J. H., assignor to self, H. H. Pattee, and I. P. Pillsbury, Monmouth, Ill. Cultivator.	Jan. 21, 1873	598		3	83
134, 610	Pattee, L. C., Lebanon, N. H. Circular-saw mill (Reissue)	Mar. 4, 1873	204	68	3	261
135, 267	Patten, G. M., Auburn, N. Y. Adjustable grain-wheel for harvester-platforms	Jan. 7, 1873	104	34	3	15
140, 382	Patten, T. B., West Amesbury, Mass. Carriage	Jan. 28, 1873	742	239	3	107
146, 018	Patterson, A. J., Genesee, assignor of one-half interest to E. W. Osborne, Rochester, N. Y. Thill-coupling	July 1, 1873	40	13	4	11
137, 385	Patterson, C., Philadelphia, Pa. Valvular stopper for bottles	Dec. 30, 1873	907	294	4	705
144, 129	Patterson, E. C., Rochester, N. Y. Box	Apr. 1, 1873	93	30	3	364
	Same. Cigar-box	Oct. 28, 1873	691	229	4	465
	Patterson, J. (See Lippincott & Patterson.)					
	Same (Design)					
137, 620	Patterson, J., assignor to C. Lippincott & Co., Philadelphia, Pa. Draft-faucet for soda-water apparatus	Apr. 8, 1873	311	97	3	394
141, 785	Patterson, J., Belfast, Ireland. Machinery for beetling woven fabrics	Aug. 12, 1873	267	94	4	166
145, 333	Patterson, J., jr., Bangor, Me. Bridle-blind	Dec. 2, 1873	175	60	4	509
	Patterson, J. M., et al. (See Hettinger, A., assignor.)					
145, 444	Patterson, L., assignor to self and J. Cooper, Parker City, Pa. Brick-machine	Dec. 9, 1873	361	121	4	626
135, 149	Patterson, N. A., Athens, assignor to self, M. F. and L. N. Miller, Rheatown, Tenn. Screw-propeller	Jan. 21, 1873	599	195	3	83
142, 269	Patterson, N. A., Cleveland, Tenn. Screw-propeller	Aug. 26, 1873	793	261 262	4	226
143, 710	Patterson, R. and S., Newcastle-upon-Tyne, England. Grinding-mill	Oct. 14, 1873	393	96	4	412
137, 713	Patterson, R. H., Hammersmith, England. Manufacture of gas	Apr. 8, 1873	397		3	401
	Patterson, S. (See Patterson, R. and S.)					
142, 270	Patterson, S. B., assignor to Phillipsburgh Stove Works, Phillipsburgh, N. J. Heating-stove	Aug. 26, 1873	794	262	4	226
	Patterson, W. (See Planck, J., assignor.)					
140, 788	Patterson, W., Oneonta, N. Y. Stove-pipe shelf	July 15, 1873	397	136	4	60
	Patterson, W. L., et al. (See Wynn, U., assignor.)					
138, 343	Patterson, W. R., Chicago, Ill. Lubricator for steam-engines	Apr. 29, 1873	1,702	315	3	490
138, 687	Patterson, W. W., Crawford Springs, Va. Self-waiting table	May 6, 1873	195	69	3	513
142, 864	Pattison, R. M., Cartersville, Ga. Reversible plow-point	Sept. 16, 1873	484	165	4	304
145, 008	Pattison, G. C., Baltimore, Md. Fog-signal	Nov. 25, 1873	798	245	4	572
	Pattison, J. (See Thompson & Pattison.)					
140, 433	Pattison, J. E., New Orleans, La. Street-railway switch	July 1, 1873	75	27	4	14
139, 605	Patton, J. D., Trevorton, Pa. Gas-retort	June 3, 1873	140	46	3	620
138, 181	Patton, S., Chataworth, Ill. Corn-harvester	Apr. 22, 1873	658	263	3	458
142, 271	Patton, W. H., Oakland, Cal. Rotating blanket-slucies for washing ore	Aug. 26, 1873	795	262	4	226
	Paul, A. (See Jordan & Paul.)					
135, 008	Paul, A., assignor of one-half interest to Campbell & Clute, Cohoes, N. Y. Self-acting spinning-mule	Jan. 21, 1873	482	155	3	74
137, 386	Paul, A., Cohoes, N. Y. Self-acting spinning-jack	Apr. 1, 1873	93	31	3	364
	Paul, E. B., et al. (See Gray, L. N. B., assignor.)					
137, 476	Paul, F. J., Cincinnati, Ohio. Hydrant	Apr. 1, 1873	177	56	3	372
140, 639	Paul, J. A., assignor of one-half interest to A. B. Brumbaugh, Huntingdon, Pa. Mail-bag fastening	July 8, 1873	270	91	4	42
145, 194	Paul, P. P., Brooklyn, N. Y. Shoe-last	Dec. 2, 1873	79	25	4	521
140, 533	Paul, A. W., Wheeling, W. Va. Process of preparing wall-paper	July 1, 1873	163		4	21
141, 588	Pavonarius, S., and C. U. Mittle, Philadelphia, Pa. Fish-trap	Aug. 5, 1873	152	49	4	147
145, 749	Pawlewski, F., and J. Schulz, Milwaukee, Wis. Medical compound or eye-wash	Dec. 23, 1873	650		4	674
139, 419	Payn, B., Albany, N. Y. Coloring and curing tobacco-stems (Extension)	Jan. 18, 1873			3	37
139, 490	Payne, J. A., New Orleans, La. Desk and book-case	May 27, 1873	820	282	3	600
143, 636	Same. Combined trunk and wardrobe	May 27, 1873	881	283	3	600
	Payne, J. H., Roseville, Minn. Car-coupling	Oct. 14, 1873	218	74	4	407
	Payne, J. M. (See Mayfield & Payne.)					
144, 861	Payne, S. F., assignor to Gaylord Manufacturing Company, Chicopee, Mass. Register for machinery	Nov. 25, 1873	611	208	4	561
138, 688	Payne, S. J., Charlton, England. Plastic compound for furnace-lining, retorts, &c.	May 6, 1873	196		3	513
142, 938	Payne, W. H., and H. Imhof, Lockport, N. Y. Clamp	Sept. 16, 1873	549	186	4	309
143, 181	Payne, W. L., assignor of one-half interest to J. G. Searle, Topeka, Kans. Well-auger	Sept. 23, 1873	747	258	4	345
135, 935	Paynter, N. W., Baltimore, Md. Siphon	Feb. 16, 1873	511	166	3	193
	Payson, C. B. (See Beckett, J. R., assignor.)					
140, 534	Payson, J. G., Foxborough, Mass. Dumping-car	July 1, 1873	163	55	4	21
138, 182	Paysant, G., Chicago, Ill. Table-leaf support	Apr. 22, 1873	632	264	3	458
	Peabody, D. (See Carey, A. C., assignor.)					
137, 714	Peabody, D., et al. (See Carey, A. C., assignor.)					
135, 288	Peabody, G. H., Brooklyn, N. Y. Portable window platform	Apr. 8, 1873	400	193	3	401
	Peabody, J., Bangor, Me. Mechanical movements for converting oscillating into rotary motion	Jan. 28, 1873	743	239	3	107
141, 234	Peace, J., Merchantville, and W. P. Cox, Camden, N. J. Screw-cutting machine	July 29, 1873	839	273	4	112
135, 150	Pearce, J., assignor to M. Stevens, Brooklyn, N. Y. Machine for bending sheet-metal	Jan. 21, 1873	600	195	3	83
138, 183	Peard, J., New York, N. Y. Seat	Apr. 22, 1873	832	264	3	458
143, 840	Pearl, J., Lawrenceville, N. Y. Milk-cooler	Oct. 21, 1873	425	142	4	433
141, 073	Pearl, J. C., Mendota, Ill. Wheel-plow	July 22, 1873	673	225	4	91
138, 431	Pearsall, H. W., Emporia, Kans. Table	Apr. 29, 1873	1,079	341	3	426
138, 184	Pearse, J. B., Swatara Township, Pa. Cupola furnace	Apr. 22, 1873	833	264	3	458
142, 722	Pearson, J., Sacramento, Cal. Water-filter	Sept. 9, 1873	354	119 120	4	262
	Pearson, S. (See Sluuser & Pearson) (Design)					
5, 604	Pearson, S., Cincinnati, Ohio, assignor to E. G. Gory. Bed-bottom (Reissue)	Oct. 14, 1873	322	109	4	415
143, 711	Pearsons, G. W., Odgensburgh, N. Y. Stand-pipe for water-works	Oct. 14, 1873	294	96	4	412
138, 344	Peartree, P., assignor to J. Ames, Lansingburgh, N. Y. Machine for driving brush-handles	Apr. 29, 1873	1,003	316	3	420
142, 410	Pease, F. B., Ontario Center, N. Y. Anger-handle	Sept. 2, 1873	78	26	4	248
140, 070	Pease, H., Dayton, Ohio. Steam-generator	June 17, 1873	579	183	3	679
145, 750	Pease, J., assignor to self, W. O. Bell, and S. Tryon, Westfield, Mass. Weather-guard	Dec. 23, 1873	651	213	4	674
138, 185	Pease, J. A., Boston, Mass. Lamp	Apr. 22, 1873	836	264	3	458
138, 925	Same. Candle-lamp	May 13, 1873	419	129	3	541
144, 130	Same. Lamp	Oct. 28, 1873	692	229	4	465
	Pease, S. W. (See Benjamin, E., assignor.)					
	Peaslee, B. E., et al. (See Young, C. H., assignor.)					
	Peaslee, H. A., et al. (See McIntyre, T. K., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
136, 859	Peaslee, T. J., Boston, Mass. Attachment for sewing-machines	Mar. 18, 1873	462	153	3	301
144, 131	Peatfield, S., Ipswich, Mass. Nut-lock	Oct. 28, 1873	693	230	4	465
145, 896	Peavey, A. J., and F. B. Cotton, Boston, Mass., said Peavey assignor to said Cotton. Device for holding and carrying pipe-fitting chucks	Dec. 23, 1873	777	254	4	684
135, 441	Peavey, H., assignor of one-half interest to M. Schwartz, Bangor, Me. Shingle-machine	Feb. 4, 1873	45	14	3	131
142, 723	Peck, C., assignor to M. and C. Peck, New Haven, Conn. Drop-hammer lifter	Sept. 9, 1873	355	180	4	282
137, 477	Peck, C. O., Pittsfield, Mass. Refrigerator	Apr. 1, 1873	178	56	3	372
145, 307	Peck, C. O., Pittsfield, Mass., assignor to W. Lester, South Hadley, Mass. Corpse-preserver	Dec. 9, 1873	245	82	4	617
143, 780	Peck, G. E., Du Quoin, Ill. Card and ticket printing-press	Oct. 21, 1873	373	123 124	4	429
	Peck, J. C. (See Teachout, S. T., assignor.)					
	Peck, M. (See Peck, C., assignor.)					
	Peck, Stow & Wilcox Company. (See Smith, H., assignor.)					
138, 186	Peck, W., assignor to D. S. Penfield, Rockford, Ill. Windmill	Apr. 22, 1873	837	265	3	458
139, 518	Peck, W., and H. C. Richman, Lombard, Ill. Railway-tie	June 3, 1873	64	22	3	614
141, 377	Peck, W. I., Carthage, N. Y. Carriage-top	July 29, 1873	976	317	4	123
140, 158	Peckham, E., Antwerp, N. Y. Apparatus for treating ore and manufacturing iron and steel	June 24, 1873	675	212	3	695
143, 637	Same. Manufacture of iron and steel	Oct. 14, 1873	219		4	407
	Peckham, J. (See Otis, E., assignor.)					
141, 515	Peckham, W., Middletown, R. I. Railway-rail	Aug. 5, 1873	93	29	4	142
6, 692	Peckover, J., Cincinnati, Ohio. Cooking-stove (Design)	May 27, 1873			3	586
141, 663	Pedden, T., Middletown, Conn. Bobbin-winder for sewing-machines	Aug. 12, 1873	239	75	4	162
	Pedder, J. (See Bolton & Pedder.)					
127, 621	Pedder, J. and G. Abel, Pittsburgh, Pa. Manufacture of iron and steel	Apr. 8, 1873	312	97	3	394
	Pedrick, R. C. (See Stanton & Pedrick.)					
144, 629	Pedrick, W. H., Richmond, Ind. Cotton-harvester	Nov. 18, 1873	401	134	4	534
141, 166	Peck, D. T., New York, N. Y. Brake for preventing retrograde movement in sewing and other machinery	July 22, 1873	760	250	4	98
143, 378	Peel, L. G., Hazlehurst, Miss. Vehicle-wheel	Sept. 30, 1873	931	315	4	366
142, 646	Peer, J. A., Grasa Valley, Cal. Ore-concentrator	Sept. 9, 1873	291	96	4	277
142, 647	Same. Ore-washer	Sept. 9, 1873	292	96	4	277
138, 276	Peet, S. J., assignor to the Peet Valve Company, Boston, Mass. Apparatus for separating metals	Apr. 29, 1873	942	297	3	475
138, 277	Same. Screw and nut	Apr. 29, 1873	943	298	3	475
138, 278	Same. Screw-rod	Apr. 29, 1873	944	298	3	475
	Peet Valve Company. (See Peet, S. J., assignor.)					
	Pegram, W. M. (See Browne & Pegram.)					
136, 860	Peirce, C. E., Centreville, Mich. Potato and peanut digger	Mar. 18, 1873	463	154	3	301
144, 630	Peirce, H. L., Taunton, Mass. Process of repairing spinning-rings	Nov. 18, 1873	402	135	4	534
136, 861	Pelham, A., assignor to self and R. Haines, Plymouth, Mich. Door-bolt	Mar. 18, 1873	463	154	3	301
141, 378	Pelham, A., assignor to self, L. C. Hall, and S. H. Fairman, Plymouth, Mich. Fire-escape	July 29, 1873	977	317	4	123
5, 339	Pelham, I., Elmira, N. Y., assignor to E. Andrews. Attaching handles to cross-cut saws. (Reissue)	Mar. 25, 1873	850	278	3	343
136, 862	Pelletier, A., Washington, D. C. Composition for artificial stone, tiles, pavements, &c.	Mar. 18, 1873	464		3	301
141, 290	Peloubet, E. W., Newark, N. J. Car-coupling	July 29, 1873	889	291	4	116
144, 787	Pelton, J. B., Mount Pleasant, Md. Car-brake	Nov. 18, 1873	532	181	4	545
136, 538	Peltz, E., New York, N. Y. Neck-tie supporter	Mar. 4, 1873	169	54	3	259
139, 914	Pember, J. R., Randolph, Vt. Type-writing machine	June 17, 1873	447	139	3	668
	Pemberton, E. L., et al. (See Underwood, J. B., assignor.)					
138, 576	Pendell, J. R., Dryden, N. Y. Wash-boiler	May 6, 1873	98	31	3	505
137, 860	Pender, D. O., Palmyra, Mich. Car-coupling	Apr. 15, 1873	535	166	3	425
	Pendergraft, M., et al. (See Siner, J. B., assignor.)					
135, 580	Penfield, C., New Britain, Conn. Bed-bottom	Feb. 4, 1873	178	56	3	141
143, 996	Penfield, C. W., New Britain, assignor to J. P. Connell, Kensington, Conn. Door-gung	Oct. 28, 1873	581	193	4	456
	Penfield, D. S. (See Peck, W., assignor.)					
138, 689	Penfield, F. C., West Meriden, Conn. Printing-press	May 6, 1873	197	62	3	513
136, 176	Pengelly, T. N., Detroit, Mich. Car-coupling	Feb. 25, 1873	736	297	3	223
144, 562	Pennington, A., jr., Brenham, Tex. Cotton and corn planter	Nov. 11, 1873	337	114	4	517
142, 581	Penisten, G., sr., Buchanan, assignor to J. M. Penisten, Schooley's Station, Ohio. Revolving horse-rake	Sept. 9, 1873	240	78	4	273
	Penisten, J. M. (See Penisten, G., sr., assignor.)					
144, 563	Penley, S. H., Chelsea, Mass. Rattan-ware	Nov. 11, 1873	338	114	4	517
137, 954	Penn, M. A., Washington, D. C. Clasp for harness	Apr. 15, 1873	612	193	3	431
139, 809	Penn, P., Cleveland, Ohio. Spring for vehicles	June 10, 1873	347	107	3	652
143, 379	Pennepacker, J., Philadelphia, Pa. Portable burglar alarm	Sept. 30, 1873	932	316	4	366
138, 815	Penny, I. L., Minneapolis, Minn. Lock-cutting machine	May 13, 1873	321	99	3	534
138, 577	Penniston, G. W., North Vernon, Ind. Loading railway flat-cars	May 6, 1873	98	31	3	506
136, 004	Pennock, A. J., and T. A. Chandler, Rockford, Ill. Device for cutting pipe, &c.	Feb. 18, 1873	568	187 188	3	198
145, 234	Pennock, J. L., Coatesville, Pa. Crane	Dec. 2, 1873	176	61	4	599
137, 092	Pennock, S., Kennett's Square, Pa. Power-hammer	Mar. 25, 1873	675	224	3	329
145, 897	Pentlarge, R., Brooklyn, N. Y. Making bungs for casks, &c.	Dec. 23, 1873	779	255	4	684
137, 566	Percy, E. R., Lawrence, Kans. Fire-proof and water-proof roofing	Apr. 8, 1873	267		3	390
141, 074	Same. Water-wheel	July 22, 1873	674	226	4	91
145, 524	Pereau, W. E., Oakland, Cal. Bit-brace	Dec. 16, 1873	447	146	4	645
	Peregov, N. W. (See Gorman & Peregov.)					
143, 380	Perez, F., Havana, Cuba. Cultivator	Sept. 30, 1873	933	316	4	366
	Perez, J. B. (See Carbonel, M., assignor.)					
138, 690	Perkins, C. E., Malone, N. Y. Piaton-packing	May 6, 1873	198	62	3	513
135, 151	Perkins, C. H., Providence, R. I. Band-pulley	Jan. 21, 1873	600	195	3	83
138, 578	Same. Traction-wheel	May 6, 1873	99	32	3	506
143, 781	Perkins, C. H., assignor to The Rhode Island Horseshoe Company, Providence, R. I. Horseshoe-machine	Oct. 21, 1873	374	124	4	429
143, 782	Same. Same	Oct. 21, 1873	375	124	4	429
144, 631	Perkins, C. H., Providence, R. I. Rolling-mill	Nov. 18, 1873	402	135	4	534
144, 632	Same. Guide for rolling-mills	Nov. 18, 1873	403	135	4	534
144, 633	Same. Guide for rolling-mills	Nov. 18, 1873	404	136	4	534
141, 946	Perkins, E. L., J. H. Moulton, and C. E. Sawyer, Boston, Mass. Steam-trap	Aug. 19, 1873	496	164	4	192
	Perkins, F. (See Barry & Perkins.)					
145, 898	Perkins, G. H., assignor to self and Atlantic Refining Company, Philadelphia, Pa. Oil-can nozzle	Dec. 23, 1873	780	255	4	684
137, 478	Perkins, H. H., Osceola, Ill. Cultivator	Apr. 1, 1873	179	57	3	372
138, 579	Perkins, J., Danielsonville, Conn. Window	May 6, 1873	100	32	3	506

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
143, 028	Perkins, L., London, England. Traction-engine.....	Sept. 23, 1873	629	{ 214 215	{ 4	326
145, 525	Same..... Locomotive, portable, and other steam engines.....	Dec. 16, 1873	448	{ 146 147	{ 4	645
141, 291	Perkins, M. R., Portsmouth, N. H. Burglar-alarm.....	July 29, 1873	889	291	4	116
144, 950	Same..... Steering-apparatus.....	Nov. 4, 1873	45	13	4	482
144, 921	Same..... Railway-rail.....	Nov. 4, 1873	45	13	4	482
144, 222	Same..... Door-check.....	Nov. 4, 1873	46	14	4	482
144, 132	Perkins, O. N., assignor to E. Miller & Co., Meriden, Conn. Lamp.....	Oct. 28, 1873	693	230	4	495
138, 926	Perkins, R. B., Almond, N. Y. Shank-laster.....	May 13, 1873	414	129	3	542
6, 491	Perkins, R. W., West Meriden, assignor to self and J. H. Holmes, Wallingford, Conn. Work-holder..... (Design).	Mar. 11, 1873	.	.	3	272
138, 691	Same..... same.....	May 6, 1873	198	62	3	513
143, 586	Perkins, S. R., assignor to self and T. J. Harrison, Greenville, Mich. Separator for thrashing-machines.....	Oct. 14, 1873	177	60	4	403
135, 359	Perkins, T. G., Chicago, Ill. Raffle for sewing-machines.....	Jan. 28, 1873	508	261	3	112
6, 876	Perkins, W. H., assignor to E. Miller & Co., Meriden, Conn. Lamp-stand..... (Design).	Sept. 9, 1873	.	.	4	270
140, 071	Perrin, A., Marine City, Mich. Adjustable templet for ships' frames.....	June 17, 1873	579	183	3	679
141, 814	Perrin, C. H., New York, assignor to S. E. Tompkins, Sing Sing, N. Y. Check-rein retainer.....	Aug. 12, 1873	370	121	4	173
137, 861	Perrin, D., McGregor, Iowa. Cutter for tonguing and grooving lumber.....	Apr. 15, 1873	535	167	3	425
141, 887	Perrin, E. W., Portland, Ore., assignor of one-half interest to W. E. Weldon, Solano County, Cal. Table-leaf support.....	Aug. 19, 1873	450	147	4	189
146, 019	Perrin, E. W., Portland, Ore. Wood pavement.....	Dec. 30, 1873	908	294	4	705
140, 159	Perrin, A. T., Charlestown, assignor to J. Hitchcock, trustee, Boston, Mass. Cutting-attachment for sewing-machines.....	June 24, 1873	677	213	3	695
	Perry, A. J. (See Wilson & Perry.)					
	Perry, B. F. (See Myers, W. H., assignor.)					
	Perry, F. W. (See Neuber & Perry.)					
138, 523	Perry, G., and J. Webb, Chicago, Ill. Metallurgic furnace.....	May 6, 1873	51	17	3	501
	Perry, J. G., Kingston, R. I. Meat-cutter..... (Extension).	Aug. 2, 1873	.	.	4	85
141, 075	Same..... Seat for harvesters, &c.....	July 22, 1873	675	226	4	91
142, 811	Same..... Harvester.....	Sept. 16, 1873	442	149	4	300
135, 581	Perry, J. R., Wilkesbarre, Pa. Reed-organ reed.....	Feb. 4, 1873	179	56	3	141
	Perry, J. S., trustee and executor. (See Easterly, J., assignor.)..... (Reissue.)					
134, 767	Perry, J. S., Albany, N. Y. Base-burning fire-place heater.....	Jan. 14, 1873	255	83, 84	3	41
	Perry, N. B. (See Easterly, J., assignor.)..... (Reissue.)					
136, 539	Perry, S., Newport, N. Y. Combined rake and tedder.....	Mar. 4, 1873	170	54	3	259
	Perry, W. (See Evans & Perry.)					
137, 236	Perry, W. G., Manchester, N. H. Spindle for spinning-machines.....	Mar. 25, 1873	805	265	3	339
145, 009	Same..... same.....	Nov. 25, 1873	729	246	4	572
137, 955	Perry, W. L., and A. J. Mathews, Hartwell, Ga. Felly.....	Apr. 15, 1873	613	193	3	431
138, 279	Pert, L. B., Tecumseh, Mich. Revolving book-case.....	Apr. 29, 1873	945	298	3	475
142, 724	Peteler, F., Bloomington, Minn. Dumping-platform.....	Sept. 9, 1873	355	120	4	282
135, 839	Peteler, L. H., New Brighton, N. Y. Railway-track.....	Feb. 11, 1873	418	136	3	172
	Peters, G. E. (See Peters, G. T. & G. E.)					
138, 692	Peters, G. T. & G. E., Jersey City, N. J. Bath-tub for bird-cages.....	May 6, 1873	199	63	3	513
138, 280	Peters, H., Penn Township, Pa. Lever cider-press.....	Apr. 29, 1873	945	298	3	476
	Peters, H. C. (See Miller, F. C., assignor.)					
137, 862	Peters, H. J., Quebec, Canada. Wheelbarrow dumping-car.....	Apr. 15, 1873	536	167	3	425
	Peters, J. W. C. (See Whittlesey & Peters.)					
140, 160	Peters, J. W. C., Chicago, Ill. Woven-wire fabric.....	June 24, 1873	678	213	3	695
	Peters, T. J. (See Smith, J. E., assignor.)					
140, 072	Petersen, C. J. C., Port Chester, N. Y. Can-opener.....	June 17, 1873	580	184	3	679
136, 456	Petersen, N., and R. Roesser, Memphis, Tenn. Mosquito-net frame.....	Mar. 4, 1873	87	30	3	252
140, 589	Petersen, T. E., Copenhagen, Denmark. Compound for preventing incrustation in steam-boilers.....	July 8, 1873	227	.	4	38
	Peterson, C. J. (See Shipp, Peterson & McLurd.)					
136, 455	Peterson, C. J., Brevard Station, N. C. Machine for upsetting tires.....	Mar. 4, 1873	86	30	3	252
142, 648	Peterson, J. G., Morgantown, N. C. Printing-press.....	Sept. 9, 1873	293	96	4	277
135, 663	Pettee, F. W., assignor of one-half interest to W. P. Welch and A. Chipman, Boston, Mass. Metallic packing for piston-rods, &c..... (Extension).	Feb. 11, 1873	262	82	3	160
	Pettee, S. E., Bethlehem, Pa. Envelope.....	Mar. 22, 1873	.	.	3	297
137, 567	Pettengill, C. B., Hebron, assignor of one-half interest to F. C. Merrill, South Paris, Me. Barrel-header.....	Apr. 8, 1873	267	82, 83	3	390
139, 733	Pettengill, C. B., Hebron, Me. Sad-iron holder and lid lifter.....	June 10, 1873	277	86	3	647
	Pettengill, D. (See Sturges, G., assignor.)					
	Same..... (See Sturges, G. A., assignor.)					
	Petter, G. W., et al. (See Dawson, A. & H. T., assignors.)					
	Pettie, J. G. (See Culver, J. C., assignor.)					
136, 177	Pettit, H., assignor of one-half interest to J. M. Wilson, Philadelphia, Pa. Bridge.....	Feb. 25, 1873	737	237	3	224
140, 383	Pevey, A., Portland, Me. Process for preparing iron chips, &c., for remelting.....	July 1, 1873	41	13	4	11
140, 948	Pevey, C. K., Worcester, Mass. Coverlet.....	July 15, 1873	547	183	4	72
143, 248	Same..... Walking-cane.....	Sept. 30, 1873	814	279	4	357
139, 187	Pfau, J. L., jr., Quincy, Ill. Cooking-range.....	May 26, 1873	661	207	3	574
143, 927	Pfefferkorn, C. L. F., and W. Aust, Manchester, N. H. Loom-shuttle.....	Oct. 21, 1873	495	167	4	439
	Pfisterer, P. D. (See Connor & Pfisterer.)					
143, 462	Pfeeger, G., Deerfield, N. Y. Fire-escape ladder.....	Oct. 7, 1873	55	19	4	385
138, 261	Pflock, A. H., Philadelphia, Pa. Apparatus for packing snuff.....	Apr. 29, 1873	946	299	3	476
135, 582	Pfund, A., New York, N. Y. Compound for hydraulic cement.....	Feb. 4, 1873	179	.	3	141
140, 073	Same..... Beer-cooler.....	June 17, 1873	581	184	3	679
144, 133	Same..... Ice-elevating track.....	Oct. 29, 1873	694	230	4	465
144, 355	Same..... Hot-air furnace.....	Nov. 4, 1873	153	51	4	491
135, 583	Pharo, E. A., Philadelphia, Pa. Packing-case.....	Feb. 4, 1873	180	56	3	141
136, 178	Phelan, G. E., New York, N. Y. Billiard-table cushion.....	Feb. 25, 1873	738	237	3	223
	Phelan, J. (See Keech, L. P., assignor.)					
	Phelps, A. M., et al. (See Arey, R., assignor.)					
143, 712	Phelps, E. W., Elizabeth, N. J. Saw-sharpening machine.....	Oct. 14, 1873	294	96	4	412
	Phelps, G. M., Brooklyn, N. Y. Telegraphic machine..... (Extension).	Nov. 1, 1873	.	.	4	452
141, 076	Same..... Printing-telegraph.....	July 22, 1873	676	{ 226 227	{ 4	92
144, 285	Same..... same.....	Nov. 4, 1873	94	31, 32	4	486
136, 261	Phelps, I. M., Chicago, Ill. Furnace for chloridizing ores.....	Feb. 25, 1873	806	261	3	218
145, 680	Phelps, I. M., Philadelphia, Pa. Refining iron and steel.....	Dec. 16, 1873	579	190	4	656

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136, 758	Phelps, J. M., assignor of one-half interest to J. Bartlett, Crogan Station, Pa. Car-coupling	Mar. 11, 1873	366	121	3	284
	Philadelphia Architectural Iron Company. (See Brand, C. F., assignor.)					
	Philadelphia Gas-Machine Company. (See Judd & Doty, assignors.)					
6, 983	Same. (See Judd & Pierson, assignors.)					
	Philbrook, J. W., West Roxbury, Mass. Glass bottle (Design)	Nov. 4, 1873			4	478
5, 304	Phillip, P., Stockport, N. Y. Method of operating windlasses (Extension)	July 12, 1873			4	35
133, 840	Phillip, P., Ghent, N. Y. Method of operating windlasses (Reissue)	Mar. 4, 1873	205	68	3	262
135, 841	Phillip, P., Stockport, N. Y. Corn-husker	Feb. 11, 1873	419	136	3	172
142, 040	Same	Feb. 11, 1873	419	136	3	172
142, 175	Phillippi, A., Saint Louis, Mo. Grain-binder	Aug. 19, 1873	582	191	4	199
140, 161	Phillip, W. H., Brooklyn, N. Y. Revolving fire-arm	Aug. 26, 1873	715	236	4	220
133, 936	Phillipp, W. K. (See Sewell, G., assignor.)					
138, 282	Phillips, A. and A., Cleveland, Ohio. Screw-cutting machine	June 24, 1873	679	213	3	695
	Phillips, C. A., Chicago, Ill. Bosom-pad	Feb. 18, 1873	512	167	3	193
141, 167	Phillips, C. H., New York, and L. Reid, Brooklyn, N. Y. Medical compound called the milk of magnesia	Apr. 29, 1873	947		3	476
	Phillips, C. H., and L. Reid, assignors to C. H. Phillips, New York, N. Y. Making a hydrate of milk of magnesia	July 22, 1873	761		4	98
142, 411	Phillips, E. F. (See Reed & Phillips.)					
143, 249	Phillips, G., Biddeford, Me. Quilting frame	Sept. 2, 1873	79	26	4	949
5, 583	Phillips, G., Augusta, Me. Running-gear for wagons	Sept. 30, 1873	814	279	4	357
137, 479	Phillips, G. H., Troy, N. Y. Cooking stove (Reissue)	Sept. 30, 1873	950	321	4	368
140, 217	Phillips, H. F., assignor to Sheldon & Co., Auburn, N. Y. Carriage-axle lubricator	Apr. 1, 1873	180	57	3	372
	Phillips, H. S., assignor to self and R. Blair, Wilmington, Del. Shutter-worker	June 24, 1873	724	228	3	699
	Phillips, J. M. (See Long, P., assignor.)					
	Phillips, N. M. (See Marston & Phillips.)					
137, 480	Phillips, P. W., Salem, Mass. Curtain-fixture	Apr. 1, 1873	181	57	3	372
	Phillips, S. S. (See Frank, J. H., assignor.)					
144, 475	Phillips, T., and J. Golletz, Leavenworth, Kans. Drill for well-boring	Nov. 11, 1873	262	88	4	511
	Phillips, W. V. (See Clough, C. F., assignor.)					
144, 356	Phillipsburgh Stove Works. (See Patterson, S. B., assignor.)					
6, 637	Phippa, D. G., New Haven, Conn. Valve for water-pipes	Nov. 4, 1873	154	51	4	491
6, 638	Phippa, J., assignor to Landenberger, M., & Co., Philadelphia, Pa. Trimming (Design)	May 6, 1873			3	497
6, 696	Same	May 6, 1873			3	497
6, 710	Same. Nubia (Design)	June 3, 1873			3	608
139, 810	Same	June 17, 1873			3	663
144, 223	Same. Knit fringe or border	June 10, 1873	347	108	3	652
	Phipps, W. H., Poquonock, Conn. Door-securer	Nov. 4, 1873	46	14	4	462
	Pickard, A. C. (See Putnam, D., assignor.)					
	Pickard, J. (See Pickard, T. and J.)					
138, 816	Pickard, T. and J., said T. assignor to said J. Pickard, Minonk, Ill. Bolster-plate for wagons	May 13, 1873	321	99	3	534
144, 286	Pickering, E. C., Boston, Mass. Balances	Nov. 4, 1873	96	32	4	466
136, 616	Pickersgill, W. C., assignor to Providence Tool Company, Providence, R. I. Sewing-machine	Mar. 11, 1873	947	83	3	274
138, 187	Pickert, F., Concord, N. H. Reversible pinion for watches	Apr. 22, 1873	838	265	3	459
139, 398	Pickford, E., New Brunswick, N. J. Loom for weaving piled fabrics	May 27, 1873	796	254	3	563
144, 788	Picking, G. G., Kingsland, and W. Hopkins, Islington, assignors to selves and J. Hart and J. L. Sampson, London, England. Steam-cylinder and piston-valve	Nov. 18, 1873	532	181	4	545
136, 668	Piedra, M., Williamsburgh, N. Y. Paper-feeding machine	Mar. 11, 1873	292	98	3	276
	Pierce, A. (See Pierce, C., assignor.)					
	Pierce, B. S., New Bedford, Mass., and M. R. Pierce, Woodstock, N. Y. Machine for making drain-pipes (Extension)	Apr. 19, 1873			3	416
	Pierce, B. S., New Bedford, Mass., and M. R. Pierce, New York, N. Y. Manufacture of porous ware (Extension)	Dec. 27, 1873			4	671
141, 947	Pierce, C., assignor to self and A. Pierce, Portland, Mich. Mortar-mixer	Aug. 19, 1873	497	164	4	192
141, 664	Pierce, C. D., Lawrence, Kans. Earth-auger	Aug. 12, 1873	239	75	4	162
	Pierce, C. H., et al. (See Utley, R. G., assignor.)					
138, 188	Pierce, C. L., Natick, Mass. Hot-air furnace	Apr. 22, 1873	839	265	3	459
138, 189	Same	Apr. 22, 1873	840	265	3	459
143, 250	Same	Sept. 30, 1873	615	220	4	357
	Pierce, D., Washington, D. C., assignor to J. W. Willis. Sifter					
	Pierce, E., et al. (See Hammond, J. E., assignor.)					
	Pierce, E. N., et al. (See Hastings, G. S., assignor.)					
	Same. (See Hastings, G. S., jr., assignor.)					
142, 507	Pierce, E. P., Boston, Mass. Machine for skiving and feather-edging boot and shoe soles	Sept. 2, 1873	167	54	4	255
134, 818	Pierce, E. S., Hartford, and J. A. Ayres, Groton, assignors to National Screw Company, Hartford, Conn. Machine for slotting heads of screws	Jan. 14, 1873	302	97	3	44
134, 768	Pierce, G., Boston, Mass. Machine for pressing cigar-bunches	Jan. 14, 1873	256	84	3	41
141, 458	Pierce, J. D., Columbia, Mo. Iron bridge	Aug. 5, 1873	44	14	4	138
	Pierce, J. W. (See Townsend, W., assignor.)					
	Pierce, M. R. (See Pierce, B. S. and M. R.) (Extension)					
	Pierce, R. V. (See Paden, S. K., assignor.)					
	Pierson & Morehouse. (See Hallock, W. R., assignor.)					
	Pierson, C. H. (See Judd & Pierson.)					
136, 337	Pierson, D., J. W. Macy, and J. D. Moore, Grinnell, Iowa. Corn-planter	Feb. 25, 1873	872	281	3	233
143, 182	Pierson, J. S., Brooklyn, N. Y. Fire-escape ladder	Sept. 23, 1873	747	258	4	335
138, 580	Pigot, J., Brooklyn, N. Y. Self-closing stop-cock	May 6, 1873	100	32	3	506
138, 042	Piggott, J. J., Saint Louis, Mo. Bake-oven	Apr. 22, 1873	711	225	3	449
134, 925	Pike, D., assignor of one-half interest to C. Satterly, New Orleans, La. Sash-holder	Jan. 14, 1873	395	126	3	52
142, 508	Pike, D., and O. B. Graham, Bridgeport, Conn. Lamp-extinguisher	Sept. 2, 1873	168	54	4	255
	Pike, J. J. (See Rubarth, L., assignor.)					
141, 888	Pilcher, W., Chicago, Ill. Bellows	Aug. 19, 1873	451	147	4	189
140, 301	Pilkington, J., assignor of three-fourths interest to J. H. Billington & Co., Philadelphia, Pa. Heater and feeder for steam-boilers	June 24, 1873	794	252	3	705
	Pilkington, R., et al. (See O'Neill, E. V., assignor.)					
134, 926	Pilkington, W. W., St. Helens, England. Apparatus for manufacturing window-glass	Jan. 14, 1873	395	126	3	52
141, 012	Pillings, G. T., Philadelphia, Pa. Milling-machine (Reissue)	July 22, 1873	620	209	4	87
	Pillsbury, I. P. (See Morton, C. P., assignor.)					
	Pillsbury, I. P., et al. (See Pattee, J. H., assignor.)					
146, 020	Pimley, J. E., Newark, N. J. Can for transporting oil, &c	Dec. 30, 1873	909	294	4	705
137, 093	Pinchard, J., San Francisco, Cal. Compound and apparatus for the cure of asthma	Mar. 25, 1873	676	225	3	329
	Pindar, J. H., et al. (See Hobart, G. W., assignor.)					
5, 714	Pine, J., Troy, N. Y. Harvester (Reissue)	Dec. 30, 1873	1,008	324	4	713
139, 689	Pine, J., assignor to E. B. Leverich, Brooklyn, N. Y. Extension-ladder	June 10, 1873	229	73	3	643

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Pingree, F. C. (See Berry & Pingree.)					
	Pingry, W. M., administrator. (See Dodge, P.) (Extension.)					
139, 475	Pink, C. and M. Silverberg, Cairo, Ill. Envelope.....	June 3, 1873	28	9	3	611
	Piper, E. J. (See Stebbins & Piper.)					
138, 180	Piper, E. J., Springfield, Mass. School-chair.....	Apr. 22, 1873	841	266	3	459
139, 915	Piper, F. M., Chicago, Ill. Cooler for wine, &c.....	June 17, 1873	449	139	3	668
138, 817	Piper, J. L., Pittsburg, Pa. Metallic column.....	May 13, 1873	322	99	3	534
141, 645	Same.....	Aug. 12, 1873	240	76	4	162
134, 702	Piper, R. U., Girard, Mich., assignor of one-half interest to M. Heath, Chicago, Ill. Covering for roofs.....	Jan. 7, 1873	191	62	3	92
135, 152	Same.....	Jan. 21, 1873	601		3	83
135, 153	Same.....		601		3	83
6, 762	Pitbladdo, T., Brooklyn, N. Y. Cemetery-fence..... (Design.)	July 8, 1873			4	36
	Pitcairn, R., et al. (See Kinzer, J., assignor.)					
136, 669	Pitcher, H., Fond du Lac, Wis. Wheel for vehicles.....	Mar. 11, 1873	295	98	3	278
138, 927	Same.....	May 13, 1873	414	130	3	542
5, 279	Pitcher, L. D., Dixon, Ill. Hay and manure fork..... (Reissue.)	Feb. 11, 1873	452	147	3	175
	Pitcher, R. L. (See Elwood & Pitcher.)					
	Pitkin, A. P., Hartford, Conn. Steam-pressure regulator..... (Extension.)	June 14, 1873			3	640
138, 524	Same.....	May 6, 1873	52	17	3	502
	Pitkin, P. P., et al. (See Lane, D., assignor.)					
140, 590	Pitkin, W. L., and C. J. Gleason, Montpelier, Vt. Compound for cleaning gas-retorts.....	July 8, 1873	227		4	32
141, 235	Pitrat, M. J., assignor of three-fourths interest to N. S. Angell, J. Hannan, and D. Williams, Gallipolis, Ohio. Thread-cutter.....	July 29, 1873	239	274	4	112
139, 811	Pitt, W. A., New York, N. Y. Lighting gas by electricity.....	June 10, 1873	348	108	3	652
	Pittman, G. W., and W. C. Boone, Brooklyn, N. Y. Machinery for laying rope. (Extension.)	Apr. 5, 1873			3	325
139, 916	Pittman, G. W., Keokuk, Iowa. Fire-proof vault.....	June 17, 1873	450	140	3	668
	Pitta, E. (See Ebert & Pitta.)					
135, 260	Pitta, J. K., McLean, Ill. Plow-coupling.....	Jan. 28, 1873	809	261	3	112
136, 263	Planck, J., assignor to self and W. Patterson, Constantine, Mich. Millstone-driver.....	Mar. 18, 1873	465	154	3	301
139, 606	Planck, J. H., Bloomfield, Iowa. Sewing-machine caster.....	June 3, 1873	140	46	3	626
136, 759	Planck, E. F., Burr Oak, Mich. Car-coupling.....	Mar. 11, 1873	367	132	3	284
137, 023	Plant, E. H., Platteville, Conn. Die for making carriage-bolts.....	Mar. 18, 1873	602	199	3	314
145, 966	Plant, F., Brickburgh, N. J. Stump-extractor.....	Dec. 30, 1873	662	280	4	701
144, 267	Plant, A., New York, N. Y. Clock-escapement.....	Nov. 4, 1873	97	32	4	486
138, 191	Platt, A. L., assignor to J. D. and T. K. Connera, Bloomington, Ill. Nutmeg-grater.....	Apr. 22, 1873	241	266	3	459
136, 262	Platt, C. H. and G. A. Stanbery, Norwalk, Ohio. Knitting-machine needle.....	Feb. 25, 1873	608	261	3	322
137, 568	Same.....	Apr. 8, 1873	268	83	3	390
138, 525	Platt, C. M., Waterbury, Conn. Manufacture of buttons.....	May 6, 1873	52	18	3	502
138, 432	Platt, E. B., Florence, Ind. Press.....	Apr. 29, 1873	1, 079	341	3	486
	Platt, G. H., et al. (See Hunter, G. W., assignor.)					
	Platt, J. F. (See Tracy & Platt.)					
138, 098	Platt, R. B., Hazleton, Pa. Miner's bar.....	Apr. 22, 1873	758	241	3	452
137, 094	Platt, W. H., Dayton, Ohio. Cultivator.....	Mar. 18, 1873	602	200	3	312
137, 569	Same.....	Apr. 8, 1873	272	83	3	390
143, 713	Same.....	Oct. 14, 1873	296	97	4	412
137, 481	Platt, W. K., Camden, N. J., assignor to self and A. M. Greene, Philadelphia, Pa. Fire-extinguisher.....	Apr. 1, 1873	182	57	3	372
138, 693	Plattenburg, J. W., assignor to self and J. G. Armstrong, Tiffin, Ohio. Wagon-seat.....	May 6, 1873	200	63	3	513
	Platts, G. (See Walden & Platts.)					
	Same..... (See Walden, J., assignor.) (Reissue.)					
143, 783	Platts, G., and J. Walden, Newark, N. J. Machine for crimping and folding leather.....	Oct. 21, 1873	376	124	4	429
5, 222	Platts, H., Ithaca, N. Y. Billiard-cue..... (Reissue.)	Aug. 5, 1873	187	60	4	150
139, 519	Same.....	June 3, 1873	64	22	3	614
138, 526	Blecker, W. J., Bushnell, Ill. Harvester-dropper.....	May 6, 1873	53	18	3	502
140, 789	Pleins, F. M., Dubuque, Iowa. Manufacture of soap.....	July 15, 1873	397		4	60
	Plumb, R. (See Burdick, O. C., assignor.)					
140, 535	Plumb, W. H., Paterson, N. J., assignor to J. A. Sterling, New York, N. Y. Jigger for separating ore.....	July 1, 1873	164	56	4	22
	Plume & Atwood Manufacturing Company. (See Atwood, L. J., assignor.)					
	Plumer, J., et al. (See Enos, J. A., assignor.)					
141, 379	Pinmer, W., Lexington, Mass. Manufacture of glue.....	July 29, 1873	978	{ 317 } { 318 }	4	123
145, 235	Plummer, G. H., New York, N. Y. Cork or stopper holder.....	Dec. 2, 1873	177	61	4	599
	Plummer, J. F., et al. (See Newton, F. W., assignor.) (Reissue.)					
	Plummer Sewing-Machine Company. (See Whiting, W. M., assignor.)					
144, 698	Plympton, N., Boston, Mass. Tea-kettle.....	Nov. 18, 1873	459	156	4	538
139, 188	Poage, J. N., Cincinnati, Ohio. Water-column for railway water-tanks.....	May 20, 1873	661	{ 207 } { 208 }	3	574
141, 815	Same.....	Aug. 12, 1873	371	122	4	173
145, 236	Same.....	Dec. 2, 1873	177	61	4	599
141, 666	Pocheiron, A., Paris, France, assignor to E. Cannington. Glass-furnace.....	Aug. 12, 1873	241	76	4	162
141, 948	Poe, J. B., assignor to self and J. F. Allison, Worthington, Ind. Machine for making chair and basket splints.....	Aug. 19, 1873	498	164	4	193
143, 183	Poffenbarger, J., Farmersville, Ohio. Carriage-top setter.....	Sept. 23, 1873	748	{ 258 } { 259 }	4	336
	Poh & Raichle. (See Delonest, A. E., assignor.)					
	Pohlman, J. W. (See Stirling & Pohlman.)					
	Polder, P. (See Cone & Polder.)					
143, 251	Pole, B. C., Washington, D. C. Ordnance, and projectile therefor.....	Sept. 30, 1873	816	280	4	357
135, 442	Poihamus, J. H., Albany, N. Y. Refrigerating-cupboard.....	Feb. 4, 1873	45	14	3	131
143, 528	Pollard, J. E., Norfolk, Mass. Manufacture of felt-cloth.....	Oct. 7, 1873	110		4	389
	Polley, H. (See Rosenfeld, A., assignor.)					
141, 726	Pollitt, J., Edon, Ohio. Spring-bed bottom.....	Aug. 12, 1873	288	94	4	166
	Pollock, A., et al. (See Goodrich, A. S., assignor.)					
138, 192	Pomeroy, C., Mattoon, Ill. Harvester-cutter.....	Apr. 22, 1873	842	266	3	459
143, 714	Pomeroy, C., and J. D. Owen, Mattoon, Ill. Shovel-handle.....	Oct. 14, 1873	297	97	4	412
137, 367	Pomeroy, D., Green Point, N. Y. Truss.....	Apr. 1, 1873	96	31	3	364
139, 917	Pomeroy, D. and W., assignors to J. B. D., and M. E. Pomeroy, New York, N. Y. Truss.....	June 17, 1873	451	140	3	668
	Pomeroy, J. B., et al. (See Pomeroy, D. and W., assignors.)					
	Pomeroy, M. E., et al. (See Pomeroy, D. and W., assignors.)					
	Pomeroy, W. (See Pomeroy, D. and W.)					
	Pomeroy, W. L., et al. (See Newton, F. W., assignor.) (Reissue.)					
	Pompeji, F. G. (See Kline & Jack, assignors.)					

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138, 283	Ponce, J. P., assignor to self and J. Miller, Mayfield, Cal. Automatic gate	Apr. 29, 1873	948	299	3	476
138, 928	Pond, D. B., Woonsocket, R. I. Washing-machine	May 13, 1873	415	130	3	542
144, 862	Pond, L., Foxborough, Mass. Hose-coupling spanner	Nov. 25, 1873	612	208	4	561
138, 760	Pond, L. W., assignor to self and The Eau Claire Lumber Company, Eau Claire, Wis. Boom and raft-rudder	May 13, 1873	272	84	3	529
140, 384	Pond, M. W., Elyria, Ohio. Harness-pad	July 1, 1873	42	14	4	11
140, 385	Same. same	July 1, 1873	43	14	4	11
143, 381	Same. Harness saddle tree	Sept. 30, 1873	933	316	4	366
137, 094	Pond, O. M. (See Bingham & Pond.) Same. Independence, Iowa. Cultivator	Mar. 25, 1873	676	225	3	329
140, 386	Pond, O. N. (See Sweeney, H. M., assignor.) Same. Eau Claire, Wis. Log-turner	July 1, 1873	44	15	4	11
143, 184	Pool, S., Chapel Hill, N. C. Adding-machine	Sept. 23, 1873	749	259	4	336
5, 330	Pool, T., Brunswick, Ohio, assignor to Metropolitan Washing-Machine Company. Clothes-wringer	Mar. 18, 1873	628	207	3	314
145, 751	Pooley, T., assignor of one-half interest to N. Johnson, Blackberry Station, Ill. Miter-machine	Dec. 23, 1873	651	214	4	674
	Pooley, W. C. (See Fritz & Pooley.)					
	Poorman, C. L. (See Parker, G. W., assignor.)					
5, 622	Pope, F. L., et al. (See Lockwood, R. M., assignor.) Pope, F. L., Elizabeth, N. J., assignor to self and S. C. Hendrickson, Brooklyn, N. Y., J. N. Ashley and J. D. Lincoln, Greenville, N. J. Electric signaling apparatus for railways	Oct. 21, 1873	529	{ 175 176 }	{ 4 4 }	441
140, 536	Pope, F. L., Elizabeth, N. J. Circuit for electric railway-signal	July 1, 1873	166	56	4	22
140, 790	Same. Electric railway-signal apparatus	July 15, 1873	399	136	4	60
443, 529	Same. Electric circuit and device for railway-signals	Oct. 7, 1873	111	38	4	389
145, 308	Same. Electric signaling apparatus for railways	Dec. 9, 1873	246	82	4	617
5, 523	Pope, F. L., Elizabeth, and T. A. Edison, Newark, N. J., assignors by mesne assignment to The Gold and Stock Telegraph Company, New York, N. Y. Printing-telegraph	Aug. 5, 1873	187	60	4	150
139, 476	Pope, J. L., Cleveland, Ohio. Machine for tapping-pipe-fittings	June 3, 1873	29	9	3	611
	Pope, T. S., et al. (See Burney, F., assignor.)					
142, 649	Pope, W. D., Gadsden, Ala. Railway-car brake	Sept. 9, 1873	294	96	4	277
143, 638	Same. Car-coupling	Oct. 14, 1873	221	74	4	407
142, 939	Popping, J., New York, N. Y., assignor of two-thirds interest to H. Schierloh, Jersey City, N. J., and H. Schierloh, New York, N. Y. Welding iron and steel	Sept. 16, 1873	549	.....	4	309
145, 445	Popping, J., assignor to self and W. L. Godfrey, New York, N. Y. Welding iron and steel	Dec. 9, 1873	362	.....	4	627
142, 349	Porta, P., assignor to W. Uda and M. B. S. Uda, Milan, Italy. Fireman's ladder	Sept. 2, 1873	24	9	4	244
139, 260	Porter, A., Chicago, Ill. Nut-lock	May 27, 1873	739	234	3	588
144, 883	Porter, A. W., New York, N. Y. Apparatus for carbureting gas	Nov. 25, 1873	613	208	4	561
136, 540	Porter, C., Nunda, N. Y. Car-coupling	Mar. 4, 1873	172	55	3	259
	Porter, C. B. & Co. (See Fallows, J., assignor.)					
144, 864	Porter, D., Cleveland, Ohio. Sewing-machine	Nov. 25, 1873	614	209	4	562
144, 789	Porter, H., Polo, Ill. Binder's attachment for harvesters	Nov. 18, 1873	534	182	4	545
	Porter, H. K. (See Porter, T. W. & H. K.)					
144, 790	Porter, H. K., Boston, Mass. Shifting top for vehicles	Nov. 18, 1873	535	182	4	545
146, 093	Same. Carriage-iron	Dec. 30, 1873	972	314	4	711
5, 653	Porter, H. K. & T. W., Boston, Mass., assignors by mesne assignment to C. Parker, Meriden, Conn. Vice	Nov. 11, 1873	366	123	4	519
139, 812	Porter, J. G., New York, N. Y., and E. Davis, Jersey City, N. J. Heating-furnace	June 10, 1873	349	108	3	652
	Porter, L. F., New Brunswick, N. J. Elastic toy	Feb. 15, 1873	.....	.....	3	127
145, 010	Porter, N., Peabody, Mass. Apparatus for drying tan	Nov. 25, 1873	729	246	4	572
	Porter, T. W. (See Porter, H. K. & T. W.)					
143, 029	Porter, T. W., Boston, Mass. Wheel for vehicles	Sept. 23, 1873	631	215	4	326
143, 030	Same. Wagon	Sept. 23, 1873	632	215	4	326
143, 031	Porter, T. W. & H. K., Boston, Mass. Foot-rail for carriages	Sept. 23, 1873	633	216	4	326
	Post & Co. (See Walton, G., assignor.)					
	Post, B. M. (See Oakley & Post.)					
143, 185	Post, F., Clinton, Iowa. Wagon	Sept. 23, 1873	750	259	4	336
136, 760	Post, I. M., Philadelphia, Pa. Cuff	Mar. 11, 1873	368	122	3	284
140, 537	Same. Shirt-bosom support	July 1, 1873	167	56	4	22
140, 538	Same. Dress-shoulder	July 1, 1873	167	56	4	22
136, 670	Post, J. L., Ashley, Ill. Fruit-drier	Mar. 11, 1873	295	98	3	278
134, 703	Post, J. W., Lansing, Mich. Carriage-spring	Jan. 7, 1873	192	62	3	22
135, 842	Post, N. L., East Cleveland, Ohio. Wrench	Feb. 11, 1873	421	137	3	173
	Post, P. S. (See Michaels & Broadwell, assignors.)					
140, 591	Potter, A., Philadelphia, Pa. Gas-lighting apparatus	July 8, 1873	228	76	4	38
	Potter, A. J. (See Von Dorn, T. L., assignor.)					
	Potter, B., jr. (See Dodge & Potter)					
	Potter, B. F. (See Sheears, T. J., assignor.)					
	Potter, C., jr. (See Cranston, J. H., assignor.)					
140, 640	Potter, G. P., Coventry, R. I. Window weather-strip	July 8, 1873	271	92	4	42
144, 224	Potter, H. H., Sterlingville, N. Y. Railway-switch	Nov. 4, 1873	47	14	4	482
145, 446	Same. Car-coupling	Dec. 9, 1873	363	121	4	627
138, 929	Potter, H. T., Norwich, Conn. Device for stopping the spindles of spinning-frames	May 13, 1873	416	130	3	542
142, 509	Same. Top-roll for drawing-frames, &c	Sept. 2, 1873	168	55	4	255
140, 302	Potter, J. C., Saint Helena, Cal. Plow	June 24, 1873	795	253	3	705
136, 179	Potter, M., Mendon, Mich. Plow-wheel	Feb. 25, 1873	738	238	3	223
143, 928	Potter, M. F., Kaneville, Ill. Apparatus for treating the eye	Oct. 21, 1873	496	167	4	439
	Potter, Sons & Co. (See Barrett, J., assignor.)					
138, 581	Potter, T., Jackson, Miss. Safety-guard for pocket-books	May 6, 1873	101	32	3	506
5, 593	Potter, T. O., and J. W. Smith, Boston, Mass., assignors to The Bay State Suspender Company. Suspenders	Oct. 7, 1873	148	49	4	392
	Potter, T., Sons & Co. (See Hutchinson, J., assignor.)					
	Same. (See Kagy, H., assignor.)					
138, 761	Potter, W., jr., Andover, N. Y. Inside blind	May 13, 1873	273	84	3	529
134, 769	Potts, E., Philadelphia, Pa. Washing-machine	Jan. 14, 1873	257	84	3	41
142, 865	Potts, W. W., Swedeland, Pa. Portable fence	Sept. 16, 1873	485	166	4	304
135, 937	Potwin, W. S., Chicago, Ill. Slop-jar	Feb. 18, 1873	512	167	3	193
141, 889	Same. Soldering-furnace	Aug. 19, 1873	451	147	4	189
137, 237	Poulson, B., Fort Wayne, Ind. Door-check	Mar. 25, 1873	806	265	3	339
145, 681	Poulson, J., assignor of one-half interest to M. Baldwin, Frenchtown, N. J. Nail-plate feeder	Dec. 16, 1873	580	190	4	656
139, 607	Poulson, N., New York, N. Y. Fire-proof roof	June 3, 1873	141	46	3	620
135, 664	Poundstone, C. N., Livonia, Ill. Rotary cultivator	Feb. 11, 1873	262	83	3	160

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134, 927	Powell, A. H., Philadelphia, Pa., assignor to self and J. Wood, Red Bank, N. J., and E. R. Bennet, New York, N. Y. Lift and force pump	Jan. 14, 1873	397	126	3	52
146, 094	Powell, E., New York, N. Y. Tuck-croaser for sewing-machines	Dec. 30, 1873	973	314	4	711
6, 337	Powell, J., assignor to H. J. Dixon & Sons, Kidderminster, England. Carpet. (Design)	Jan. 7, 1873			3	7
6, 380	Same. same. (Design)	Jan. 21, 1873			3	71
6, 590	Same. same. (Design)	Apr. 16, 1873			3	417
6, 591	Same. same. (Design)	Apr. 15, 1873			3	417
6, 784	Same. same. (Design)	July 22, 1873			4	85
138, 527	Powell, J. B., assignor of one-half interest to E. P. Michener, Philadelphia, Pa. Gate for railway-crossings	May 6, 1873	54	18	3	502
142, 812	Powell, J. G., Philadelphia, Pa. Clamp for sewing-machine attachments	Sept. 16, 1873	442	149	4	300
143, 539	Same. Corder for sewing-machines	Oct. 14, 1873	177	60	4	403
141, 013	Powell, J. P., Cincinnati, Ohio. Music notation	July 22, 1873	622	209	4	87
143, 032	Powelson, H., New Brunswick, N. J. Carpet stretcher	Sept. 23, 1873	633	216	4	326
144, 865	Power, H. L., London, England. Umbrella	Nov. 25, 1873	614	209	4	562
134, 611	Power, J. M., Port Discovery, Wash. Lubricator	Jan. 7, 1873	105	34	3	15
143, 639	Same. same. same. (Design)	Oct. 14, 1873	221	74	4	407
137, 863	Powers, A. A., et al. (See Hemenway, C. V., assignor.)					
139, 971	Powers, C. M., Ridgewood, N. J. Thrashing-machine	Apr. 15, 1873	537	167	3	425
	Same. Beer-strainer	June 17, 1873	490	155	3	671
	Powers, D., & Sons. (See Barrett, J., assignor.) (Design.)					
	Same. (Design.)					
136, 180	Powers, D. J., Chicago, Ill. Woven-wire mattress-frame	Feb. 25, 1873	739	238	3	223
142, 940	Same. Tightening device for woven-wire mattress	Sept. 16, 1873	550	186	4	309
144, 564	Same. Wire-mattress	Nov. 11, 1873	339	114	4	517
	Powers, G. C. (See Graves, Powers & Graves.)					
143, 715	Powers, I., Laingsburgh, Mich. Wagon-seat	Oct. 14, 1873	297	97	4	412
136, 092	Powers, L. A., West Meriden, Conn. Game-table	Feb. 18, 1873	645	211	3	204
144, 791	Same. Rake	Nov. 18, 1873	536	182	4	545
	Powers, P. F. (See Wasson, Powers, & Dungan)					
135, 466	Powers, R., Charleston, Miss. Cotton-press	Feb. 4, 1873	87	27	3	134
142, 272	Powers, W. P., North La Crosse, Wis. Belting	Aug. 26, 1873	796	262	4	226
	Powers, Z. M. (See Allerton & Powers.)					
140, 949	Prahl, C., Stapleton, N. Y. Match-box	July 15, 1873	548	184	4	72
	Prall, W. E. (See Blanchard & Prall.)					
5, 715	Prall, W. E., Washington, D. C. Steam water-elevator. (Reissue)	Dec. 30, 1873	1,009	324	4	714
145, 309	Same. Pneumatic railway-signal	Dec. 9, 1873	248	83	4	618
146, 095	Prall, W. E. and D. A. Burr, Washington, D. C. Steam vacuum-pump	Dec. 30, 1873	974	{ 314 315 }	4	711
5, 425	Prate, H. T., New York, N. Y. Life-preserving stool. (Reissue)	May 27, 1873	906	292	3	602
	Pratt & Letchworth. (See Bottomley, T. J., assignor.) (Reissue.)					
	Pratt, C. A. (See Orr & Sears, assignors.)					
146, 021	Pratt, D. R., Greenfield, Ohio. Sawing-machine	Dec. 30, 1873	909	294	4	705
135, 564	Pratt, G. M., and V. A. King, assignors to the Victor Sewing-Machine Company, Middletown, Conn. Machine for dressing cam-grooves	Feb. 4, 1873	181	56	3	141
145, 967	Pratt, H., and T. T. Munhall, Fairburz, Ill. Truck	Dec. 30, 1873	863	280	4	702
141, 390	Pratt, M., Deep River, Conn. Machine for shaping piano-keys	July 29, 1873	979	318	4	123
140, 791	Pratt, M. E., Prattville, Ala. Cotton-gin	July 15, 1873	401	136	4	60
	Pratt, N. B., Deep River, Conn. Carpet-sweeper. (Extension)	Feb. 8, 1873			3	100
	Pratt, R. N. (See McNeill & Pratt.)					
	Pratt, R. N. (See Traphagen, H. L., assignor.)					
137, 482	Pratt, T. W., Boston, Mass. Wooden truss-bridge	Apr. 1, 1873	183	58	3	372
142, 273	Same. Steam-boiler	Aug. 26, 1873	796	263	4	226
143, 530	Pratt, W. A., Baltimore, Md. Lubricator	Oct. 7, 1873	114	39	4	390
136, 864	Pratt, Z. I., Chicago, Ill. Candlestick	Mar. 18, 1873	465	154	3	301
136, 865	Same. Fare-box	Mar. 18, 1873	466	155	3	301
141, 168	Pray, D. F., Boston, Mass. Lubricator	July 22, 1873	763	250	4	98
	Pregamann, A. (See Aulbach, J., assignor.)					
	Preis, J. (See Goebel & Preis.)					
136, 383	Prentiss, C. H., Cleveland, Ohio. Gas-beater	Mar. 4, 1873	29	10	3	248
142, 117	Prentiss, E. F., Philadelphia, Pa. Composition for coating wood and iron	Aug. 26, 1873	668		4	216
144, 792	Prentiss, T. M., Boston, Mass. Portable fly and mosquito net	Nov. 18, 1873	536	183	4	545
135, 154	Presbrey, C. H., assignor to Novelty Iron Works Manufacturing Company, Sterling, Ill. School-desk	Jan. 21, 1873	602	196	3	83
	Presbrey, O. F., et al. (See Hunter, R. F., assignor.)					
136, 541	Prescott, D. C., Marinette, Wis. Saw-mill	Mar. 4, 1873	173	55	3	259
	Prescott, E. (See Cobb, B. F., assignor.) (Reissue.)					
	Prescott, G. A. (See Barsaloux & Graham, assignors.)					
	Prescott, G. A. (See Barsaloux & Prescott.)					
135, 361	Prescott, G. A., Sandy Hill, N. Y. Saw-swaging machine	Jan. 28, 1873	810	261	3	112
136, 093	Prescott, G. A., and J. Barsaloux, Sandy Hill, N. Y. Spike-extractor	Feb. 18, 1873	646	211	3	204
144, 866	Prescott, G. A., and J. Barsaloux, said Barsaloux assignor to said Prescott, Sandy Hill, N. Y. Head-block for saw-mill	Nov. 25, 1873	615	209	4	562
139, 329	Prescott, M. H., jr., La Crosse, Wis. Child's photograph chair	May 27, 1873	796	254	3	393
145, 310	Pressey, G. W., Hammouton, N. J. Umbrella	Dec. 9, 1873	250	83	4	618
	Prest, J. (See Taylor & Prest.)					
	Preston, C. (See Wygant, Preston & Westervelt.)					
140, 641	Preston, F. B., assignor to self and W. H. Stapleton, Fayette, Mo. Washing-machine	July 8, 1873	271	92	4	42
138, 818	Preston, J., Plymouth, Ohio. Corn-plow	May 13, 1873	323	100	3	534
137, 956	Preston, S. H., Worth, Pa. Bolt and rod cutter	Apr. 15, 1873	614	193	3	431
142, 412	Preston, W. M., Roxbury, N. Y. Door-bell	Sept. 2, 1873	79	26	4	249
	Prewitt, H. C. (See Harrison, W., assignor.)					
145, 815	Price, C. A., Jersey City, N. J. Rubber-mat for pitchers, &c.	Dec. 23, 1873	705	232	4	679
142, 582	Price, F. M. W., Danville, Ill. Machine for mining coal	Sept. 9, 1873	240	79	4	273
136, 866	Price, J., Columbia County, Fla. Combined stalk-cutter and land roller	Mar. 18, 1873	467	155	3	301
134, 928	Price, J. S., Champaign County, and P. Miller, Clarke County, Ohio. Grain-register	Jan. 14, 1873	397	127	3	52
6, 338	Price, V., New York, N. Y. Sword hilt and scabbard. (Design)	Jan. 7, 1873			3	7
6, 763	Price, V., Woodside, N. Y. Sword hilt and scabbard. (Design)	July 8, 1873			4	36
6, 953	Price, V., New York, N. Y. Sword hilt and scabbard. (Design)	Oct. 7, 1873			4	380
139, 023	Price, V., Woodside, N. Y. Casting ornaments for sword scabbards. (Design)	May 20, 1873	507	159	3	562
137, 715	Price, W., Mount Olive, N. C. Cotton-chopper	Apr. 8, 1873	400	123	3	401
137, 716	Same. Plow	Apr. 8, 1873	402	123	3	401
138, 043	Same. Cotton-planter	Apr. 22, 1873	712	225	3	449
140, 841	Pridgeon, J. P., assignor to J. P. Pridgeon & Co., Marion Court-house, S. C. Cotton-press	July 15, 1873	443	151	4	64
	Pridgeon, J. P., and Co. (See Pridgeon, J. P., assignor.)					

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137, 147	Prier, A. (<i>See</i> Loeffelholz & Prier.) Priest, C. W., assignor of one-half interest to J. W. Lamb, Troy, N. Y. Machine for } beading sheet-metal vessels..... } Priest, J. (<i>See</i> Colver & Priest.) Priest, J. K., <i>et al.</i> (<i>See</i> Fullam, A. J., assignor)..... (Reissue.) Same..... (<i>See</i> Smith, R. T., assignor.)	Mar. 25, 1873	721	{ 239 240	3	333
144, 136	Priest, J. K., assignor to self, R. T. Smith, J. G. Blunt, and W. Earl, jr., Nashua, N. H. Shearing-machine.....	Oct. 28, 1873	697	231	4	465
135, 727	Priew, H., Magdeburg, Prussia. Centrifugal machine for purifying sugar.....	Feb. 11, 1873	316	100	3	164
136, 542	Prince, G. A. (<i>See</i> Kent, W. J., assignor.) Prince, J., and N. D. Martin, North Craftsbury, Vt. Apparatus for cooling milk and cream.....	Mar. 4, 1873	174	55	3	259
25, 449	Prindle, D. R., East Bethany, N. Y. Portable furnace boiler and steamer..... (Extension.)	Sept. 13, 1873	.....	.....	4	270
6, 733	Same..... (Disclaimer filed.)	Sept. 12, 1873	.....	.....	4	270
6, 734	Prindle, G. H., Philadelphia, Pa. Boa..... (Design.)	Aug. 5, 1873	.....	.....	4	135
135, 585	Same..... (Design.)	Aug. 5, 1873	.....	.....	4	135
144, 134	Prindle, G. S., Washington, D. C., assignor to The Queen City Wringer Company, Cin- cinnati, Ohio. Clothes-wringer.....	Feb. 4, 1873	182	57	3	142
140, 162	Prindle, L. B., Bantam Falls, Conn. Wrench.....	Oct. 28, 1873	695	230	4	465
144, 135	Prindle, L. C., Chicago, Ill. Billiard-table.....	June 24, 1873	680	213	3	695
140, 303	Pritchard, E. D., New York, N. Y. Protection for underground telegraph-wires.....	Oct. 28, 1873	695	231	4	465
137, 238	Pritchard, T., assignor of two-thirds interest to J. Laughlin and C. Darragh, Philadel- phia, Pa. Device for connecting car-axes with axle-boxes.....	June 24, 1873	796	253	3	705
134, 561	Prits, A., Dayton, Ohio. Car-coupling.....	Mar. 25, 1873	807	266	3	399
143, 093	Probasco, W., Lawrenceburgh, Ind. Centrifugal apparatus for extracting honey from the comb.....	Jan. 7, 1873	56	17	3	11
145, 011	Procopé, M., Stockholm, Sweden. Adjustable tongue for organ-reeds.....	Sept. 23, 1873	682	234	4	330
142, 041	Proctor, J. K., Malden, Mass. Sewing-machine caster.....	Nov. 25, 1873	730	246	4	572
139, 608	Proctor, A. N., assignor to J. Proctor, Boston, Mass. Motor for driving machinery..... Proctor, D. C. (<i>See</i> Culter & Proctor.)	Aug. 19, 1873	583	192	4	199
140, 074	Proctor, G. K., Salem, Mass. Caster for sewing-machines.....	June 3, 1873	142	{ 46 47	3	690
5, 493	Same..... Lapboard..... Proctor, J. (<i>See</i> Proctor, A. N., assignor.) Proctor, J. K., Philadelphia, Pa., assignor of one-half interest to C. R. Lindsay. Cylin- der for burring-machines..... (Reissue.)	June 17, 1873	582	184	3	679
137, 609	Same..... Machine for working waste, fibrous material, &c.....	July 15, 1873	595	200	4	76
140, 304	Proctor, J. K., Philadelphia, Pa. Mechanism for operating the doffer-combs of carding- machines.....	June 3, 1873	142	{ 47 48	3	690
142, 650	Proctor, J. W. (<i>See</i> Forbie, H. K., assignor.) Prosser, T. T., assignor of one-half interest to G. C. Morgan, Chicago, Ill. Water-meter.....	Sept. 9, 1873	294	97	4	277
145, 752	Prosser, T. T., Chicago, Ill. Connecting-rod.....	Dec. 23, 1873	652	214	4	674
145, 753	Same..... Fan-blower.....	Dec. 23, 1873	653	214	4	674
145, 754	Same..... Pegging-machine for boots and shoes.....	Dec. 23, 1873	654	214	4	674
135, 843	Prosser, T. T., and G. W. Gillette, Chicago, Ill. Tool for facing bung-holes.....	Feb. 11, 1873	421	137	3	172
137, 717	Prosser, T. T., and G. C. Morgan, Chicago, Ill. Pipe-joint.....	Apr. 8, 1873	403	124	3	461
139, 813	Proudfoot, F., Toronto, Canada. Fire-place.....	June 10, 1873	350	108	3	652
145, 237	Same..... Heating-drum.....	Dec. 2, 1873	176	61	4	599
5, 664	Prouty, G. W., Charlestown, Mass. Printing-press..... (Reissue.)	Nov. 18, 1873	567	192	4	547
141, 077	Same..... Inking apparatus for oscillating printing-presses.....	July 22, 1873	678	227	4	92
135, 665	Prouty, H. W., Boston, Mass. Lamp-chimney cleaner.....	Feb. 11, 1873	263	83	3	160
141, 516	Same..... Toy money-box..... Providence Tool Company. (<i>See</i> Bartlett, E. G. W., assignor.) Same..... (<i>See</i> Pickersgill, W. C., assignor.)	Aug. 5, 1873	93	29	4	142
140, 163	Provost, P. C., <i>et al.</i> (<i>See</i> Dewell, J. V., assignor.) Pruden, H., Erie, Pa. Medical compound for diphtheria, &c.....	June 24, 1873	680	.....	3	695
134, 704	Prybil, P., New York, N. Y. Saw-guide.....	Jan. 7, 1873	192	62	3	22
139, 734	Puder, G. (<i>See</i> Brand & Puder.) Puffer, A. D., Boston, Mass. Soda-water fountain.....	June 10, 1873	278	87	3	647
142, 413	Pugh, W. H., Chicago, Ill. Subterranean irrigation.....	Sept. 2, 1873	80	26	4	249
137, 718	Pulla, C. (<i>See</i> Mowry & Pulla.) Pullinger, C., Philadelphia, Pa. Flexible support for mattresses, seats, &c.....	Apr. 8, 1873	404	124	3	401
142, 941	Same..... Ventilating window-sash.....	Sept. 16, 1873	550	186	4	309
138, 099	Pullis, J. (<i>See</i> Pullis, T. R. & J.) Pullis, T. R. & J., Saint Louis, Mo. Bolt mechanism for prison-doors.....	Apr. 22, 1873	759	241	3	452
144, 225	Puntenney, G. H. (<i>See</i> Ochiltree, S. P., assignor.) Purinton, J., Lynn, Mass. Machine for lasting boots and shoes..... (Extension.)	Oct. 4, 1873	.....	.....	4	353
137, 719	Purple, G., Cameron, Mo. Flour-sifter.....	Nov. 4, 1873	48	14	4	482
139, 610	Pursell, A., Williamsport, Pa. Car-coupling.....	Apr. 8, 1873	404	124	3	401
137, 390	Pursley, G. A., Pittsfield, Ill. Grain-drill.....	June 3, 1873	146	48	3	621
143, 929	Pusey, H. (<i>See</i> Blessing, L. W., assignor.) Pusey, J., Philadelphia, Pa. Rack for curtain-fixtures.....	Apr. 1, 1873	38	12	3	360
136, 543	Pusey, J. M., Wilmington, Del. Thill-coupling.....	Oct. 21, 1873	496	168	4	439
141, 169	Pusey, S. J., assignor to W. H. Grove, Philadelphia, Pa. Sewing-machine table..... Same..... Folding-cover for sewing-machines.....	Mar. 4, 1873	174	56	3	259
136, 937	Push, A. B. (<i>See</i> Thompson, C. G., assignor.) Putequat, J. L., Brownsville, Tex. Medical compound.....	July 22, 1873	764	250	4	98
145, 510	Putnam, D., Stockton, assignor of one-half interest to A. C. Pickard, Busti, N. Y. Lift- ing-jack.....	Mar. 18, 1873	528	.....	3	306
143, 716	Putnam, G. W., South Glen's Falls, N. Y. Car-coupling.....	Sept. 2, 1873	169	55	4	255
144, 226	Putnam, H. W., Bennington, Vt. Bottle-stopper fastening..... (Extension.)	Oct. 14, 1873	298	97	4	412
144, 922	Putnam, J. (<i>See</i> Tisdale, J., assignor.) Same..... (<i>See</i> Tisdale, Putnam & Allen.) Putnam, S. S., Boston, Mass. Machine for feeding horseshoe nails.....	Mar. 15, 1873	.....	.....	3	245
145, 755	Same..... Machine for finishing horseshoe nails.....	Nov. 4, 1873	48	15	4	462
6, 764	Same..... Nail-delivering machine.....	Nov. 25, 1873	656	{ 222 223	4	565
140, 727	Putnam, S. W., jr., Fitchburgh, Mass. Bolt-threading machine..... (Design.)	Dec. 23, 1873	657	215	4	675
142, 511	Same..... Nut-tapping machine.....	July 8, 1873	340	115	4	47
143, 186	Same..... Machine for tapping nuts.....	Sept. 2, 1873	170	55	4	255
25, 673	Putnam, W. E., & Co. (<i>See</i> Putnam, W. E., assignor.) Putnam, W. E., assignor to W. E. Putnam & Co., Boston, Mass. Gaiter.....	Sept. 23, 1873	751	259	4	336
	Purinton, J., Lynn, Mass. Machine for lasting boots and shoes..... (Disclaimer filed.)	Sept. 27, 1873	.....	.....	4	354

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Di-g.	Vol.	Page.
141, 727	Pye, W. H. M., Brooklyn, N. Y. Hat-tip lining	Aug. 12, 1873	289	94	4	166
145, 232	Pyke, M. (See Rea, Pyke & Rennoe.)					
145, 682	Quackenbush, H. M., Herkimer, N. Y. Toy pistol	Dec. 2, 1873	179	62	4	599
	Same..... Steam-generator	Dec. 16, 1873	581	191	4	656
144, 793	Quail, W. (See Buschmann, L., assignor.)					
	Quarles, F., Waco, Tex. Cotton-bale tie	Nov. 12, 1873	537	183	4	545
	Quarterman, E., et al. (See Quarterman, J., assignor.)					
143, 841	Quarterman, F. J. J., et al. (See Quarterman, J., assignor.)					
	Quarterman, J., Flushing, assignor to A. M. Ingersoll, Brooklyn, and F. J. J. and E. Quarterman, Flushing, N. Y. Paint-compound	Oct. 21, 1873	426		4	433
145, 311	Quast, E., Jerseyville, Ill. Plane-iron	Dec. 9, 1873	252	84	4	618
	Queen City Wringer Company. (See Bogert, T. O., assignor.)					
	Same..... (See Cathcart, R. S., assignor.)					
	Same..... same..... (Reissue.)					
	Same..... (See Gault & Winall, assignors.)					
	Same..... (See Prindle, G. S., assignor.)					
141, 667	Quick, D. R., and G. A. Gardner, New York, N. Y. Steam hammer	Aug. 12, 1873	242	77	4	162
136, 181	Quigg, J. F., Chicago, Ill. Swing	Feb. 25, 1873	739	238	3	223
137, 957	Quigley, W. D. G., Spring Valley, N. Y. Tire-tightener	Apr. 15, 1873	614	193	3	431
	Quimby, E. E. (See Bancroft, L. F., assignor.)					
	Same..... (Reissue.)					
143, 590	Quinn, F., Keokuk, Iowa. Candy-cutter	Oct. 14, 1873	178	60	4	403
135, 938	Quinn, M., Galveston, Tex. Bale-tie	Feb. 18, 1873	513	167	3	193
136, 544	Quincy, A. P., assignor to W. A. Freeman, Newark, N. J. Oil-can	Mar. 4, 1873	175	56	3	259
143, 463	Quincke, L., Joliet, Ill., assignor of one-half interest to F. Mueller, Carondelet, Mo. Cupola and other furnaces	Oct. 7, 1873	56	19	4	385
140, 305	Quincy, E. W., assignor of one-half interest to J. H. Hall, Peoria, Ill. Corn-harvester	June 24, 1873	798	253	3	705
140, 387	Quincy, E. W., Peoria, Ill. Bed-bottom	July 1, 1873	45	15	4	11
	Quincy, G. H., et al. (See Morrison, C. F., assignor.)					
138, 433	Quirk, J. B., Philadelphia, Pa. Car-spring	Apr. 29, 1873	1,061	341	3	486
138, 930	Quirola, A., New York, N. Y. Stereoscope	May 13, 1873	416	130	3	542
143, 252	Race, A. H. and J. H., Brooklyn, N. Y. Apparatus for preventing back-motion	Sept. 30, 1873	817	280	4	357
	Same..... (See Race, A. H. and J. H.)					
	Same..... (See Wright & Race.)					
140, 642	Racicot, A., Troy, N. Y. Medical compound for cholera	July 8, 1873	272		4	42
144, 137	Radway, S. H., Berlin, Wis. Windmill	Oct. 28, 1873	698	231	4	465
136, 283	Rae, M., Uphall, New Britain. Manufacture of fuel	Feb. 25, 1873	809	261	3	228
135, 045	Raeder, F. W., Saint Louis, Mo. Lime-kiln	Jan. 21, 1873	516	167	3	77
142, 866	Rafael, R., Havana, Cuba. Boiler-feeder	Sept. 16, 1873	486	166	4	304
	Raff, G. W., et al. (See Essick, S. V., assignor.)					
138, 434	Rafferty, J. T., El Dara, Ill. Plow-handle	Apr. 29, 1873	1,062	341	3	486
137, 692	Ragan, C., Waterloo, Iowa. Dried-fruit-looseners	Apr. 8, 1873	313	97	3	394
136, 545	Ragan, T., Philadelphia, Pa. Hydrant	Mar. 4, 1873	176	56	3	259
145, 239	Rager, C. B., assignor of one-half interest to H. Mills, North Manchester, Ind. Weather-strip	Dec. 2, 1873	180	62	4	599
136, 938	Rains, G. J., Aiken, S. C. Safety-valve	Mar. 18, 1873	529	175	3	306
139, 611	Rairigh, W. K., Plumville, Pa. Harvester	June 3, 1873	146	48	3	621
139, 612	Same..... same.....	June 3, 1873	147	48, 49	3	621
135, 844	Rakestraw, R., Wyoming, Ill. Bed-bottom	Feb. 11, 1873	422	137	3	173
139, 814	Same..... Rotary harrow	June 10, 1873	351	109	3	653
142, 651	Ralph, A., Philadelphia, Pa. Packing-machine	Sept. 9, 1873	295	97	4	278
135, 586	Ralston, J., Brenham, Tex., assignor of part interest to D. S. Skinner, N. B. Hall, and E. J. Bicknell, Providence, R. I. Cotton-cleaner	Feb. 4, 1873	183	57	3	142
136, 761	Ralya, J. J., Cleveland, Ohio. Wheel for vehicles	Mar. 11, 1873	368	122	3	284
138, 762	Same..... Stave-jointer	May 13, 1873	273	89	3	530
141, 816	Same..... Device for centering barrel-heads	Aug. 12, 1873	372	122	4	173
144, 138	Same..... Machine for dressing staves	Oct. 28, 1873	698	232	4	465
135, 845	Ramer, S., Winona, Minn. Grain-register	Feb. 11, 1873	422	137	3	172
	Ranney, D. S. (See Ackley & Ranney.)					
140, 075	Ramsay, G. M., New York, N. Y. Globe and holder for gas-burners	June 17, 1873	583	185	3	679
	Ramsay, J. (See Kirkhart & Ramsay.)					
134, 929	Ramsay, R., Irwin's Station, Pa. Car-wheel	Jan. 14, 1873	398	127	3	52
137, 570	Ramsay, W. C., Wadesborough, N. C. Cotton-bale tie	Apr. 8, 1873	273	84		
	Ramsdell, A. J. (See Goodsell, L. A., assignor.)					
136, 671	Ramus, C. E., Lawrence, Kans. Treating pine-leaves for use in the arts	Mar. 11, 1873	296		3	278
137, 025	Rand, A. C., Aurora, Ill. Converting cast-iron into wrought-iron and steel	Mar. 18, 1873	603	200	3	312
138, 694	Same..... Steam-boiler furnace	May 6, 1873	200	63	3	513
142, 118	Same..... Stocking-supporter	Aug. 26, 1873	669	220	4	216
	Rand, E. K., Boston, Mass. (See Anderson, H. L., assignor.)					
140, 306	Rand, J. M., and J. F. McSherry, Baltimore, Md. Sofa	June 24, 1873	799	254	3	705
140, 307	Rand, J. M., and J. F. McSherry, Baltimore, Md. Sofa	June 24, 1873	800	254	3	705
144, 288	Raud, O. B., Kalamazoo, Mich. Door-latch	Nov. 4, 1873	97	32	4	486
	Same..... same.....					
	Randall, A. A. (See Randall, S. G., assignor.)					
	Randall, A. F., et al. (See Hunter, R. F., assignor.)					
136, 264	Randall, G. H., assignor to self and W. H. Woods, Forestville, Md. Combined atmospheric exhaust-pump and funnel	Feb. 25, 1873	811	262		228
	Same..... (Extension)	Apr. 5, 1873				
145, 240	Randall, G. W., Boston, Mass. Faucet	Dec. 2, 1873	180	62	4	599
137, 026	Randall, S. G., assignor to A. A. Randall, Providence, R. I. Seeding-machine	Mar. 18, 1873	604	200	3	312
	Randle & Heath. (See Smith, J. B., assignor.)					
144, 923	Randol, J. B., and C. W. Wright, New Almaden, Cal. Process for purifying quicksilver	Nov. 25, 1873	658		4	566
144, 924	Randolph, J. F., Edwardsburgh, Mich. Revolving sample-case	Nov. 25, 1873	658	223	4	566
138, 931	Randolph, J. H., jr., Bayou Goula, La. Wheel-cultivator	May 13, 1873	417	131	3	542
141, 949	Randolph, L., Jerseyville, Ill. Millstone-dressing machine	Aug. 19, 1873	499	164	4	193
138, 435	Range, G., New York, N. Y. Sewing-machine cabinet	Apr. 29, 1873	1,062	342	3	486
143, 382	Ranger, B., and J. B. Smiley, Brattleborough, Vt. Bracelet-fastening	Sept. 30, 1873	934	316	4	366
140, 728	Rank, A., Salem, Ohio. Grave-guard	July 8, 1873	341	115	4	47
141, 668	Same..... Harvester-rake	Aug. 12, 1873	243	77	4	163
	Rankin, A. (See Wilder, A. A., assignor.)					
137, 623	Rankin, A., Philadelphia, Pa. Hinge	Apr. 8, 1873	314	98	3	394
140, 539	Same..... Speaking-tube	July 1, 1873	168	57	4	22
141, 381	Same..... Master-key lock	July 29, 1873	979	318	4	123
140, 950	Rankin, H. P., Allegheny, Pa. Meat-chopper	July 15, 1873	548	184	4	72
135, 362	Rankin, J., Binghamton, N. Y. Corn-sheller	Jan. 28, 1873	810	{ 261 } { 262 }	3	113

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
143, 640	Rankin, J., Binghamton, N. Y. Mechanism for transmitting power.	Oct. 14, 1873	222	74, 75	4	407
145, 012	Same. Planing-machine.	Nov. 25, 1873	731	247	4	572
143, 299	Ranks, E. C., Boston, Mass. Reclining-chair.	Sept. 30, 1873	857	294	4	360
139, 477	Ranney, M. (See Johnson & Ranney.)					
135, 155	Ransom, A. F., Glen's Falls, N. Y. Bouquet-holder.	June 3, 1873	30	10	3	611
6, 726	Ransom, G. B., assignor to self and J. B. Clark, Chester, Conn. Coffin-plate.	Jan. 21, 1873	603	196	3	84
6, 727	Ransom, S. H., Albany, N. Y. Plates of cooking-stove (Design).	June 24, 1873			3	691
6, 728	Same. same (Design).	June 24, 1873			3	691
6, 729	Same. same (Design).	June 24, 1873			3	691
6, 730	Same. same (Design).	June 24, 1873			3	691
6, 731	Same. same (Design).	June 24, 1873			3	691
6, 732	Same. same (Design).	June 24, 1873			3	691
6, 733	Same. same (Design).	June 24, 1873			3	691
137, 095	Ransom, W. W., Buffalo, N. Y. Combined hose-pipe and sprinkler.	Mar. 25, 1873	677	225	3	329
145, 363	Ransome, E. L., San Francisco, Cal. Process of manufacturing artificial stone.	Dec. 9, 1873	292		4	621
142, 274	Rapp, B. R., assignor to self and W. H. Lawson, Westchester, Pa. Thill-coupling.	Aug. 26, 1873	797	263	4	227
5, 688	Rapley, J. W., Farmer Village, N. Y. Constructing wire fences (Reissue).	Dec. 16, 1873	613	201	4	659
136, 094	Same. Wire fence.	Feb. 18, 1873	647	212	3	204
142, 725	Raah, R. A., assignor of one-half interest to Tappay, Lumsden & Co., Petersburg, Va. Railway-switch stand.	Sept. 9, 1873	356	191	4	292
142, 726	Same. Straw-cutter.	Sept. 9, 1873	357	121	4	283
143, 383	Raay, W., Remington, Ind. Comb-frame.	Sept. 30, 1873	935	317	4	366
143, 942	Ratelle, J. C., Rochester, N. Y. Knife for trimming boot and shoe soles.	Sept. 16, 1873	551	187	4	309
140, 643	Rathbone, C. D., Belpre, Ohio. Pump.	July 8, 1873	873	92	4	42
141, 170	Rathbone, R., New York, N. Y. Paper-file.	July 22, 1873	765	251	4	98
138, 582	Raub, D. C., Saint Louis, Mo. Bedstead.	May 6, 1873	102	33	3	506
137, 720	Raub, J. L., assignor to C. Parker, Meriden, Conn. Tool for capping cartridges.	Apr. 8, 1873	406	124	3	401
141, 459	Rawle, G., Bristol and W. N. Evans, Bedminster, England. Manufacture of leather.	Aug. 5, 1873	45		4	139
143, 890	Rawson, A., Des Moines, Iowa. Furnace-grate bar.	Aug. 19, 1873	452	147	4	189
138, 044	Rawson, D. W., Croydon, N. H. Clothes-pounder.	Apr. 22, 1873	713	225	3	449
140, 729	Rawson, G. W., Cambridgeport, assignor to self and M. Hittinger, Somerville, Mass. Upright steam-boiler.	July 8, 1873	342	116	4	47
	Ray, B., et al. (See Harris, S. W., assignor.)					
142, 652	Same. (Reissue.)					
	Ray, D. B., New York, N. Y. Apparatus for arranging type for type-setting machines.	Sept. 9, 1873	297	97, 98	4	278
138, 160	Ray, G. O. (See Jonas, F., assignor.)					
6, 584	Ray, G. R., Bridgeport, Conn. Machine for dressing stone.	Apr. 22, 1873	760	241	3	453
6, 592	Ray, J. S., East Haddam, Conn. Coffin-handle socket (Design).	Apr. 2, 1873			3	387
6, 734	Same. same (Design).	Apr. 15, 1873			3	417
137, 958	Same. same (Design).	June 24, 1873			3	691
	Same. same (Design).	Apr. 15, 1873	615	194	3	431
	Ray, S., and M. R. Shalters, Alliance, Ohio. Harvester (Extension of No. 4,824).	Apr. 19, 1873			3	416
	Same. same (Extension of No. 4,826).	Apr. 19, 1873			3	416
	Rayburn, J., et al. (See Fordem, J. M., assignor.)					
	Same. (See Gross, E. L., assignor.)					
	Rayner, W. A., (See Lincoln & Rayner.)					
142, 042	Rayer, W. A., and W. S. Lincoln, Boston, Mass. Sewing-machine.	Aug. 19, 1873	584	192	4	199
139, 169	Raymond, A., Waupun, Wis. Wind-wheel.	May 20, 1873	664	208	3	574
	Raymond, J. (See Chamness & Vaughn, assignors.)					
145, 125	Raymond, J. P., Cincinnati, Ohio. Paper-bag machine.	Dec. 2, 1873	80	25, 26	4	592
145, 683	Raymond, L. F., Bordeaux, France. Portfolio.	Dec. 16, 1873	582	191	4	656
138, 284	Raynard, J. H. & B. W., and W. P. Hatch, Boston, Mass. Universal joiner.	Apr. 29, 1873	949	299	3	476
136, 546	Rayney, J., Brooklyn, N. Y., and W. Cairns, Jersey City, N. J., assignors to J. Rayney, Brooklyn, N. Y. Baker's oven.	Mar. 4, 1873	177	56, 57	3	259
144, 139	Rea, B. F., M. Pyke, and D. M. Rennoe, said Pyke assignor to said Rea and Rennoe, South Bend, Ind. Boring-machine.	Oct. 28, 1873	700	232	4	466
136, 364	Rea, F., Gloucester, N. J. Shuttle-binder.	Mar. 4, 1873	29	11	3	248
136, 457	Read, D., New York, N. Y. Tobacco-pouch.	Mar. 4, 1873	88	30	3	253
138, 932	Read, H. F., assignor of one-half interest to E. Beach, Brooklyn, N. Y. Wrench.	May 13, 1873	418	131	3	542
142, 727	Read, J. A., Enfield, near Sydney, New South Wales. Distant-heat indicator.	Sept. 9, 1873	358	121	4	283
144, 634	Read, J. M., Boston, Mass. Stove-pipe damper.	Nov. 18, 1873	405	136	4	534
144, 925	Read, R. F., San Francisco, Cal. Road-scraper.	Nov. 25, 1873	659	223	4	566
139, 261	Read, W., jr., Cambridge, assignor to W. Read, Boston, Mass. Inkstand.	May 27, 1873	740	235	3	588
135, 487	Read, W. S., Oakland, Cal. Black-board eraser.	Feb. 4, 1873	87	27	3	134
	Reading Hardware Manufacturing Company. (See Griscom, W. M., assignor.)					
142, 728	Reagan, W. J., assignor to Royer's Ford Iron Foundry, Royer's Ford, Pa. Mode of and apparatus for varnishing sad-irons, and other articles.	Sept. 9, 1873	261	192	4	283
135, 846	Reames, J. M., Oxford, N. C. Machine for distributing fertilizers.	Feb. 11, 1873	424	138	3	172
138, 193	Same. Machine for recessing tobacco-boxes.	Apr. 22, 1873	843	266	3	459
137, 959	Reams, C. F., Raleigh, N. C. Cotton-cultivator.	Apr. 15, 1873	616	194	3	431
134, 930	Reamy, T. J., Tarborough, N. C. Truck for moving buildings.	Jan. 14, 1873	399	127	3	52
137, 960	Rearden, J., assignor to S. W. Fowler, Brooklyn, N. Y. Towel-rack.	Apr. 15, 1873	617	194	3	432
144, 289	Reber, J., Nebraska, Ohio. Blackboard.	Nov. 4, 1873	98	33	4	486
5, 444	Rebstock, C., and J. Ottner, Bridgeport, Conn., assignors by mesne assignment to the Bridgeport Electro-Casting Company. Mold for casting knobs (Reissue).	June 10, 1873	383	119	3	655
5, 445	Same. Door-knob. (Reissue).	June 10, 1873	384	119	3	656
134, 931	Rebstock, C., and J. Ottner, Bridgeport, Conn. Molds for casting metal knobs.	Jan. 14, 1873	400	122	3	53
143, 253	Reddick, W. A., Niles, Mich. Harness-pad.	Sept. 30, 1873	818	280	4	357
145, 684	Reder, L., Wilmington, Del. Tool-holder for lathes.	Dec. 16, 1873	583	191	4	656
141, 589	Redfearn, E., Philadelphia, Pa. Loom-shedding mechanism.	Aug. 5, 1873	152	49	4	147
139, 972	Redfern, S., Churchville, N. Y. Spike.	June 17, 1873	490	155	3	671
	Redheffer, J., jr., et al. (See Redheffer, J., assignor.)					
	Redheffer, J., jr. (See Redheffer, W. J., jr., & T. G., and Smith.)					
135, 847	Redheffer, J., Philadelphia, Pa., assignor to W. & J., jr., and T. G. Redheffer, of Kansas City, Mo. Tin-can soldering-machine.	Feb. 11, 1873	425	138	3	172
136, 265	Redheffer, J., Kansas City, Mo. Machine for holding and soldering cans.	Feb. 25, 1873	812	262	3	229
	Redheffer, T. G., et al. (See Redheffer, J., assignor.)					
	Redheffer, T. G. (See Redheffer, W. J., jr., & T. G., and Smith.)					
	Redheffer, W., et al. (See Redheffer, J., assignor.)					
137, 097	Redheffer, W. J., jr., & T. G., Kansas City, Mo., and L. A. Smith, Pawnee, Kans., said Smith assignor to W. J., jr., and T. G. Redheffer. Machine for holding and soldering cans.	Mar. 18, 1873	605	200	3	312
	Redway & Burton. (See Redway, A. J., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
135, 587	Redway, A. J., assignor to Redway & Burton, Cincinnati, Ohio. Lining for fire-places.	Feb. 4, 1873	185	57	3	142
137, 148	Reed, A., assignor of one-half interest to W. T. Cooley, Chicago, Ill. Extension-table.	Mar. 25, 1873	722	240	3	333
	Reed & Barton. (See Brabrook, G., assignor.)					
	Same. (See Gill, G., assignor.) (Design.)					
135, 156	Reed, B. D., Westfield, Mass. Butter-knife rest.	Jan. 21, 1873	604	196	3	84
136, 762	Reed, C. W., Chagrin Falls, Ohio. Sewing-machine cover.	Mar. 11, 1873	370	{ 122 } { 123 }	3	284
	Reed, D. A., et al. (See Gray, L. N. B., assignor.)					
136, 763	Reed, G. A., New York, N. Y. Head-lining for barrels.	Mar. 11, 1873	370	123	3	294
145, 241	Reed, G. D., assignor of two-thirds interest to J. E. Graves and W. Balley, Springfield, Vt. Guitar.	Dec. 2, 1873	181	62	4	599
139, 735	Reed, G. P., Malden, Mass. Stem winding and setting watch.	June 10, 1873	279	87	3	647
138, 528	Reed, G. P., and H. B. Day, Malden, Mass. Combined watch-key and screw-driver.	May 6, 1873	55	19	3	502
139, 613	Reed, G. W., Middlesex, Pa. Dumping-apparatus.	June 3, 1873	147	49	3	621
144, 140	Reed, H. J. O., Salem, Mass. Floor-clamp.	Oct. 28, 1873	701	232	4	466
141, 460	Reed, H. O., Boston, Mass. Screw-cutting machine.	Aug. 5, 1873	46	14	4	139
142, 813	Same. Table for sawing-machines.	Sept. 16, 1873	443	150	4	300
140, 644	Reed, J. A., Dunellen, N. J. Nut-lock.	July 8, 1873	273	92	4	42
137, 149	Reed, J. J., Lyons, Iowa. Can-opener.	Mar. 25, 1873	723	240	3	333
142, 943	Reed, J. V., New Albany, Ind. Car-coupling.	Sept. 16, 1873	532	187	4	309
135, 229	Reed, J. W., Careyville, Mo. Plow.	Jan. 22, 1873	743	240	3	107
139, 815	Reed, L., Allegheny, Pa. Washing-machine.	June 10, 1873	352	109	3	653
139, 736	Reed, N. F., North Wolcott, Vt. Washing-machine.	June 10, 1873	282	87	3	647
144, 476	Reed, S., Liberty, Pa. Car-coupling.	Nov. 11, 1873	262	88	4	511
136, 266	Reed, S. H., and T. Thompson, Fredericktown, Ohio. Harvester-cutter.	Feb. 25, 1873	813	262	3	229
144, 794	Reed, T. L., and E. F. Phillips, Providence, R. I. Insulating and finishing compound for conducting-wires.	Nov. 18, 1873	538	.....	4	545
140, 540	Reeder, C. V., San José, Cal. Bed-bottom.	July 1, 1873	168	57	4	22
135, 009	Reeder, O., Baltimore, Md. Windless.	Jan. 21, 1873	483	155	3	74
140, 730	Rees, J. S., Phillipsburgh, N. J. Puddling-furnace door.	July 8, 1873	342	116	4	47
142, 867	Reese, A., Pittsburgh, Pa. Railway-car stove.	Sept. 16, 1873	487	166	4	304
136, 267	Reese, A., and J., Pittsburgh, Pa. Machine for corrugating sheet-iron.	Feb. 25, 1873	813	262	3	229
	Reese, A. R. (See Shireman, J. H., assignor.)					
	Reese, C. M. (See Reese, E., assignor.)					
135, 363	Reese, E., assignor to C. M. Reese, Eutaw, Ala. Plow.	Jan. 28, 1873	812	262	3	113
137, 796	Reese, E., Mahanoy City, Pa. Steam-pump and condenser.	Apr. 15, 1873	481	150	3	420
137, 721	Reese, F., Calera, Ala. Broom.	Apr. 8, 1873	406	125	3	401
144, 699	Reese, G. F. C., Brooklyn, assignor of one-half interest to R. R. Sinclair, New York, N. Y. Method of fastening artificial teeth.	Nov. 18, 1873	460	156	4	538
	Reese, J. (See Reese, A., and J.)					
	Reese, T. H., et al. (See Furguson, W., assignor.)					
	Reeve, A. (See Tunison & Reeve.)					
142, 814	Reeve, T., Brooklyn, N. Y. Belt-shifting mechanism for planers and lathes.	Sept. 16, 1873	443	150	4	300
	Reeves, D., et al. (See Clark, T. C., assignor.)					
142, 583	Reeves, J., Cincinnati, Ohio. Coupling for connecting cradles to rocking-chairs.	Sept. 9, 1873	941	79	4	273
138, 529	Reeves, S. H., New York, N. Y. Spring bed-bottom.	May 6, 1873	56	19	3	502
	Reeves, W. H. (See Way, T. R., assignor.)					
138, 436	Regan, H. W., Renovo, Pa. Lubricator.	Apr. 29, 1873	1,083	342	3	486
142, 350	Register, J., and W. H. Bowen, Baltimore, Md. Stop-cock.	Sept. 2, 1873	25	10	4	244
5, 260	Reh fuss, G., assignor to American Button-Hole and Overseaming Sewing-machine Com-pany, Philadelphia, Pa. Sewing-machine.	Jan. 28, 1873	845	{ 272 } { 273 }	3	115
	Same. (Design.)	Jan. 28, 1873	.....	.....	3	100
6, 375	Same. Shuttle for sewing-machines.	Mar. 18, 1873	607	201	3	312
137, 028	Same. same	May 27, 1873	882	283	3	600
139, 421	Same. same					
	Reichert, G. A., jr., et al. (See Shoemaker, D., assignor.)					
	Reichert, J. H., et al. (See Shoemaker, D., assignor.)					
138, 345	Reichhardt, P. H., & M. Schnapp, Brunswick, Mo. Automatic-fan.	Apr. 29, 1873	1,004	316	3	480
141, 171	Reid, A., assignor to self and W. Reid, New York, N. Y. Self-closing hatchway.	July 22, 1873	765	251	4	98
139, 816	Reid, A. H., Brandywine Manor, Pa. Scraper.	June 10, 1873	353	109	3	653
145, 242	Same. Curry-comb.	Dec. 2, 1873	182	63	4	600
141, 817	Reid, C. H., Danbury, Conn. Lathe-chuck.	Aug. 12, 1873	373	122	4	173
142, 043	Same. Button-fastening.	Aug. 19, 1873	586	192	4	199
	Reid, L. (See Phillips & Reid.)					
141, 728	Reid, S., Chicago, Ill. Balance slide-valve.	Aug. 12, 1873	290	95	4	166
	Reid, W. (See Reid, A., assignor.)					
135, 848	Reiff, W. H., Philadelphia, Pa. Show-case.	Feb. 11, 1873	426	138	3	172
143, 464	Reifschneider, F., New York, N. Y. Picture-frame.	Oct. 7, 1873	57	20	4	385
145, 447	Reigart, J. F., assignor to self and E. N. Darling, Washington, D. C. Endless driving-belt.	Dec. 9, 1873	363	121	4	627
145, 685	Reiling, A., Bellevue, Iowa. Bridge.	Dec. 16, 1873	583	191	4	657
139, 079	Reilly, J. O., Jersey City, N. J., assignor of one-half interest to H. M. Martin, New York, N. Y. Hand-punch and cutting-nippers.	May 30, 1873	561	176	3	566
145, 126	Reilly, W., Newark, N. J. Extensible-brace for supporting trenches.	Dec. 2, 1873	82	27	4	592
143, 419	Rein, J., & J. Stock, New York, N. Y. Bullet.	Oct. 7, 1873	22	9	4	382
144, 795	Reinemer, W., Homburg, Prussia. Wash-boiler.	Nov. 18, 1873	539	183	4	545
136, 095	Reiner, H. F., Blairsville, Pa., assignor to self and F. Lofink, Pittsburgh, Pa. Bottle-stopper.	Feb. 18, 1873	648	212	3	204
	Reiners, J., et al. (See Buckner, C., assignor.)					
	Reinhardt, C. (See Cyran & Reinhardt.)					
143, 330	Reinhardt, J., New York, N. Y. Hobby-horse.	Oct. 21, 1873	497	168	4	439
138, 285	Reinig, J., Fond du Lac, Wis. Wash-boiler.	Apr. 29, 1863	953	300	3	476
136, 385	Reinking, C. D., Des Moines, Iowa. Wash-boiler attachment.	Mar. 4, 1873	30	11	3	248
	Reinoehl, J., jr. (See Melinger, C. K., assignor.)					
140, 842	Rembert, S. S., Memphis, Tenn. Pencil-case.	July 15, 1873	444	151	4	64
135, 468	Remhof, C., Brooklyn, N. Y. Combined tobacco-box and match-box.	Feb. 4, 1873	88	27	3	134
	Remington, E., & Sons. (See Elliot, W. H., assignor.) (Reissue.)					
	Same. (See Richardson, J. C., assignor.)					
	Same. (See Smoot, W., assignor.)					
144, 227	Remington, G. H., B. D. Thayer, and J. P. Manton, Providence, R. I. Ship's windlass.	Nov. 4, 1873	52	16	4	482
145, 686	Renaud, E., Washington, D. C. Welding copper.	Dec. 16, 1873	584	.....	4	657
135, 588	Render, F., EtcHELLS, England. Flour-bolt.	Feb. 4, 1873	185	58	3	142
	Renevey, A. (See Tailbouis & Renevey.)					
138, 933	Reniff, A. B., Bingham's Mills, N. Y. Water-wheel.	May 13, 1873	419	131	3	542
6, 207	Reniff, R., Bloomington, Ill. Safety-stirrup.	Aug. 19, 1873	.....	.....	4	185
141, 461	Renker, L., Hoboken, N. J. Device for locking drawers.	Aug. 5, 1873	47	14	4	139
	Rennoe, D. M. (See Rea, Pyke, & Rennoe.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 842	Renshaw, D., Philadelphia, Pa. Sectional steam-generator	Oct. 21, 1873	426	142	4	433
143, 843	Same..... same	Oct. 21, 1873	427	142	4	433
143, 844	Same..... same	Oct. 21, 1873	428	143	4	433
143, 845	Same..... same	Oct. 21, 1873	429	143	4	433
143, 846	Same..... Superheater	Oct. 21, 1873	430	143	4	433
136, 617	Renshaw, G. P., Park Valley, England. Hydraulic railway-brake	Mar. 11, 1873	248	84	3	274
138, 934	Rensink, J. D., Bridgeport, N. J. Potato-digger	May 13, 1873	420	131	3	542
138, 530	Renton, G., Boston, assignor to C. H. Isburgh, Melrose, Mass. Harness	May 6, 1873	57	19	3	502
139, 973	Renwick, H. B. (See Worthen & Renwick) (Extension.)					
136, 547	Replogle, M., Moulton, Iowa. Hopper for grinding-mills	June 17, 1873	491	155	3	671
142, 815	Replogle, S. B., Roaring Springs, Pa. Car-coupling	Mar. 4, 1873	178	57	3	259
139, 817	Same..... same	Sept. 16, 1873	444	150	4	300
	Reessler, B. W. S., & C. H. Tipton, assignors to selves and R. C. Cheeseman, Hagerstown, Md. Harvester	June 10, 1873	354	109	3	653
	Reessler, C. H. (See Reessler, B. W. S. and C. H.)					
139, 190	Restell, T., Birmingham, England. Breech-loading fire-arm	May 20, 1873	665	208	3	575
143, 420	Retowsky, R. R., Baltimore, Md. Apparatus for cleaning privies, sinks, &c.	Oct. 7, 1873	23	9	4	382
142, 512	Reuter, C., Cincinnati, Ohio. Printer's rule	Sept. 2, 1873	171	55	4	255
	Reynders, J., et al. (See Letter, J., assignor.)					
	Reynolds & Reynolds. (See Reynolds, I., assignor.)					
135, 722	Reynolds, C. H., assignor to self and H. C. Richardson, Williamsburgh, N. Y. Self-closing hatch	Feb. 11, 1873	317	101	3	164
143, 641	Reynolds, D., Prospect, Md. Cotton and hay press	Oct. 14, 1873	224	75	4	407
145, 243	Reynolds, D. M., Port Deposit, Md. Gas-extinguisher	Dec. 2, 1873	182	63	4	600
144, 796	Reynolds, I., assignor to Reynolds & Reynolds, Dayton, Ohio. Lithographic printing-form					
142, 729	Reynolds, L. S., Minneapolis, Minn. Middlings-purifier	Nov. 18, 1873	540	183	4	545
140, 951	Reynolds, R. C., Lawrence, Mass. Apparatus for producing intermittent rotative movements	Sept. 9, 1873	362	122	4	283
138, 935	Reynolds, S., Allegheny, Pa. Snap-hook	July 15, 1873	549	184	4	72
139, 614	Reynolds, S., Pierpont Manor, N. Y. Hoisting-machine	May 13, 1873	421	132	3	542
145, 013	Reynolds, T. J., Irvington, Ill. Railway-switch	June 3, 1873	142	49	3	621
138, 583	Reynolds, W. H., New Orleans, La. Cotton-press	Nov. 25, 1873	733	247	4	572
142, 730	Rhind, F., Brooklyn, N. Y. Lamp	May 6, 1873	103	33	3	506
145, 590	Rhineland, F. W., New York, N. Y. Boot and shoe tip	Sept. 9, 1873	363	122	4	283
141, 950	Rhoades, L., assignor of one-half interest to W. E. Clarke, Providence, R. I. Stopper for bottles	Dec. 16, 1873	502	165	4	650
132, 286	Rhoads, T., Ottawa, Ill. Horse hay-fork	Aug. 19, 1873	500	165	4	193
	Rhode Island Horseshoe Company. (See Perkins, C. H., assignor.)	Apr. 29, 1873	953	300	3	476
	Rhodes, D. H. (See Bannibr & Rhodes.)					
134, 770	Rhodes, E., Jr., Clyde, Ohio. Reaction pump	Jan. 14, 1873	258	84	3	41
	Rhodes, J. T., trustee. (See Vanstoue, S., assignor.)					
	Rhodes, N. B. (See Sinclair, J. D., assignor.)					
135, 290	Rhodes, W. E., Darlington Court-House, South Carolina. Cotton-planter	Jan. 28, 1873	744	240	3	107
	Rhorer, G., et al. (See Rigby, J., assignor.)					
	Rice, B. A. (See Thompson & Rice.)					
	Rice, Barton & Fales Machine and Iron Company. (See Fales, J. E., assignor.)					
	Rice, C. J. (See Nye, S. R., assignor.)					
141, 818	Rice, D., Richfield, Ill. Bee-hive	Aug. 12, 1873	374	122	4	173
134, 771	Rice, D. H., Lowell, Mass. Spindle for spinning-machines	Jan. 14, 1873	259	85	3	41
135, 939	Same..... same	Feb. 18, 1873	513	167	3	193
	Rice, G. (See Rice, W. A. & G.)					
137, 096	Rice, G. F., Worcester, Mass. Collar	Mar. 25, 1873	678	225	3	329
137, 723	Rice, G. H., Norwalk, Conn. Blacking-case	Apr. 8, 1873	407	125	3	401
	Rice, J. (See Hunter & Rice.)					
142, 275	Rice, J., Buffalo, N. Y. Ponton for raising sunken vessels	Aug. 26, 1873	798	263	4	227
139, 262	Rice, J. F., Fitchburgh, Mass. Hanging signal-cords of railway-cars	May 27, 1873	740	235	3	588
143, 300	Rice, O. P., New York, N. Y. Vehicle axle-box	Sept. 30, 1873	858	294	4	361
137, 864	Rice, S. W., Roseburgh, Oreg. Animal cage-trap	Apr. 15, 1873	538	167	3	425
142, 584	Rice, T., Boston, Mass. Splitting-gage	Sept. 9, 1873	242	79	4	273
139, 615	Rice, W., Fitchburgh, Mass. Cider-mill	June 3, 1873	149	49	3	621
139, 616	Rice, W. A., Bristol, N. H. Machine for cutting webbing	June 3, 1873	150	50	3	621
143, 717	Rice, W. A. & G., Framingham, Mass. Map exhibitor and cabinet	Oct. 14, 1873	298	98, 99	4	413
139, 918	Rice, W. E., & J. Barnes, Brooklyn, N. Y. Wash-boiler attachment	June 17, 1873	452	140	3	668
	Rice, W. M. (See Gregory, C. A., assignor.)					
142, 119	Rich, G. H., Geneva, Ill. Machine for separating cockle, &c., from wheat	Aug. 26, 1873	670	220	4	216
	Rich, H. (See Choat & Rich.)					
	Rich, J. J. (See Lee, J., assignor.)					
	Rich, J. J., et al. (See Smith & Lee, assignors.)					
136, 268	Rich, P. S., Avalanche, Wis. Wagon body and seat	Feb. 25, 1873	814	263	3	229
143, 187	Richard, E. O., Quebec, Canada, assignor of one-half interest to J. E. Richard, Columbia, S. C., and J. C. Richard, Quebec, Canada. Car-brake	Sept. 23, 1873	751	260	4	336
	Richard, J. C., et al. (See Richard, E. O., assignor.)					
	Richard, J. E., et al. (See Richard, E. O., assignor.)					
138, 194	Richard, J. E., Columbia, S. C. Belt-fastening	Apr. 22, 1873	843	267	3	459
	Richards & Fox. (See Luther, J., assignor.)					
136, 867	Richards, A. W., Indianola, Iowa. Perambulator	Mar. 18, 1873	468	155	3	301
142, 731	Richards, E. G., Detroit, Mich. Cutter-head for planing-machines	Sept. 9, 1873	364	123	4	283
142, 044	Richards, F. H., New Britain, Conn. Machine for forging horseshoe-nails	Aug. 19, 1873	586	192	4	199
144, 926	Same..... Door-spring	Nov. 25, 1873	660	224	4	566
	Richards, G. (See Richards, J. & G.)					
	Richards, G. H. (See Curtis, D., assignor.)					
	Richards, G. H., et al. (See Curtis, D., assignor.)					
137, 483	Richards, H. A., Chicago, Ill. Fire-escape	Apr. 1, 1873	184	58	3	372
	Richards, H. S., et al. (See Steel, R., assignor.)					
143, 531	Richards, J., Philadelphia, Pa. Gaining-machine	Oct. 7, 1873	115	39	4	390
144, 411	Same..... Tenoning-machine	Nov. 11, 1873	209	70	4	507
143, 254	Richards, J. & G., Philadelphia, Pa. Apparatus for collecting and transporting grain and other materials	Sept. 30, 1873	819	281	4	357
143, 931	Richards, J., and J. Meehl, Philadelphia, Pa. Spark-arrester	Oct. 21, 1873	498	168	4	439

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143, 532	Richards, J., and L. H. Berry, Philadelphia, Pa. Tenoning-machine.....	Oct. 7, 1873	116	39	4	390
	Richards, J. S., et al. (See Steel, R., assignor.)					
135, 489	Richards, L. H., Rising Sun, Md. Hand corn-planter.....	Feb. 4, 1873	88	28	3	134
135, 589	Richards, P. W., Boston Highlands, Mass. Stuffing-box for piston-rods, &c.....	Feb. 4, 1873	186	58	3	142
139, 422	Richards, W., Birmingham, England. Breech-loading fire-arm.....	May 27, 1873	883	284	3	600
136, 939	Richardson, C. P., Groveton, N. H. Grindstone trough and support.....	Mar. 18, 1873	530	175	3	306
145, 687	Richardson, E. F., assignor to G. A. Richardson, Reading, Mass. Sewing-machine.....	Dec. 16, 1873	584	192	4	657
136, 386	Richardson, F. B., Boston, Mass. Device for agitating salt in cruets.....	Mar. 4, 1873	31	11	3	248
142, 276	Richardson, F. G., Brooklyn, N. Y. Turpentine-filter.....	Aug. 26, 1873	799	264	4	227
137, 239	Richardson, G., Lowell, Mass. Spindle-bolster.....	Mar. 25, 1873	803	266	3	339
143, 785	Same..... same.....	Oct. 21, 1873	378	125	4	429
	Richardson, G. A. (See Richardson, E. F., assignor.)					
	Richardson, G. R. (See Behel, J., assignor.)					
139, 478	Richardson, G. R., Earlville, and J. Behel, Rockford, Ill. Cultivator.....	June 3, 1873	31	10	3	611
140, 952	Richardson, G. R., Earlville Ill. Railway-tie.....	July 15, 1873	550	184	4	72
136, 618	Richardson, G. W., Troy, N. Y. Relief-valve for locomotives.....	Mar. 11, 1873	250	84	3	274
136, 619	Same..... Exhaust-nozzle for locomotives.....	Mar. 11, 1873	251	84	3	275
141, 078	Richardson, G. W., Columbus, Ky. Sash-holder.....	July 22, 1873	679	227	4	92
145, 591	Richardson, G. W., assignor to B. and G. H. Starbuck, Troy, N. Y. Feed-water heater.....	Dec. 16, 1873	503	165	4	650
	Richardson, H. C. (See Reynolds, C. H., assignor.)					
143, 421	Richardson, H. M., Boston, Mass. Child's carriage.....	Oct. 7, 1873	23	9	4	362
	Richardson, J. (See Richardson, J. D., assignor.)					
140, 164	Richardson, J. and T. D., New York, N. Y. Gas-burner.....	June 24, 1873	680	214	3	695
140, 165	Same..... Gas pipe and fixtures.....	June 24, 1873	681	214	3	695
142, 120	Same..... Cocks for controlling discharge through two pipes.....	Aug. 26, 1873	671	221	4	216
136, 620	Richardson, J. C., New Haven, Conn. Machine for rolling carriage-axles.....	Mar. 11, 1873	232	85	3	275
143, 094	Richardson, J. C., Philadelphia, Pa., assignor of one-half interest to E. Remington & Sons, Illion, N. Y. Machine for rolling sword-blades.....	Sept. 23, 1873	683	235	4	330
145, 526	Richardson, J. C., Philadelphia, Pa. Machine for rolling carriage-axles.....	Sept. 16, 1873	451	147	4	645
138, 437	Richardson, J. D., assignor to self, L. C. Lord, and M. G. Howe, Houston, Tex. Record- } ing-instrument for locomotives.....	Apr. 29, 1873	1,084	342	3	487
138, 438	Richardson, J. D., Houston, Tex., assignor to self and J. Richardson, Cincinnati, Ohio. } Carriage-spring.....	Apr. 29, 1873	1,086	343	3	487
139, 080	Richardson, J. H., assignor of one-half interest to D. Hardie, Philadelphia, Pa. Chim- } ney-cowl.....	May 20, 1873	561	176	3	566
135, 157	Richardson, J. J., Marion, S. C. Truck-barrow.....	Jan. 21, 1873	604	196	3	84
141, 891	Richardson, J. J., Brooklyn, N. Y. Grate for stoves and furnaces.....	Aug. 19, 1873	453	148	4	189
5, 665	Richardson, J. R., Max Meadows, Va. Locomotive-wheel..... (Reissue)	Nov. 18, 1873	568	192	4	548
	Richardson, J. W. (See Arnaud, J. J., assignor.)					
	Richardson, L. (See Chinnock, G. H., assignor.)					
140, 434	Richardson, L. B., Carrollton, Ill. Plow.....	July 1, 1873	76	27	4	14
136, 672	Richardson, L. T., Auburn, N. Y. Die for forging hoe-plates.....	Mar. 11, 1873	297	99	3	278
141, 951	Richardson, L. W., Roscoe, Ill. Wheel-plow.....	Aug. 19, 1873	501	165	4	193
	Richardson, T. D. (See Richardson, J. and T. D.)					
137, 865	Richardson, T. D., North Providence, R. I. Motor-engine.....	Apr. 15, 1873	539	168	3	425
	Richardson, W. A. (See Richardson, W. W., assignor.)					
142, 868	Richardson, W. D., Pawtucket, R. I. Painted cloth-cover.....	Sept. 16, 1873	488	166	4	304
135, 490	Richardson, W. H., Stillwater, Minn. Device for pitching boats.....	Feb. 4, 1873	89	28	3	134
140, 645	Richardson, W. H., Fort Smith, Ark. Stitching-gauge for the blind.....	July 8, 1873	274	93	4	42
	Richardson, W. W. (See Muuroe, F. B., assignor.)					
141, 952	Richardson, W. W., Ypsilanti, Mich. Whip-socket fastener.....	Aug. 19, 1873	502	165	4	193
141, 953	Richardson, W. W., assignor to self and W. A. Richardson, Ypsilanti, Mich. Whip- } socket fastening.....	Aug. 19, 1873	502	165	4	193
	Richman, H. C. (See Peck & Richman.)					
145, 899	Richmond, A. K., Boston, Mass. Derrick.....	Dec. 23, 1873	780	255	4	684
145, 448	Richter, E. H., Taunton, Mass. Composition for fire-brick, stove-lining, &c.....	Dec. 9, 1873	364	121	4	627
145, 449	Same..... Apparatus for granulating zinc.....	Dec. 9, 1873	365	121	4	627
145, 450	Richter, E. H. and F. G., Taunton, Mass. Zinc-furnace.....	Dec. 9, 1873	365	122	4	627
	Richter, F. G. (See Richter, E. H. and F. G.)					
135, 364	Richter, W., Eintrachtshutte, Germany. Machine for breaking metal bars.....	Jan. 28, 1873	813	262	3	113
138, 195	Rick, A. F., Chicago, Ill. Cooler for beer.....	Apr. 22, 1873	844	267	3	459
145, 816	Rickards, J. B., Kilburn, assignor to G. F. Lyde, Manchester, England. Bleaching dam- } aged cotton.....	Dec. 23, 1873	706	233	4	679
135, 729	Rickart, A., Schoharie, N. Y. Harvester.....	Feb. 11, 1873	318	101	3	165
138, 196	Ricker, C. H., Dover, N. H. Plow-boot.....	Apr. 22, 1873	845	267	3	459
144, 141	Ricketts, W., Cincinnati, Ohio. Hydraulic cushion for water-pipes.....	Oct. 28, 1873	701	233	4	466
	Ricketts, D., et al. (See Stephenson, W. O., assignor.)					
	Riddel, T. E. (See Arnaud, J. J., assignor.)					
143, 033	Riddle, G. T., Saint Louis, Mo. Sawing machine.....	Sept. 23, 1873	634	216	4	326
5, 340	Rider, A. K., New York, N. Y. Hot-air engine..... (Reissue)	Mar. 25, 1873	851	279	3	343
141, 382	Rider, A. K., assignor to G. C. Wooster, J. Gowdy, and A. K. Rider, Walden, N. Y. Door- } hanger.....	July 29, 1873	980	318	4	123
143, 255	Rider, A. K., New York, N. Y. Piston and packing.....	Sept. 30, 1873	820	281	4	357
141, 383	Rider, J., Newark, Ohio. Breech-loading fire-arm.....	July 29, 1873	981	319	4	123
141, 384	Same..... same.....	July 29, 1873	983	319	4	123
141, 590	Same..... Magazine fire-arm.....	Aug. 5, 1873	153	49	4	147
135, 443	Rider, J. F. C., South New Market, N. H. Machine for making spools.....	Feb. 4, 1873	46	14, 15	2	131
138, 940	Rider, J. S., Sing Sing, N. Y. Bolt-cutter.....	May 13, 1873	424	133	3	542
144, 412	Rider, L. P., Pittsburgh, Pa. Car-coupling.....	Nov. 11, 1873	210	71	4	507
	Rider, T. J. (See Earle & Rider.)					
144, 290	Ridler, G., Rickardsville, Iowa. Churn-dasher.....	Nov. 4, 1873	99	33	4	466
	Riedel, E., et al. (See Von Culin, M., assignor.)					
141, 954	Rieger, C., Morrisania, N. Y. Extension-table.....	Aug. 19, 1873	503	166	4	193
	Riehlé Brothers. (See Olsen, T., assignor.)					
135, 365	Rife, O. C., assignor of one-half interest to J. M. Burge, North Manchester, Ind. Dust- } guard for car-windows.....	Jan. 28, 1873	816	263	3	113
140, 541	Rife, O. C., North Manchester, Ind. Ventilator and cinder and dust guard for car- } windows.....	July 1, 1873	169	57	4	22
135, 666	Rigby, J., Portsmouth, Ohio. Apparatus for the manufacture of gas from hydrocarbons } Rigby, S., assignor of two-thirds interest to J. F. Johnson and G. Rborer, Cincinnati, } Ohio. Gas-burner.....	Feb. 11, 1873	264	83	3	160
139, 919		June 17, 1873	452	141	3	668
135, 366	Rigell, M., Newton, Ala. Insect-trap.....	Jan. 28, 1873	816	264	3	113

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 520	Rigg, J., Cleveland, Ohio. Pipe-wrench.	June 3, 1873	65	92	3	614
138, 936	Riggins, G. B., New York, N. Y. Steam-heater.	May 13, 1873	421	132	3	542
	Riggs, J. W., Brooklyn, N. Y. Truss-spring. (Extension).	Jan. 18, 1873	31	12	3	37
136, 387	Same. same	Mar. 4, 1873	31	12	3	248
139, 191	Riggbee, J., Chapel Hill, N. C. Washing-machine.	May 20, 1873	666	208	3	575
6, 361	Righter, C., assignor to J. Gay, Philadelphia, Pa. Carpet. (Design).	Jan. 21, 1873			3	71
6, 578	Righter, C. A., assignor to Dornan, Maybin & Co., Philadelphia, Pa. Carpet. (Design).	Apr. 8, 1873			3	387
6, 579	Same. same. (Design).	Apr. 8, 1873			3	387
6, 655	Same. same. (Design).	May 20, 1873			3	559
6, 819	Same. same. (Design).	Aug. 19, 1873			4	185
6, 820	Same. same. (Design).	Aug. 19, 1873			4	185
6, 821	Same. same. (Design).	Aug. 19, 1873			4	185
6, 822	Same. same. (Design).	Aug. 19, 1873			4	185
6, 823	Same. same. (Design).	Aug. 19, 1873			4	185
6, 984	Same. same. (Design).	Nov. 4, 1873			4	478
140, 076	Rightor, W. R., Helena, Ark. Elevator.	June 17, 1873	583	185	3	679
142, 732	Same. Apparatus for relieving grounded vessels.	Sept. 9, 1873	365	123	4	283
143, 718	Rigney, J. (See Kealy & Rigney.)					
	Riker, S. L., New York, N. Y. Hand-tool for the manufacture of heels.	Oct. 14, 1873	302	99	4	413
143, 301	Riley & Maitland. (See Berndt, B., assignor.)					
137, 240	Riley, E., Pontnewynydd, England. Puddling-furnace.	Sept. 30, 1873	859	294	4	361
137, 723	Riley, J. B., Muncy, Pa. Feather-renovator.	Mar. 25, 1873	809	266	3	339
	Riley, W., Madison County, Miss. Wood fence.	Apr. 8, 1873	407	125	3	401
140, 792	Rinehart, W. D. (See Jackson, R. A., assignor.)					
140, 843	Ring, J., Saint Louis, Mo. Apparatus for cooling storage-rooms.	July 15, 1873	402	137	4	60
139, 479	Ring, J. L., Mount Pulaski, Ill. Heating-stove.	July 15, 1873	445	151	4	64
142, 121	Ring, W., Owen County, Ind. Device for leveling millstones.	June 3, 1873	32	10	3	611
140, 542	Ringstad, I. G., Decorah, Iowa. Machine for sawing wood.	Aug. 26, 1873	672	221	4	216
5, 666	Ringwalt, J. L., Philadelphia, Pa. Typographical printing-plate.	July 1, 1873	170	57	4	22
139, 061	Ripley, D. C., Pittsburgh, Pa. Salt and pepper dredge. (Reissue).	Nov. 18, 1873	549	193	4	548
140, 793	Same. Jelly-glass.	May 20, 1873	562	176	3	566
142, 351	Same. Molasses-pitcher.	July 15, 1873	403	137	4	60
135, 367	Same. Salt and pepper dredge.	Sept. 2, 1873	26	10	4	244
142, 277	Risdon, T. H., and W. W. Tyler, Mount Holly, N. J. Turbine water-wheel.	Jan. 28, 1873	817	264	3	113
139, 330	Risley, M., Springfield, Mass. Eye-glass.	Aug. 26, 1873	800	264	4	227
	Rissinger, D., Mahanoy City, Pa. Cross-paddle propeller-fan for ventilating mines.	May 27, 1873	797	254	3	593
	Richey, D., et al. (See Salzer, W. H., assignor.)					
143, 847	Ritchie, F. (See Vedder & Ritchie.) (Design).					
135, 730	Same. (See Vedder, Ritchie & Heister.) (Design).					
136, 548	Ritchie, F. J., Edinburgh, Scotland. Electric clock.	Oct. 21, 1873	432	144	4	434
139, 082	Ritchie, P. C., New York, N. Y. Machine for stiffening netting for bonnet-frames, &c.	Feb. 11, 1873	318	101	3	165
136, 182	Riter, J. L., Brownsville, Ind. School-furniture.	Mar. 4, 1873	178	57	3	259
141, 172	Rittenhouse, G. E., Akron, Ohio. Door-check.	May 20, 1873	563	176	3	566
140, 308	Rittenhouse, S. B., Larwill, Ind. Lath-machine.	Feb. 25, 1873	740	238	3	223
144, 477	Ritty, S., Dayton, Ohio. Steam-boiler.	July 22, 1873	766	252	4	99
142, 278	Rivers, T. L., Newark, N. J. Trunk-lock.	June 24, 1873	801	254	3	705
136, 868	Riviere, A. (See Andrews & Riviere.)					
140, 543	Riviere, A., Barnesville, Ga. Plow.	Nov. 11, 1873	263	89	4	511
137, 961	Roache, J. E., New York, N. Y. Clothes-line support.	Aug. 26, 1873	800	264	4	227
144, 357	Roat, E., Buffalo, N. Y. Lubricating compound.	Mar. 18, 1873	468	51	3	301
143, 256	Robb, W. D., New Philadelphia, Ohio. Fire-place.	July 1, 1873	171	58	4	22
135, 010	Robbins, C., assignor to self and J. A. Robbins, Charlestown, Mass. Baker's oven.	Apr. 15, 1873	617	{ 194 195 }	3	432
141, 462	Robbins, E. Y., Cincinnati, Ohio. Device for retaining fire in stoves.	Nov. 4, 1873	155	51	4	491
142, 513	Robbins, H. R., Baltimore, Md. Fire-place heating-stove. (Extension).	Mar. 29, 1873				
136, 005	Robbins, H. T., Hyde Park, Mass. Drawing-roll.	Sept. 30, 1873	821	281	4	357
138, 045	Robbins, J. A. (See Robbins, C., assignor.)					
143, 997	Robbins, J. W. (See Russell, R. L., assignor.)					
136, 183	Robbins, R. B., Adrian, Mich. Cultivator. (Reissue).	Dec. 2, 1873	211	72	4	602
5, 689	Same. Draft-tube for soda-fountains.	Jan. 21, 1873	484	155	3	74
136, 006	Same. Cultivator.	Aug. 5, 1873	47	15	4	139
5, 434	Same. Draft-tube for soda-fountains.	Sept. 2, 1873	171	56	4	255
139, 192	Robbins, S. M., New York, N. Y. Hat and coat guard.	Feb. 18, 1873	569	188	3	198
135, 158	Roberts, A. E., Des Moines, Iowa. School-desk and seat.	Apr. 22, 1873	714	225	3	449
138, 695	Roberts, A. F., Knoxville, Tenn. Combined cotton-chopper and cultivator.	Oct. 28, 1873	582	193	4	456
145, 000	Roberts, C., Winchester, Ill. Latch for gates and other purposes.	Feb. 25, 1873	741	239	3	223
145, 968	Roberts, C. C., Ferrysburgh, Ohio. Gage for sewing-machines. (Reissue).	Dec. 16, 1873	615	201	4	659
134, 932	Roberts, C. H., Troy, N. Y. Gas-lighting torch.	Feb. 18, 1873	570	188	3	198
140, 077	Roberts, E. A. L., Titusville, Pa. Method of and means for increasing the capacity of oil-wells. (Reissue).	June 3, 1873	181	59	3	623
140, 544	Same. Treating explosive compounds to render them safe for blasting and other purposes.	May 20, 1873	667	197	3	575
135, 491	Roberts, E. W., assignor of one-third interest to T. S. Wotkyns, Troy, N. Y. Slate.	Jan. 21, 1873	605	197	3	84
136, 940	Roberts, G. J., Dayton, Ohio. Steam-pump.	May 6, 1873	201	{ 63, 64 255 }	3	514
145, 364	Roberts, G. L., Boston, Mass. Pegging-machine.	Dec. 23, 1873	781	{ 255 256 }	4	684
140, 077	Roberts, H. A., Boston, Mass. Refrigerator for slaughter-houses.	Dec. 30, 1873	864	280	4	702
140, 544	Roberts, I., assignor of one-half interest to J. T. Brearley, Meriden, Ill. Vise.	Jan. 14, 1873	401	128	3	52
135, 491	Roberts, J. M. (See Schmeltzer & Roberts.)					
136, 940	Roberts, M. R., San Francisco, Cal. Coal-screen and chute.	June 17, 1873	584	185	3	679
145, 364	Roberts, N. C., Waterville, N. Y. Water-wheel.	July 1, 1873	171	58	4	22
145, 364	Roberts, R., Dubuque, Iowa. Wagon-brake.	Feb. 4, 1873	89	28	3	134
145, 364	Roberts, R. A., Salisbury, Mo. Harvester.	Mar. 18, 1873	530	175	3	306
143, 095	Roberts, W., jr., Copper Falls, Mich. Rock-drill.	Dec. 9, 1873	293	98	4	621
135, 046	Roberts, W. A., et al. (See Lowrie, H. C., assignor.)					
140, 166	Roberts, W. C. (See Stout, P. F., assignor.)					
141, 236	Roberts, W. J., Cold Spring, N. Y. Snow-plow.	Sept. 23, 1873	684	235	4	330
140, 166	Robertson, A. S., assignor of one-third interest to J. M. Beale, Boston, Mass. Molding-plane.	Jan. 21, 1873	517	167	3	77
141, 236	Robertson, J., Laaswade, Great Britain, assignor by mesne assignment to L. Ashmun & Co., Paterson, N. J. Apparatus for repairing knottes, strainer, or screen-plates of paper-machines.	June 24, 1873	682	214	3	695
141, 236	Robertson, J., assignor to self and L. W. Langdon, Northampton, Mass. Sewing-machine caster.	July 29, 1873	840	274	4	112
	Robertson, J. F. (See Holly & Robertson.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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6, 580	Robertson, J. R., Syracuse, N. Y. Plant-stand..... (Design)	Apr. 8, 1873	3	387
139, 974	Robertson, S. F., Rockford, Ill. End-gate for wagons.....	June 17, 1873	492	155	3	671
144, 142	Robertson, T. I., Madison, N. C. Box-clamp for tobacco-presses.....	Oct. 28, 1873	702	233	4	466
141, 014	Robichau, M. C., Marblehead, Mass. Carpenter's gage.....	July 22, 1873	623	210	4	87
139, 263	Robins, W. B., Shepard's Bush, England, assignor to E. & H. Haynes, Edgeware Road, England. Hand-pump or syringe.....	May 27, 1873	742	535	3	588
137, 241	Robinson, A. (See Stewart, W. H., assignor.)					
140, 592	Robinson, C., Eau Claire, Wis. Hame for harness.....	Mar. 25, 1873	810	266	3	339
	Robinson, C., Boston, Mass. Clothes-wringer.....	July 8, 1873	229	77	4	38
	Robinson, F., et al. (See Parmelee, D. D., assignor.)					
144, 228	Robinson, G., Chillicothe, Mo. Portable fence.....	Nov. 4, 1873	53	16	4	482
145, 451	Robinson, G., Louisville, Ky. Tobacco-package.....	Dec. 9, 1873	366	122	4	627
135, 590	Robinson, G. C., Cincinnati, Ohio. Spoon, fork, &c.....	Feb. 4, 1873	188	58	3	142
	Robinson, G. H., et al. (See Ericason, J., assignor.)					
	Robinson, H. (See Laacell, G. W., assignor.)					
145, 592	Robinson, H. B., Birmingham, Ala. Churn-dasher..... (Reissue.)	Dec. 16, 1873	504	166	4	650
	Robinson, I. J. (See Fairbanks & Robinson.)					
	Robinson, J. (See Somerville & Robinson.)					
140, 646	Robinson, J., Madison Station, Miss. Invalid-bedstead.....	July 8, 1873	275	93	4	42
145, 527	Robinson, J. A., Fremont, N. H. Way-meter for wheel vehicles.....	Dec. 16, 1873	452	148	4	646
	Robinson, J. D. (See Churchill & Robinson.)					
	Robinson, J. E., et al. (See Knowlton, C. H., assignor.)					
	Robinson, J. L., et al. (See Glenn, G. K., assignor.)					
	Robinson, L. (See Sperry & Robinson.)					
144, 413	Robinson, L., Newton, Mass. Window-ventilator..... (Reissue.)	Nov. 11, 1873	211	71	4	507
	Robinson, M., et al. (See Glenn, G. K., assignor.)					
135, 444	Robinson, M., deceased, by S. Robinson, administratrix, Accrington, England. Machine for shaping the elastic dents of combs for looms.....	Feb. 4, 1873	48	15, 16	3	131
145, 452	Robinson, M. F., Fayette County, Ky. Combined lounge and chair.....	Dec. 9, 1873	366	122	4	627
	Robinson, S., administratrix. (See Robinson, M.)					
5, 285	Robinson, S. W., Champaign, Ill., and De Wood, Ann Arbor, Mich. Machine for drilling rock..... (Reissue.)	Feb. 18, 1873	679	220	3	206
136, 764	Robinson, T. C., and C. W. Clift, Mystic Bridge, Conn. Engine.....	Mar. 11, 1873	371	123	3	264
142, 279	Roby, J. B., Cambridge, assignor to G. R. Taber, Boston, Mass. Corset-clasp.....	Aug. 26, 1873	801	265	4	227
140, 794	Roche, J. A., and G. V. Orton, Chicago, Ill. Wheel or pulley for band-saws.....	July 15, 1873	404	137	4	60
144, 797	Roche, J. A., and G. V. Orton, said Orton assignor to said Roche, Chicago, Ill. Band sawing-machine.....	Nov. 18, 1873	542	184	4	545
134, 562	Rock, A., New Orleans, La. Process of preparing moss for mattress-stuffing, &c.....	Jan. 7, 1873	57	.....	3	11
135, 667	Rock, A. D., Hamilton, Nev. Railway-track.....	Feb. 11, 1873	266	84	3	160
144, 143	Rockwell, B. B., Waterford Mills, Ind. Horse hay-fork.....	Oct. 22, 1873	703	233	4	466
143, 302	Rockwell, J. G., assignor to self and P. C. Wette, Shell Rock, Iowa. Railway-switch.....	Sept. 30, 1873	860	294	4	361
139, 423	Rockwell, J. V., New York, N. Y. Ruche-holder.....	May 27, 1873	885	285	3	600
139, 920	Rockwell, L. A., assignor to self and J. A. Currier, Tremont, N. Y. Cracker-machine.....	June 17, 1873	453	{ 141 } { 142 }	{ 3 }	668
139, 975	Rockwood, L. O., Ottawa, Ill. Cider-mill.....	June 17, 1873	492	156	3	672
135, 246	Rodden, W. H., Toronto, Canada. Metallic shutter.....	Jan. 28, 1873	712	227	3	105
145, 901	Roden, A., Mumfords, Ala. Cultivator.....	Dec. 23, 1873	783	256	4	685
143, 533	Rodes, T., Pulaski, Tenn. Railway-rail joint.....	Oct. 7, 1873	117	40	4	390
	Rodgers, A. (See Hinkley & Rodgers.)					
	Rodgers, A. (See Tarrant, E., assignor.)					
139, 264	Rodgers, A., Muskegon, Mich. Saw-mill head-block..... (Reissue.)	May 27, 1873	743	{ 235 } { 236 }	{ 3 }	588
140, 647	Same..... Machine for sawing laths.....	July 8, 1873	276	93	4	42
142, 280	Same..... Log-canting machine.....	Aug. 26, 1873	801	265	4	227
142, 816	Same..... Crank for saw-mills.....	Sept. 16, 1873	445	150	4	300
141, 385	Rodgers, A. C., assignor to self and J. A. Hamilton, Suffield, Conn. Sash-fastener.....	July 29, 1873	984	319	4	123
	Rodgers, H., et al. (See Brigham, C. H., assignor.)					
144, 144	Rodgers, T. P., Taunton, Mass. Belt-hole cover.....	Oct. 28, 1873	703	233	4	466
138, 439	Rodier, L. C., and F. G. Bates, Springfield, Mass. Magazine fire-arm.....	Apr. 29, 1873	1,087	343	3	487
138, 440	Rodier, L. C., and F. G. Bates, Springfield, Mass., assignors to selves, R. Baker, Middletown, Conn., and W. Parker, New York, N. Y. Car-starter.....	Apr. 29, 1873	1,088	344	3	487
144, 700	Rodier, L. C., and F. G. Bates, Springfield, Mass. Stop-cock.....	Nov. 18, 1873	461	156	4	539
	Rodney Hunt Machine Company. (See Flint, D. B., assignor.)					
	Roebing, J. E., et al. (See Von Culin, M., assignor.)					
145, 014	Roedel, H. H., Lebanon, Pa. Brace-truss.....	Nov. 25, 1873	734	248	4	572
	Roehl, C. (See Luehmann & Roehl.)					
	Roescher, R. (See Petersen & Roescher.)					
137, 331	Rogan, D. H., assignor of one-half interest to A. Lufkin, Newtown, Iowa. Sewing-machine.....	Apr. 1, 1873	38	12	3	360
	Rogers, A. E., trustee. (See Cooper, J. W., assignor.)					
137, 029	Rogers, A. E., La Grande, Oreg. Candlestick.....	Mar. 18, 1873	608	201	3	312
140, 309	Rogers, C., Allegheny, assignor to self and J. A. Hutchison, Pittsburgh, Pa. Steam-engine valve-gear.....	June 24, 1873	602	254	3	705
	Rogers, C. & Bro. (See Bunnell, G. W., assignor.)					
	Rogers, C. & Bro. (See Rogers, C. B., assignor.)					
	Same..... (See Rogers, H., jr., assignor.)					
6, 639	Rogers, C. B., assignor to C. Rogers & Bro., Meriden, Conn. Casket-handle socket. (Design).....	May 6, 1873	.....	.....	3	497
6, 640	Rogers, C. B., assignor to C. Rogers & Bro. Casket-handle socket..... (Design)	May 6, 1873	.....	.....	3	497
	Rogers, C. M. A. (See Rogers, E. H., assignor.)					
136, 621	Rogers, E., Cleveland, Ohio. Machine for tapping pipe-fittings.....	Mar. 11, 1873	253	85, 86	3	275
143, 188	Same..... Machine for molding and pressing bricks by hydraulic pressure.....	Sept. 23, 1873	754	{ 260 } { 261 }	{ 4 }	336
144, 701	Rogers, E., Rochester, Ind. Hand corn-planter.....	Nov. 18, 1873	462	156	4	539
135, 011	Rogers, E. F., Chelsea, assignor to self, L. L. & S. B. Holden, Woburn, Mass. Apparatus for burning hydrocarbons.....	Jan. 21, 1873	484	155	3	74
136, 765	Rogers, E. H., Tuscaloosa, Ala., assignor to self and C. M. A. Rogers, Gainesville, Ala. Process of obtaining gum resembling India-rubber.....	Mar. 11, 1873	372	.....	3	284
	Rogers, G. W. (See Mason & Rogers.)					
	Rogers, H. (See Moore and Hurlbut, assignors.)					
	Same..... (See Moore, S., assignor.)					
135, 591	Rogers, H., Sudbury, and L. Felton, Marlborough, assignors to selves and S. Moore, Sudbury, Mass. Boot and shoe.....	.....	188	58	3	142
138, 696	Rogers, H., jr., assignor to C. Rogers & Bro., West Meriden, Conn. Coffin-handle.....	May 6, 1873	203	64	3	514
139, 690	Rogers, H. D., Cincinnati, Ohio. Printing and dial telegraph and circuit therefor.....	June 10, 1873	230	74	3	644

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 933	Rogers, I. R., assignor to self, J. Woodredge, G. E. Bartlett, Lynn, Mass. Heel-stiffener.	Jan. 14, 1873	402	128	3	52
136, 096	Same. Sole-edge trimming-tool.	Feb. 18, 1873	648	212	3	204
6, 548	Rogers, J., New York, N. Y. Group of statuary..... (Design).	Apr. 1, 1873			3	357
6, 960	Same. Statue..... (Design).	Oct. 14, 1873			4	401
7, 016	Same. Group of statuary..... (Design).	Dec. 2, 1873			4	585
139, 365	Rogers, J. G., assignor to self and S. S. White, Niles, Mich. Floor-clamp.	May 27, 1873	745	236	3	589
140, 388	Rogers, J. G., Berrien County, assignor of one-half interest to S. S. White, Michigan City, Mich. Pruning-shears.	July 1, 1873	45	15	4	12
143, 465	Rogers, J. G., assignor to V. Stockton, Williamsburgh, Ohio. Fire-heating furnace.	Oct. 7, 1873	57	20	4	325
140, 167	Rogers, J. H., and J. W., Peekskill, N. Y. Wire-way.	June 24, 1873	684	214	3	695
	Rogers, J. W. (See Rogers, J. H., and J. W.)					
140, 545	Rogers, L. J. (See Rogers, W., assignor)..... (Design)					
	Rogers, S., assignor of one-half interest to J. Coatsworth, London, England. Car-coupling.	July 1, 1873	173	59	4	92
142, 281	Rogers, S., and A. J. Mason, Butler, Ind. Bee-hive.	Aug. 26, 1873	803	265	4	227
145, 902	Rogers, T., assignor to W. L. Walker and B. G. Devoe, Kenton, Ohio. Iron fence.	Dec. 23, 1873	784	256	4	685
145, 903	Rogers, T., and B. G. Devoe, Kenton, Ohio, said Devoe assignor to T. Rogers and W. L. Walker. Iron fence.	Dec. 23, 1873	785	257	4	685
6, 585	Rogers, W., assignor to L. J. Rogers, Hartford, Conn. Knife, fork, and spoon-handle. (Design).	Apr. 8, 1873			3	387
135, 445	Roggenburger, M. and S., Philadelphia, Pa. Setting and sewing ruches.	Feb. 4, 1873	50	16, 17	3	131
	Roggenburger, S. (See Roggenburger, M. and S.)					
139, 617	Röhner, A., Newport, Ky. Corn-planter.	June 3, 1873	150	50	3	621
143, 719	Rohr, G., Williamsburgh, N. Y. Heel-plate for boots and shoes.	Oct. 14, 1873	303	99	4	413
134, 612	Rohrbaker, G., Penn Station, Pa. Door-check.	Jan. 7, 1873	105	34	3	15
135, 159	Rohrer, G. B., Oxford, Ohio. Refrigerator for preserving butter, &c.	Jan. 21, 1873	605	197	3	84
143, 591	Rohrer, J., Lancaster, Pa. Refrigerator.	Oct. 14, 1873	179	61	4	404
6, 492	Rohrer, J. B., assignor to S. Cooper and J. Hall, Philadelphia, Pa. Lounge..... (Design).	Mar. 11, 1873			3	272
6, 507	Same..... (Design).	Mar. 18, 1873			3	297
144, 291	Rohrer, J. C., Gomer, Ohio. Farm gate.	Nov. 4, 1873	99	33	4	486
	Rohrmayer, G. (See Jackson, J., assignor.)					
140, 593	Roland, I. S., Reading, Pa. Water-wheel.	July 8, 1873	230	77	4	38
136, 097	Roll, J. J., Newark, N. J. Bed or cradle guard.	Feb. 18, 1873	649	212	3	204
137, 030	Roller, T., Allegheny City, Pa. Mattress.	Mar. 18, 1873	608	201	3	312
	Rollins, G. D. (See Harrington & Rollins.)					
141, 591	Romadka, A. V., assignor to Romadka Brothers, Milwaukee, Wis. Trunk-lid support.	Aug. 5, 1873	154	50	4	148
145, 817	Same. Lock or catch for trunks.	Dec. 23, 1873	706	232	4	679
	Romadka Brothers. (See Romadka, A. V., assignor.)					
137, 962	Rommel, C., Elizabeth, N. J., assignor to self and W. H. Townsend, New York, N. Y. Oil-cloth printing-machine.	Apr. 15, 1873	618	195	3	432
141, 669	Roed, D., Mount Erie, Ill., assignor of one-half interest to F. Emley, Franklin, Ohio. Wagon-bed lifter.		244	77	4	163
139, 197	Roop, J., Clinton, Tenn. Plow.	Apr. 22, 1873	846	268	3	459
144, 565	Roos, A., New York, N. Y. Racking cock.	Nov. 11, 1873	339	115	4	517
	Roose, C., trustee. (See Cooper, J. W., assignor.)					
145, 127	Root, E. S., Providence, R. I. Refrigerator.	Dec. 2, 1873	83	27	4	592
5, 524	Root, J. B., New York, N. Y., assignor by meane assignment of one-third interest to T. C. M. Paton. Steam-generator..... (Reissue).	Aug. 5, 1873	191	60	4	151
5, 525	Root, J. B., New York, N. Y., assignor by meane assignment to A. S. Hill, H. H. Noyes, and H. M. Haskell, Pleasantville, Pa. Pump for oil-wells..... (Reissue).	Aug. 5, 1873	193	61	4	151
141, 592	Root, J. B., New York, N. Y. Feed-water regulator.	Aug. 5, 1873	155	50	4	148
141, 593	Same. Machine for chucking and revolving tubes, &c.	Aug. 5, 1873	156	50	4	148
141, 594	Same. Boiler-furnace.	Aug. 5, 1873	157	50	4	148
144, 358	Same. Vacuum-pan for the manufacture of sugar, &c.	Nov. 4, 1873	136	51	4	491
146, 096	Same. Baling-press.	Dec. 30, 1873	976	315	4	711
146, 097	Same. Sectional steam-boiler connection.	Dec. 30, 1873	976	315	4	711
144, 566	Root, M. C., Janeville, Wis. Hand corn-planter.	Nov. 11, 1873	340	115	4	517
	Root, S. E., Bristol, Conn. Clock-dial..... (Extension).	May 10, 1873			3	497
145, 071	Ropes, D. N., Orange, N. J., assignor to India-Rubber Comb Company. College Point, N. Y. Band-comb.	Dec. 2, 1873	28	9	4	588
	Ropes, E. H. (See Groves, J. R., assignor.)					
136, 766	Ropp, J. W., and R. C. Kibby, Elyria, Ohio. Buckle for harness.	Mar. 11, 1873	373	123	3	224
	Rorer, C. (See Stout, C., assignor.)					
146, 098	Rorke, H. B., Cazenovia, N. Y. Sharpening-machine.	Dec. 30, 1873	977	316	4	711
142, 045	Rosamy, H., jr., Rochester, Pa. Centrifugal clothes-wringer.	Aug. 19, 1873	589	193	4	200
138, 937	Rose, C. L., Roseville, Ill. Washing-machine.	May 13, 1873	422	132	3	542
136, 969	Rose, F., Boston, Mass. Drawer.	Mar. 18, 1873	469	155	3	301
138, 763	Rose, H. M., Waterman Station, Ill. Wire-fence.	May 13, 1873	275	85	3	530
136, 098	Rose, I. M., Brookhaven, N. Y. Embroidering-attachment for sewing-machines.	Feb. 18, 1873	649	213	3	204
134, 563	Rose, P. H., Canandaigua, N. Y. Metallic stove-board and floor-protector.	Jan. 7, 1873	58	17	3	11
137, 024	Rose, W. E., Hornellsville, N. Y. Medical compound for liniment.	Apr. 8, 1873	314		3	394
141, 463	Rosebrook, L. R., Harmon, Ill. Running-gear of vehicles.	Aug. 5, 1873	49	15	4	130
137, 797	Rosenfield, A., assignor to self and H. Polley, San Francisco, Cal. Music-leaf turner.	Apr. 15, 1873	482	151	3	490
141, 079	Rosenstein, L., and S. Feeder, Memphis, Tenn. Curling-iron.	July 22, 1873	679	228	4	92
141, 237	Rosenstjerna, A., assignor of one-fifth interest to C. Fern, Chicago, Ill. Letter-box.	July 22, 1873	841	274	4	112
141, 015	Rosenthal, C., Philadelphia, Pa. Reel for clothes-lines.	July 22, 1873	623	210	4	87
141, 819	Rosevelt, W. H., Rochester, assignor to self, D. J. Sprague, and C. E. Blanchett, Buffalo, N. Y. Compositions for cleaning glass, silverware, &c.	Aug. 12, 1873	374		4	173
142, 733	Rosin, H. C., assignor of one-half interest to W. L. Beard, Detroit, Mich. Circular-saw table.	Sept. 9, 1873	365	123	4	283
	Ross, A. B. (See Morris, W. H., assignor)					
	Ross, A. Q., Cincinnati, Ohio. Burglar-alarm..... (Extension).	Sept. 27, 1873			4	322
144, 927	Ross, A. W., Northfield, Mass. Hand-cultivator.	Nov. 25, 1873	661	224	4	566
136, 388	Ross, E. A., Albany, N. Y. Croquet-mallet.	Mar. 4, 1873	32	12	3	248
53, 883	Ross, G., Newport, Ky. Molding and casting apparatus..... (Disclaimer filed).	Jan. 9, 1873			3	38
146, 022	Ross, H., Plattsburgh, N. Y. Wash-boiler.	Dec. 30, 1873	910	295	4	705
142, 122	Ross, H. S., Chicago, Ill. Cock.	Aug. 26, 1873	673	221	4	216
145, 528	Ross, H. S., Millville, Ohio. Fence-post.	Dec. 16, 1873	453	148	4	646
137, 097	Ross, J., Greenville, Mich. Low-water alarm and indicator.	Mar. 25, 1873	679	226	3	329
143, 422	Ross, J., Charlestown, assignor to J. F. Ross, North Cambridge, Mass. Lubricator.	Oct. 7, 1873	24	9	4	382
	Ross, J. B., et al. (See Flora, O. V., assignor.)					
	Ross, J. F. (See Ross, J., assignor)					
142, 944	Ross, J. F., Hamilton, Canada. Railway-signal.	Sept. 16, 1873	552	187	4	309
140, 078	Ross, J. G., Philadelphia, Pa., assignor to J. W. French, V. K. Spear, B. Dore, and W. F. Morgan, Lynn, Mass. Form-plate for bottoms of shoe-lasts.	June 17, 1873	585	185	3	679

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
143, 786	Ross, J. G., assignor of one-half interest to T. P. and S. S. Smith, Philadelphia, Pa. Jack for nailing, &c., boots and shoes	Oct. 21, 1873	378	125	4	489
138, 764	Ross, J. G. and T. L. Miller, Philadelphia, Pa., assignors to J. W. French, V. E. Spear, B. Dora, and W. F. Morgan, Lynn, Mass. Shoe-sewing machine	May 13, 1873	376	85, 86	3	530
137, 798	Ross, L. E., Providence, R. I. Loom-picking mechanism	Apr. 15, 1873	463	151	3	490
143, 257	Ross, L. E., assignor of three-fourths interest to E. C. Mowry, Providence, R. I., and J. Enoch and D. B. Allen, West Liberty, Ohio. Loom-picking mechanism	Sept. 30, 1873	892	282	4	358
134, 705	Ross, N., Washington, D. C. Hand printing-press	Jan. 7, 1873	193	63	3	22
143, 585	Ross, N. G., Mitchellville, Iowa. Saw filing and setting machine	Sept. 9, 1873	243	80	4	273
141, 386	Ross, O. C., Fenfield, N. Y. Device for preventing horses from crowding	July 29, 1873	965	320	4	123
139, 331	Ross, R., assignor to National Horse-Nail Company, Vergennes, Vt. Machine for finishing horseshoe nails	May 27, 1873	797	254, 255	3	593
139, 332	Same. Machine for swaging and trimming the points of horseshoe nails	May 27, 1873	798	255	3	593
142, 352	Same. Machine for finishing horseshoe nails	Sept. 2, 1873	27	10	4	244
141, 938	Ross, T. (See Strong & Ross) (Extension.)	July 29, 1873	843		4	112
145, 244	Ross, W. H., Brooklyn, N. Y. Composition for burial-caskets	July 29, 1873	843		4	112
141, 938	Rossi, G., et al. (See Durini, A., assignor.)					
145, 938	Rossiter, W. T., Lincoln, Neb. Door-spring	Dec. 2, 1873	183	63	4	600
138, 819	Rosow, C., Chicago, Ill. Sofa-bedstead	May 13, 1873	324	100	3	534
138, 938	Roswag, C. and A. N. De Pauville, Paris, France. Separating gold and silver from lead containing the same	May 13, 1873	423	132	3	548
144, 567	Roto, D. J. (See Temple, J., assignor.)					
143, 258	Rote, J. F., Reading, Pa. Egg-beater	Nov. 11, 1873	342	115	4	517
139, 333	Roth, J. J., Philadelphia, Pa. Device for cooling millstones	Sept. 30, 1873	823	282	4	358
	Rothermel, D. N. (See Ellison, J. C., assignor.)					
	Rotter, C., East Birmingham, Pa. Varnish or bronze coating for articles of plaster, iron, wood, &c.	May 27, 1873	799		3	593
	Rouart, H. S., et al. (See Carré, F. P. E., assignor.) (Reissue.)					
137, 799	Rouart, S. H. (See Gauduin, Mignon & Rouart.)					
136, 458	Rounds, W. H., Campello, Mass. Last for boots and shoes	Apr. 15, 1873	484	151	3	421
134, 934	Rountree, G. H., Milwaukee, Wis. Hand-stamp	Mar. 4, 1873	88	30	3	253
138, 597	Rouse, A. M., assignor of one-half interest to C. Amaler, Saint Louis, Mo. Car-brake	Jan. 14, 1873	402	129	3	52
140, 731	Rouse, A. M., assignor of one-half interest to P. E. Bland, Saint Louis, Mo. Water-meter	May 6, 1873	203	64	3	514
145, 015	Rouse, A. M., Saint Louis, Mo. Water-meter	July 8, 1873	343	116	4	46
143, 423	Same. Railway-rail fastening	Nov. 25, 1873	735	248	4	572
	Rouse, C. S., Dowagiac, Mich. Fly-trap	Oct. 7, 1873	25	10	4	383
139, 691	Rouse, G. L. (See Royer & Rouse.)					
140, 732	Rouse, G. L., Cincinnati, Ohio. Hub for vehicles	June 10, 1873	232	74	3	644
139, 818	Same. Spoke-polishing machine	July 8, 1873	344	116	4	48
140, 953	Rousseau, D., New York, N. Y. Speaking-tube annunciator	June 10, 1873	354	110	3	653
141, 387	Rousseau, D., assignor to self and W. C. Smith, New York, N. Y. Circuit-closer for railway-signal	July 15, 1873	551	185	4	72
144, 568	Same. Electric railway-signal	July 29, 1873	985	390	4	123
137, 484	Same. Circuit-breaker for electric railway-signals	Nov. 11, 1873	343	115	4	517
141, 016	Routledge, T., Sunderland, England. Process of treating fibrous substances for paper-stock	Apr. 1, 1873	185	58	3	372
136, 269	Same. Mode of treating fibrous substances in the manufacture of paper-stock	July 22, 1873	624	210	4	87
	Row, J. W., Lewisburgh, Pa. Screw-cutting machine	Feb. 25, 1873	815	263	3	289
	Row, S. B., et al. (See Gearing, C., assignor.)					
	Rowden, G. (See Dickinson, C. W., assignor.)					
	Rowe, A. D. (See Hoskins & Rowe.)					
	Rowe, C. T. (See Rowe, T. & C. T.)					
142, 282	Rowe, J., jr., Wilmington, and F. B. Brown, Boston, Mass. Horseshoe	Aug. 26, 1873	803	266	4	227
144, 145	Rowe, J. L., assignor to self and J. A. Sherman, New York, N. Y. Pad for pile-trusses	Oct. 22, 1873	704	234	4	466
132, 287	Rowe, P. C., Boston, Mass. Water-closet	Apr. 29, 1873	954	300	3	478
145, 688	Rowe, T. and C. T., New York, N. Y. Shutter-worker	Dec. 16, 1873	586	192	4	857
142, 176	Rowe, W., Westerville, Ohio. Device for dressing saw-teeth	Aug. 26, 1873	716	237	4	220
137, 223	Rowland, J. L., Milwaukee, Wis. Manufacture of artificial stone	Apr. 1, 1873	40	13	3	360
137, 223	Same. Treatment of lime for the manufacture of artificial stone	Apr. 1, 1873	41	13	3	360
137, 485	Rowland, T. F., Green Point, N. Y. Apparatus for charging gas-retorts	Apr. 1, 1873	187	58	3	372
137, 486	Same. Apparatus for raking gas-retorts	Apr. 1, 1873	189	59	3	372
137, 487	Same. Gas-retort charger	Apr. 1, 1873	192	59	3	373
143, 998	Rowland, T. F., Brooklyn, N. Y. Gas-retort mouth-piece	Oct. 28, 1873	583	194	4	456
138, 698	Rowland, W. A., Waverly, N. Y. Railway-rail chair	May 6, 1873	204	64	3	514
140, 435	Rowland, W. M., Tyler, Tex. Washing-machine	July 1, 1873	77	27	4	14
136, 767	Rowley, B. L., New Britain, Conn. Bridle-bit	Mar. 11, 1873	374	124	3	284
132, 939	Rowley, J. K., Chicago, Ill. Chair	May 13, 1873	424	133	3	542
6, 886	Rowley, S. B. (See Howsara, H., assignor.)					
141, 080	Rowlingson, J. W., Binghamton, N. Y. Scroll-saw	Sept. 16, 1873			4	296
	Roxbury Carpet Company. (See Goetze, H. F., assignor.) (Design.)	July 22, 1873	680	228	4	92
	Same. (See Stearne, T. J., assignor.) (Design.)					
145, 072	Roy, D., assignor of one-half interest to S. S. Caughey, Mill-Creek Township, Pa. Machine for bending chain-links	Dec. 2, 1873	29	10	4	582
141, 464	Roy, F., Saint Bernard Parish, La. Sugar-cane coverer	Aug. 5, 1873	49	15	4	139
135, 849	Royal, J., M. A. Lentz, and J. M. Deibert, Lafayette, Ind. Car-coupling	Feb. 11, 1873	427	138	3	172
140, 079	Royall, W. B., Brenham, Tex. Insect-destroying compound	June 17, 1873	586		3	680
137, 031	Royer, J. R. (See Royer, T., assignor.)					
136, 459	Royer, T., assignor of one-half interest to J. R. Royer, Lancaster, Pa. Shutter-bowing device	Mar. 18, 1873	609	201	3	313
	Royer, T., and G. L. Rouse, Cincinnati, Ohio. Hub for vehicles	Mar. 4, 1873	89	31	3	253
	Royer's Ford Iron Foundry. (See Reagan, W. J., assignor.)					
	Roya, A. (See Wright & Roya.)					
139, 480	Roya, F., East Berlin, Conn. Machine for corrugating sheet-metal	June 3, 1873	33	11	3	611
132, 584	Royse, C. W., Rindge, N. H. Machine for cutting box-stuff	May 6, 1873	104	33	3	506
140, 954	Rubarth, L., Davilla, assignor of one-half interest to J. J. Pike, Milam County, Texas. Ant-trap	July 15, 1873	552	185	4	72
	Rudigier, L. (See Wolters & Rudigier.)					
137, 098	Rudow, C., et al. (See Kersting, F., assignor.)					
145, 969	Rue, G. W., Hamilton, Ohio. Hand-cultivator	Mar. 25, 1873	679	226	3	299
138, 198	Rue, S., Philadelphia, Pa. Injector	Dec. 30, 1873	866	221	4	702
138, 199	Rue, S., jr., Philadelphia, Pa. Injector for steam-generators	Apr. 22, 1873	846	268	3	459
135, 492	Same. same	Apr. 22, 1873	847	268	3	459
144, 034	Ruediger, T., Carver County, Minn. Belt-fastening	Feb. 4, 1873	90	28	3	134
	Ruel, L., assignor to self and J. Demers, Saint Johnsbury, Vt. Car-coupling	Oct. 28, 1873	613	203	4	458

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 414	Ruel, L., assignor to self and J. Demers, Saint Johnsbury, Vt. Apparatus for heating and illuminating	Nov. 11, 1873	212	71	4	507
143, 466	Rugg, H. W. (See Winchell & Rugg.)					
144, 635	Ruggles, C., Huron, Ohio. Machine for cutting gores in staves	Oct. 7, 1873	58	90	4	385
143, 189	Same. Machinery for making barrels	Nov. 18, 1873	406	136	4	534
142, 869	Rughlman, R., Trenton, N. J. Combined shutter-fastener and bower	Sept. 23, 1873	757	261	4	336
144, 478	Ruggles, S. P., Boston, Mass. Steam-engine governor	Sept. 16, 1873	488	167	4	304
145, 016	Ruiseco, J. D., Paris, France. Cigarette-machine	Nov. 11, 1873	264	89, 90	4	511
141, 465	Rumberger, L. C., Cass, Pa. Harrow	Nov. 25, 1873	736	246	4	572
145, 593	Rummer, H. S., Binghamton, N. Y. Vent-gimlet	Aug. 5, 1873	51	16	4	139
143, 642	Rundlett, G. B., assignor to Swamscot Machine Company, South New Market, N. H. Machine for planing the edges of sheet-metal	Dec. 16, 1873	505	166	4	650
142, 514	Rungvist, C. R., Stockholm, Sweden. Governor for steam-engine	Oct. 14, 1873	224	75	4	407
137, 242	Runyan, J. S., Columbus, Ohio. Fire-place grate	Sept. 2, 1873	172	56	4	255
5, 631	Runyon, A. L. (See Weber, T. A., assignor.)					
143, 424	Runyon, C., et al. (See Parmelee, D. D., assignor.)					
139, 737	Ruof, B., Zoar, Ohio. Water-wheel	Mar. 25, 1873	811	267	3	339
140, 218	Rupertus, J., Philadelphia, Pa. Revolving fire arm (Reissac)	Oct. 28, 1873	740	247	4	469
136, 270	Ruah, A., Chariton, assignor of one-half interest to Johnston Ruffler Company, Ottumwa, Iowa. Ruffling or plaiting attachment for sewing-machines	Oct. 7, 1873	96	10	4	383
135, 940	Rushton, T. H., and R. Touge, Bolton, England. Spinning-mule	June 10, 1873	282	87, 88	3	647
136, 099	Rushton, T. H., and W. Dobson, Bolton, England. Cotton-gin knife-roller	June 24, 1873	725	228	3	699
137, 242	Rushworth, J., New York, N. Y. Windlass for hoisting-machines	Feb. 25, 1873	816	263	3	229
138, 200	Russell, W. H., Sedalia, Mo. Soda-fountain	Feb. 18, 1873	515	168	3	193
142, 123	Russell, A., Brooklyn, N. Y., assignor to A. Russell, Wilton, Me., and C. W. Alexander, Washington, D. C. Folding rocking-chair	Feb. 18, 1873	651	213	3	204
142, 653	Russell and Erwin Manufacturing Company. (See Gorman, W., assignor) (Design)					
144, 479	Same. (See Parker, E., assignor.)					
138, 200	Same. (See Webb, R. L., assignor.)					
142, 123	Russell, C. P., et al. (See Grant, J. J., assignor.)					
142, 653	Russell, E., Brooklyn, N. Y. Steam-heater	Apr. 22, 1873	848	268	3	459
144, 479	Russell, E. G., Ravenna, Ohio. Pump	Aug. 26, 1873	674	221	4	216
137, 242	Russell, E. P., Manlius, N. Y. Chain-propeller	Sept. 9, 1873	298	98	4	278
138, 200	Russell, H. G., Lincoln, Ill. Car-coupling	Nov. 11, 1873	267	90	4	511
137, 242	Russell, H. R. (See Russell, I. S., assignor.)					
138, 200	Same. (See Russell, I. S. and H. R.)					
139, 737	Same. same. (Extension.)					
140, 218	Russell, I. S., New Market, Md., and H. R. Russell, Woodbury, New Jersey. Harvester	Mar. 29, 1873			3	527
141, 465	Same. Earth-closet	Mar. 25, 1873	680	226	3	329
142, 653	Same. Magnesium-lamp	Apr. 29, 1873	1,005	316	3	490
143, 424	Same. Earth-closet	Dec. 23, 1873	658	215	4	675
144, 479	Russell, I. S., New Market, Md., assignor of one-half interest to H. R. Russell, Woodbury, N. J. Wood-screw	Dec. 30, 1873	911	295	4	705
136, 184	Russell, J. (See Dominy, G., assignor.)					
144, 229	Same. (See Travis, assignor.)					
135, 368	Russell, J., Springfield, Mass. Adjustable nut	Feb. 25, 1873	741	239	3	223
137, 724	Russell, J., Providence, R. I., assignor by means assignment to self and W. Sprague. Cut-nail machine	Nov. 4, 1873	54	16	4	482
144, 702	Russell, L., Otisco, Mich. Fastening for sash-ropes	Jan. 28, 1873	817	264	3	113
139, 819	Russell, L. B., et al. (See Samuels, J., assignor.)					
6, 508	Russell, M., Union Bridge, Md. Corset	Apr. 8, 1873	408	125	3	402
143, 096	Russell, N. W. (See Budge & Russell.)					
139, 193	Russell, R. L., assignor to J. W. Robbins, Brooklyn, N. Y. Safety-pocket attachment	Nov. 18, 1873	402	157	4	539
141, 239	Russell, S., Jr., New York, N. Y. Electro-medical bath-tub	June 10, 1873	356	110	3	653
142, 283	Russell, S. L., Chicago, Ill. Basket (Design)	Mar. 18, 1873			3	297
137, 488	Russell, W. D. (See Cantrell, R. B., assignor.)					
6, 890	Rust, J., Vauxhall, England. Compound for sanitary and decorative articles used in building	Sept. 23, 1873	685		4	330
139, 193	Rust, R., Odessa, Del. Cultivator	May 20, 1873	668	209	3	575
141, 292	Ruston, G., Freeport, Ill. Wagon-seat fastener	July 29, 1873	890	292	4	117
134, 564	Ruth, S., Philadelphia, Pa. Sun-shade for horses	Jan. 7, 1873	58	18	3	11
137, 488	Ruth, W. A., assignor to J. T. Jakes, W. Broadway, and W. A. Ruth, Wyoming, Del. Medical compound for kidney diseases	Apr. 1, 1873	103		3	373
6, 954	Ruthven, E. C., Philadelphia, Pa., assignor to D. W. Bruce, New York, N. Y. Printing-type (Design)	Sept. 23, 1873			4	322
142, 283	Same. Printing-type (Design)	Oct. 7, 1873			4	380
146, 099	Rutledge, W. H., Hamilton, Ohio. Furrowing-machine	Aug. 26, 1873	804	266	4	227
145, 529	Rutter, J., et al. (See Hays, J. R., assignor.)					
139, 481	Rutter, W. F., Philadelphia, Pa. Water-cooler	Dec. 30, 1873	978	316	4	711
141, 239	Ryan, B. (See Nolan K., assignor.)					
145, 530	Ryan, D., Boston, Mass. Attaching slates to roofs	Dec. 16, 1873	454	149	4	646
134, 819	Ryan, D. E., Cincinnati, Ohio. Gas-burner	June 3, 1873	34	11	3	611
144, 703	Ryan, J., Saint Louis, Mo. Steam-generator	July 29, 1873	843	275	4	112
135, 592	Same. same	Dec. 16, 1873	455	149	4	646
143, 932	Ryan, J. A., Cleveland, Ohio. Indicating-filler for lamps, &c	Jan. 14, 1873	305	97	3	44
144, 415	Ryan, J. D., New York. Pantaloon-stretcher	Nov. 18, 1873	463	157	4	539
136, 673	Ryan, P., Albany, N. Y. Combined torch and fire-lighter	Feb. 4, 1873	189	59	3	142
138, 441	Ryan, T. D. (See Ryan, T. W. & T. D.)					
142, 514	Ryan, T. W. & T. D., Maumee City, Ohio. Car-coupling	Oct. 21, 1873	499	168	4	439
139, 819	Ryder, C., assignor to self and H. G. White, Cambridgeport, Mass. Garden-hose rest	Nov. 11, 1873	213	71	4	507
142, 514	Ryder, H., Somerville, Mass. Grate for furnaces	Mar. 11, 1873	287	99	3	278
138, 441	Same. Paraffine-lamp	Apr. 29, 1873	1,089	344	3	487
142, 514	Same. Apparatus for distilling heavy oils	Sept. 2, 1873	173	56	4	255
139, 024	Ryer, G. H., New York, N. Y. Clothes-line pulley	May 20, 1873	507	160	3	562
135, 593	Rykert, A. G., Attica, N. Y. Carriage-painter's jack	Feb. 4, 1873	189	59	3	142
144, 146	Rynerson, J. H., Clayton, Ind. Corn-ground marker	Oct. 28, 1873	704	234	4	466
139, 083	Sabbaton, F. A., administrator. (See Sabbaton, P. A.) (Extension.)					
5, 242	Sabbaton, F. A., Troy, N. Y. Manufacture of gas furnaces (Extension)	May 20, 1873	564	177	3	566
139, 083	Sabbaton, P. A., deceased, by F. A. Sabbaton, administrator, Troy, N. Y. Door-frame for furnaces (Extension)	June 21, 1873			3	662
139, 083	Sabin, E. D. (See Cole & Sabin.)					
139, 083	Sabin, H. W., deceased, by C. E. Cox, executrix, West Somerset, N. Y. Horse-hay rake (Reissac)	Jan. 21, 1873	635	207	3	86

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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5, 243	Sabin, H. W., deceased, by C. E. Cox, executrix, West Somerset, N. Y. Horse-hay rake	Jan. 21, 1873	637	208	3	87
5, 244	Same same	Jan. 21, 1873	639	208	3	87
5, 245	Same same	Jan. 21, 1873	641	208	3	87
136, 674	Sachse, L., Monmouth, Oreg. Wheel-plow	Mar. 11, 1873	298	99	4	278
143, 848	Sack, W. M., Oakland, Cal. Tenoning-machine	Oct. 21, 1873	434	144	4	434
142, 586	Sackett, G. (See Mettais, C. J., assignor.)					
140, 594	Sackman, J. M., assignor to self and J. D. Marot, Ridgeville, Ind. Extension-table	Sept. 9, 1873	244	80	4	273
135, 160	Sadler, H. J., and S. H. Spencer, Mecca, Ohio. Device for preventing cows from kicking	July 8, 1873	231	77	4	38
141, 517	Sadler, S. J., and H. Volmar, Cleveland, Ohio. Feed-water heater and purifier	Jan. 21, 1873	606	197	3	84
138, 201	Safely, J. J., Ottumwa, Iowa. Portable punch	Aug. 5, 1873	95	29	4	142
140, 648	Saffory, W. J., Bremen, Ohio. Seed-planter	Apr. 22, 1873	849	269	3	459
142, 734	Safford, H. (See Orput, J. M., assignor.)	July 8, 1873	276	93	4	42
139, 194	Safford, H. B., Lancaster, N. Y. Coal-bcd	Sept. 9, 1873	366	153	4	283
139, 921	Saffley, R., Seneca Falls, N. Y. Water-regulator and alarm for boilers	May 20, 1873	668	209	3	575
141, 388	Sagar, G., assignor to Chicago Waste-Cleansing Company, Chicago, Ill. Cleaning cotton-waste	June 17, 1873	455		3	668
144, 359	Sage, P. I., Springfield, Mass. Cement-pipe mold	July 29, 1873	967	320	4	124
138, 941	Sahn, E., Greenville, Pa. Carpenter's gauge	Nov. 4, 1873	157	52	4	491
5, 359	Sajno, F., Milan, Italy. Apparatus for freezing liquids	May 13, 1873	425	133	3	543
135, 369	Saladee, C. W., Saint Catharine's, Canada, assignor of one-half interest to L. Dobbins, Erie, Pa. Car-spring for vehicles	Apr. 15, 1873	659	207	3	435
137, 324	Saladee, C. W., Saint Catharine's, Canada. Buffer-spring for railroad-cars	Jan. 28, 1873	818	264	3	113
137, 963	Same Road-wagon	Apr. 1, 1873	43	13	3	360
5, 399	Same same	Apr. 15, 1873	620	196	3	432
138, 699	Saladee, C. W., Pittsburgh, Pa. Whiffle-tree snap-hook	May 6, 1873	243	75	3	517
145, 365	Same same	May 6, 1873	205	65	3	514
145, 366	Same Railway-car	Dec. 9, 1873	293	99	4	621
145, 594	Same same	Dec. 9, 1873	294	99	4	621
146, 100	Same Wagon-standard	Dec. 16, 1873	505	166	4	650
	Same Vehicle-spring	Dec. 30, 1873	978	316	4	711
138, 531	Salem Shade-Roller Manufacturing Company. (See Tripp, L. A., assignor.) (Reissue.)					
5, 623	Salisbury, A. E., and S. S. Steel, Martin, Ohio. Barrel-heater	May 6, 1873	58	19	3	502
139, 618	Salisbury, S., et al. (See Mears, H. A., assignor.)					
140, 595	Salmon, I. A., Boston, Mass. Dental instrument	Oct. 21, 1873	533	176	4	442
141, 892	Salmon, T. H., Brooklyn, N. Y. Heating-stove	June 3, 1873	151	50	3	621
146, 024	Salver, W. H., Hamburg, Iowa, assignor of one-half interest to J. M. Campbell and D. Ritchey. Earth-boring machine	July 8, 1873	231	78	4	38
142, 414	Salver, W. H., Cornring, Iowa, assignor of one-half interest to J. M. Campbell. Earth-auger	Aug. 19, 1873	454	148	4	189
144, 480	Sambrook, W., Liverpool, England. Feed-water heater	Dec. 30, 1873	911	295	4	705
138, 820	Sammis, E. M., Babylon, N. Y. Lemon-squeezer	Sept. 2, 1873	81	27	4	249
	Sample, W. H., Albany, N. Y. Cutting-attachment for sewing-machines	Nov. 11, 1873	268	91	4	512
	Sampson, E. C. (See Meyer, C. T. and V. E., assignors.) (Design.)					
	Sampson, I. B., Albany, N. Y. Cork for bottles	May 13, 1873	324	106	3	534
	Sampson, J. L., et al. (See Picking & Hopkins, assignors.)					
	Sampson, M. (See Beman, W. E., assignor.)					
143, 467	Samson, S. D., Woburn, and G. H. Smith, Waltham, Mass. Stereoscopic-picture holder	Oct. 7, 1873	58	20	4	385
145, 017	Samuels, J., Vineland, N. J., assignor to W. G. Hill, Cambridge, and L. R. Russell, Lynn, Mass. Machine for making heel-stiffeners	Nov. 25, 1873	736	248	4	572
	Sanborn, B., et al. (See Mears, H. A., assignor.)					
143, 468	Sanborn, G. P., deceased, by W. R. Sanborn, administrator, Bridgeport, and W. Mansfield, New Haven, Conn. Elastic railway-frog	July 5, 1873			4	6
142, 654	Sanborn, L. D., Cohoes, N. Y. Knitting-machine	Oct. 7, 1873	59	21	4	385
142, 284	Sanborn, R. S., Rockford, Ill. Joint-connection for hollow railway-rails	Sept. 9, 1873	299	98	4	278
140, 844	Sanborn, W. A., administrator. (See Sanborn & Mansfield.) (Extension.)					
136, 549	Sanders, G. N., jr., New York, N. Y. Spike	Aug. 26, 1873	805	266	4	227
145, 970	Sanders, G. N. and G. N., jr., New York, N. Y. Spike	July 15, 1873	445	152	4	64
	Sanders, J. (See Lawrence & Sanders.)					
	Sanders, L., Brooklyn, N. Y. Clasp for leather belts	Mar. 4, 1873	179	58	3	259
	Sanderson, E., Paris, France. Windmill	Dec. 30, 1873	867	281	4	702
	Sanderson, R. (See Zimmer, J., assignor.)					
143, 933	Sanderson, S., New Bedford, Mass. Plumb and level	Oct. 21, 1873	500	169	4	439
	Sands & Baxter. (See Baxter, W. D., assignor.)					
143, 849	Sanford, E., Hartford, Conn. Mode of securing wheel-hubs to shafts	Oct. 21, 1873	436	145	4	434
142, 870	Sanford, G., Stroudsburgh, Pa. Machine for dressing brasses of journal-boxes	Feb. 25, 1873	873	281	3	233
135, 161	Sanford, W. L., Ashton, Ill. Binder's attachment for harvesters	Sept. 16, 1873	489	167	4	304
136, 870	Sanger, K. (See Sanger, W. H. M., assignor.)					
142, 415	Sanger, W. H. M., assignor to K. Sanger, Bay Side, N. Y. Car-brake	Jan. 21, 1873	607	197	3	84
	Sargant, A. V., Newark, N. J. Harness-saddle	Mar. 18, 1873	470	156	3	301
	Same Check-hook for harness-saddles	Sept. 2, 1873	81	27	4	249
	Sargeant, S. S. (See Mashmeyer, J. A., assignor.) (Reissue.)					
	Sargent & Co. (See Steele, E. J., assignor.) (Design.)					
	Same (See Wunder, A., assignor.) (Design.)					
134, 935	Sargent & Greenleaf. (See Morrison, H. B., assignor.)					
142, 945	Sargent, C. G., Graniteville, Mass. Apparatus for dyeing and washing fibrous materials	Jan. 14, 1873	403	129	3	52
140, 080	Sargent, G. M. (See Hill & Sargent.)					
141, 081	Sargent, J., Rochester, N. Y. Machine for corrugating and beading sheet-metal pipe	Sept. 16, 1873	553	187	4	309
	Sargent, J. F., Manchester, N. H. Metallic corner-shield for boxes	June 17, 1873	586	186	3	680
	Sargent, S. D., Hartford, Conn., assignor to The Stanley Rule and Level Company, New Britain, Conn. Carpenter's level	July 22, 1873	681	228	4	92
	Sargent, S. J. (See Batchelder & Sargent.)					
136, 007	Sargent, W. D., Philadelphia, Pa. Telegraph switch-board	Sept. 16, 1873	446	151	4	300
135, 594	Sarsfield, J. C., New York, N. Y. Valve for gas-regulators	Feb. 18, 1873	570	188	3	198
	Satterly, C. (See Pike, D., assignor.)					
135, 370	Sattley, M., Taylorville, Ill. Wheel-plow	Feb. 4, 1873	190	59	3	142
	Sauer, A. (See Barth, G. M., assignor.)					
141, 017	Saugl, J. E., Washington, D. C. Cider-mill	Jan. 28, 1873	819	265	3	113
134, 936	Saulpaw, G. W. (See Fryer, R. M., assignor.)					
135, 371	Sault, J., South Manchester, Conn. Machine for spreading silk	July 22, 1873	626	211	4	87
138, 532	Saunders, C. (See Walters, A. B., assignor.)					
144, 928	Saunders, D. R., Houston, Tex. Fluting-machine	Jan. 14, 1873	405	130	3	52
	Saunders, H., South Kingston, R. I. Ship's lantern	Jan. 28, 1873	820	265	3	113
	Same same	May 6, 1873	58	20	3	592
	Saunders, J., Brooklyn, N. Y. Manufacture of sulphuric acid	Nov. 25, 1873	661	224	4	566

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Saunders, J. E., et al. (See Blackman, A. L., assignor.) (Reissue.)					
141, 890	Saunders, O. F., Corning, N. Y. Pane for sky-lights	Aug. 12, 1873	375	123	4	173
	Savage, D. (See Shive & Savage.)					
	Savage, J. B. (See Miller, R. R., assignor.)					
142, 194	Savage, J. S., Kingston, N. H. Registering ballot-box	Aug. 26, 1873	674	222	4	216
139, 195	Savage, J. W., and F. M. Doty, Parmitchie, Miss. Corn and cotton planter	May 20, 1873	669	209	3	575
139, 922	Savery, C. C., Philadelphia, Pa. Filter	June 17, 1873	455	142	3	668
139, 196	Saville, I. N. C., Worcester, Mass. Last	May 20, 1873	670	210	3	575
145, 531	Savoral, E., assignor to E. Schnantz and E. Savoral, New York, N. Y. Lamp-stove	Dec. 16, 1873	456	149	4	646
144, 360	Sawday, C. W., Poolville, N. Y. Cattle-stanchion	Nov. 4, 1873	158	52	4	491
145, 757	Sawkins, J. N., Langport, England. Game-apparatus	Dec. 23, 1873	660	215	4	675
137, 100	Sawyer, A. C., Canton, N. Y. Tailor's pressing-machine	Mar. 25, 1873	682	226	3	329
	Sawyer, C. E. (See Houck & Sawyer.)					
	Same. (See Perkins, Moulton & Sawyer.)					
135, 446	Sawyer, C. K., and G. F. Wright, Clinton, Mass. Loom-shuttle	Feb. 4, 1873	51	17	3	131
143, 097	Sawyer, D., Washington, Ind. Nut-lock	Sept. 23, 1873	685	236	4	320
6, 489	Sawyer, H., Chelsea, Mass. Bottle	Mar. 4, 1873			3	245
	Sawyer, H. W. (See Tarble & Sawyer.)					
145, 971	Sawyer, J., Northfield, Vt. Process for cleaning marble, granite, &c.	Dec. 30, 1873	868		4	702
	Sawyer, J. H. & Co. (See Bacon, C. H., assignor.)					
145, 904	Sawyer, L., Springfield, Vt. Umbrella	Dec. 23, 1873	786	257	4	685
145, 905	Sawyer, O. A., Lowell, Mass. Loom-picker	Dec. 23, 1873	787	257	4	685
139, 820	Sawyer, P. C., Macon, Ga. Cotton-gin	June 10, 1873	357	110	3	653
	Sawyer, W. H., et al. (See Lockwood, R. M., assignor.)					
145, 128	Sawyer, W. H., American District Telegraph Company, New York, N. Y. Telegraph-register	Dec. 2, 1873	83	27	4	599
5, 716	Sax, J. K., Pittston, Pa. Casting car-wheels	Dec. 30, 1873	1,010	325	4	714
142, 587	Sax, J. K., Pittston, and G. W. Kear, Kingston, Pa. Car-wheel	Sept. 9, 1873	245	80	4	273
141, 082	Saxton, E. S., Greenfield, Ill. Clothes-pounder	July 22, 1873	682	229	4	92
	Saxton, P., et al. (See Moloney, J., assignor.)					
144, 704	Saylor, H., Saint Paris, Ohio. Carriage-top	Nov. 18, 1873	464	157	4	539
	Sayles, J. M. (See Lincoln, J. B., assignor.)					
137, 800	Sayre, B. C., Montrose, Pa. Hot-air furnace	Apr. 15, 1873	485	151	3	421
5, 322	Sayre, J. W., and A. S. Shull, Martin's Creek, Pa., said Sayre assignor of one-third, and said Shull assignor of whole interest to H. W. Harper. Machine for dressing the edges of slate-frames	Mar. 11, 1873	413	136	3	287
	Says, L. (See Johnson, J. W., assignor.)					
	Scammon, G. S. (See Chase, F., assignor.)					
	Scanlon, M. A., executor. (See Murphy, T. G.)					
145, 018	Scarborough, J. R., Milburn, Ky. Broad-cast seeder	Nov. 25, 1873	737	249	4	572
145, 689	Schacher, C., and L. Feret, Paris, France. Furnace	Dec. 16, 1873	586	192	4	657
140, 219	Schacht, W., Brooklyn, N. Y. Rotary stamp-canceler	June 24, 1873	726	228	3	699
139, 821	Schaefer, C. A., Chicago, Ill. Adjustable try-square	June 10, 1873	358	111	3	653
	Schaeffer, F. J. (See Myers, C., assignor.)					
144, 636	Schafer, D., Parkersburgh, W. Va. Writing-desk, &c.	Nov. 18, 1873	407	137	4	534
138, 101	Schafer, G. W., Saint Charles, Mo. Machine for paring horses' hoofs	Apr. 22, 1873	761	242	3	453
138, 942	Schafer, L., jr., Mount Carmel, Ill. Potato-digger	May 13, 1873	425	133 } 134 }	3	543
138, 585	Schaff, G. & J. A., Chicago, Ill. Desk	May 6, 1873	105	33	3	506
	Schaff, J. A. (See Schaff, G. & J. A.)					
136, 008	Schalk, E., New York, N. Y. Oil-still	Feb. 18, 1873	571	189	3	198
139, 084	Schalk, J., jr., Guttenburgh, N. J. Self-measuring oil-tank	May 20, 1873	564	177	3	566
143, 850	Same. Measuring-faucet	Oct. 21, 1873	436	145	4	434
142, 353	Schaller, C. A., Philadelphia, Pa. Artificial flowers	Sept. 2, 1873	28	10	4	244
137, 032	Scharl, B., Boston, Mass. Cap	Mar. 18, 1873	610	202	3	313
145, 595	Schastey, G. A., New York, N. Y. Adjustable reclining-chair	Dec. 16, 1873	506	166	4	650
136, 766	Schatz, A. E., New York, N. Y. Device for fastening clothes-lines, &c.	Mar. 11, 1873	374	124	3	284
138, 943	Same. Pencil-sharpener	May 13, 1873	426	134	3	543
143, 934	Schedler, J., Jersey City Heights, N. J. Apparatus for teaching geography	Oct. 21, 1873	500	169	4	439
140, 220	Scheide, W. T., Tidionte, Pa. Apparatus for burning liquid fuel and generating steam	June 24, 1873	726	229	3	699
141, 955	Scheidler, R., and J. H. McNamar, Newark, Ohio. Portable steam-engine	Aug. 19, 1873	503	166	4	193
	Schenloth, C., deceased, by W. Westlake, administrator, London, assignor to J. Head, Ipawich, England. Steam-boiler and other furnaces	Nov. 4, 1873	64	20	4	483
138, 533	Schenck, M. P., Fulton, N. Y. Cider-mill	May 6, 1873	59	20	3	502
136, 550	Scheuck, R. C., jr., Dayton, Ohio. Link	Mar. 4, 1873	180	58	3	259
142, 517	Scherer, M. M., Batesville, Ark. Cotton-press	Sept. 2, 1873	175	57	4	256
145, 367	Schermerhorn, C., New York, N. Y. Towel-rack	Dec. 9, 1873	294	99	4	621
144, 569	Schermerhorn, J. L., Schenectady, N. Y. Device for rounding the ends of bolts	Nov. 11, 1873	343	116	4	517
142, 735	Scherpe, J. F., Saint Louis, Mo. Window-screen	Sept. 9, 1873	367	124	4	283
	Schieder, G. (See Edwards & Schieder.)					
	Same. (Reissue.)					
	Schierloh, H., et al. (See Popping, J., assignor.)					
146, 025	Schiffer, J. G., San Francisco, Cal. Malt-drier	Dec. 30, 1873	912	295	4	705
134, 566	Schindler, A., Lancaster, Pa. Coating for writing-tablets	Jan. 7, 1873	60		3	12
139, 266	Same. Writing-tablet	May 27, 1873	746		3	589
139, 425	Schindler, S. S., West Meriden, Conn. Game-table	May 27, 1873	886	225	3	600
136, 460	Schirck, A. & J., and J. Smith, Rochester, N. Y. Manufacture of carriage-axles	Mar. 4, 1873	89	31	3	253
	Schirck, J. (See Schirck & Smith.)					
138, 586	Schirmayer, F. J., Milwaukee, Wis. Wash-boiler	May 6, 1873	105	34	3	506
135, 595	Schleier, T. M., Knoxville, Tenn. Mustard-pot	Feb. 4, 1873	191	59	3	142
140, 221	Schlesser, N., Chicago, Ill. Rotary vegetable-cutter	June 24, 1873	727	229	3	699
138, 046	Schlich, F., and A. Feyh, New York, N. Y. Bottle-washing apparatus	Apr. 22, 1873	715	226	3	449
138, 334	Same. Bottle-filling apparatus	May 6, 1873	60	20	3	502
	Schloesser, H. J., et al. (See Kayser, L., assignor.)					
142, 871	Schmalhausen, H., Bridgeport, Ill. Trotting-gear	Sept. 16, 1873	491	167	4	304
144, 147	Schmeltzer, J. F., and J. M. Roberts, Winona, Minn. Instrument to loosen dried fruits	Oct. 28, 1873	705	234	4	466
	Schmid, A. (See Smith & Schmid.)					
137, 150	Schmid, J. B., Salem, Va. Saw-setting device	Mar. 25, 1873	723	240	3	333
138, 288	Schmidt, E., Pittsburgh, Pa. Stirrer for malt-kilns	Apr. 29, 1873	955	300	3	476
	Schmidt, H. (See McCosker, P., assignor.)					
141, 957	Schmidt, H., Albany, N. Y. Pole for vehicles	Aug. 19, 1873	504	166	4	193
142, 354	Schmidt, H., Chicago, Ill. Bolt and rod cutter	Sept. 2, 1873	29	11	4	244
	Schmidt, J. (See Hoffmeyer & Schmidt.)					
138, 289	Schmitt, F., Milwaukee, Wis. Beer-cooler	Apr. 29, 1873	956	301	3	476
135, 596	Schmitt, R., Newark, N. J. Traveling-bag	Feb. 4, 1873	192	60	3	142

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139, 822	Schmitz, J. N., Kilbourn City, Wis. Horse-collar.....	June 10, 1873	359	111	3	653
	Schmoele, C. (See Schmoele, W. F. and H., jr., assignors.)					
	Schmoele, H., jr. (See Schmoele, W. F. and H., jr.)					
145, 532	Schmoele, W. F. and H., jr., Philadelphia, Pa., assignors of one-third interest to C. Schmoele. Electro-pneumatic action for musical instruments.....	Dec. 16, 1873	457	149	4	646
145, 019	Schnapp, M. (See Beichhardt & Schnapp.)					
136, 769	Schrapp, M., Pleasant Park, Mo. Seeding-machine.....	Nov. 25, 1873	737	949	4	572
	Schnauffer, W., Baltimore, Md. Stereotype-plate holder.....	Mar. 11, 1873	375	194	3	284
	Schnautz, E., and E. Savoral. (See Savoral, E., assignor.)					
139, 085	Schneider, C., Newark, N. J. Filter for water-coolers.....	May 20, 1873	565	177	3	567
139, 823	Schneider, J. B., Kankakee, Ill. Wheelbarrow.....	June 10, 1873	360	111	3	653
139, 197	Schneider, J. F., assignor to self and P. Lenhart, Brooklyn, N. Y. Refrigerator and mode of cooling.....	May 20, 1873	671	210	3	575
	Schneider, L. (See Schneider & Montgomery, assignors.) (Reissue)					
5, 372	Schneider, L., Williamsport, Pa., and J. A. Montgomery, Springfield, N. J., assignors to L. Schneider. Draw-bridges.....	Apr. 22, 1873	883	279	3	462
	Schneidt, C. (See Beck & Schneidt.)					
139, 424	Schneller, G. O., Ansonia, Conn. Corset-fastening.....	May 27, 1873	885	285	3	600
140, 733	Same..... Corset-spring.....	July 8, 1873	345	117	4	48
	Schöberl, J. (See Nisale & Schöberl.)					
136, 551	Schoellhorn, P. A., Buffalo, N. Y. Peg-float.....	Mar. 4, 1873	181	58	3	280
141, 956	Same..... Crimping-clamp.....	Aug. 19, 1873	504	166	4	193
137, 243	Schoenhut, A., Philadelphia, Pa. Musical instrument.....	Mar. 25, 1873	812	267	3	339
144, 148	Same..... Sounding-plate for musical instruments.....	Oct. 28, 1873	706	234	4	466
144, 867	Schoettle, J. C., Collinsville, Ill. Hog-ringing plunchers.....	Nov. 25, 1873	615	209	4	562
140, 168	Schoevers, A. T. C., Hague, Holland. Truss.....	June 24, 1873	684	215	3	695
142, 872	Schofield, D., Gloucester, N. J. Calendering-machine.....	Sept. 16, 1873	491	167	4	304
135, 372	Schofield, E., Worcester, Mass. Combined inhaler and nasal-douche.....	Jan. 28, 1873	820	265	3	113
142, 518	Same..... Wash-boiler.....	Sept. 2, 1873	175	56	4	256
145, 758	Same..... Inhaling-apparatus.....	Dec. 23, 1873	661	316	4	675
138, 047	Schofield, G. W., United States Army. Revolving fire-arm.....	Apr. 22, 1873	715	226	3	449
138, 202	Schofield, J., assignor to J. Haworth and T. H. McCollin, Philadelphia, Pa. Guide for cutting out photographs.....	Apr. 22, 1873	850	269	3	460
	Schofield, T., Grass Valley, Cal. Needle-threader for sewing-machines.....	Sept. 23, 1873	686	236	4	330
143, 098	Schofield, W. H., Somerville, assignor of one-half interest to J. F. Donnell, Cambridgeport, Mass. Shuttle for sewing-machines.....	Sept. 30, 1873	861	295	4	361
143, 303	Schofield, F., Chicago, Ill. Stereotype-plate holder.....	Apr. 29, 1873	956	301	3	476
138, 290	Schofield, I., Dunlap, assignor of one-half interest to B. F. Frederick, Marshall County, Iowa. Middlings-purifier.....	Dec. 23, 1873	787	257	4	685
	Schofield, S. (See Wightman, D. A., assignor.)					
135, 597	Schofield, S., Providence, R. I., and C. E. Baker, Mont Clair, N. J. Paper-feeding machine.....	Feb. 4, 1873	193	60	3	142
135, 598	Same..... same.....	Feb. 4, 1873	194	60	3	142
135, 599	Same..... same.....	Feb. 4, 1873	197	61	3	143
139, 486	Schofield, S., Providence, R. I. Saw.....	May 27, 1873	887	285	3	600
140, 845	Same..... Cigar-machine.....	July 15, 1873	446	152	4	64
140, 846	Same..... same.....	July 15, 1873	447	152	4	64
140, 247	Same..... Cigar-trimmer.....	July 15, 1873	448	153	4	64
140, 848	Same..... Machine for making cigar-bunches.....	July 15, 1873	449	153	4	64
140, 849	Same..... Cigar-wrapping machine.....	July 15, 1873	451	153	4	64
140, 850	Same..... Apparatus for arranging cigar-fillers.....	July 15, 1873	453	153	4	64
140, 081	Schollhorn, W., New Haven, Conn. Pencil-attachment for dividers.....	June 17, 1873	587	186	3	680
137, 725	Schönberg, J., New York, N. Y. Stage-machinery.....	Apr. 8, 1873	409	126	3	402
	Schoneman, R. A. (See O'Neil, J., assignor.)					
145, 759	Schooler, J. E., assignor of one-half interest to J. S. Weaver, Chillicothe, Mo. Feather-renovator.....	Dec. 23, 1873	662	216	4	675
	Schorg, A., and B. Van Valkenburgh, Cobleskill, N. Y. Car-coupling.....	Sept. 23, 1873	686	236	4	330
	Schormann, L. (See Thiele, A., assignor.)					
134, 772	Schottky, H. A., and T. Simendinger, Hartford, Conn. Gun-sight.....	Jan. 14, 1873	259	85	3	41
145, 907	Schpakowsky, A., assignor to B. Hoffmark, St. Petersburg, Russia. Driving-belt.....	Dec. 23, 1873	788	258	4	665
142, 736	Schrack, J., Philadelphia, Pa. Shuttle-box mechanism.....	Sept. 9, 1873	367	124	4	283
	Schrader, J. C. (See Mathiesen & Schrader.) (Design.)					
5, 236	Schrag, P., and P. Hufeland, New York, N. Y., assignors to E. Faber. Machine for cutting off lead-pencils.....	(Reissue.)				
	Schraun, I. C., Des Moines, Iowa. Wash-boiler attachment.....	Jan. 14, 1873	436	138	3	65
140, 546	Schröder, B., Newark, N. J. Shaft for vehicles.....	July 1, 1873	174	59	4	22
138, 442	Schucht, J. H. (See Goffrie & Schucht.)	Apr. 29, 1873	1,090	344	3	467
	Schuellermann, J. C., executor. (See Siebrich, C.) (Reissue.)					
142, 946	Schuff, P., New York, N. Y. Malt-drier.....	Sept. 16, 1873	554	188	4	300
145, 533	Schulenburg, C., Detroit, Mich. Billiard-table.....	Dec. 16, 1873	458	150	4	646
145, 453	Schulke, W., Hamilton, Ohio. Pipe-organ valve.....	Dec. 9, 1873	367	122	4	627
143, 259	Schullian, C., New York, N. Y. Ruffer for sewing-machines.....	Sept. 30, 1873	823	282	4	358
135, 162	Schultz, F. W., assignor of one-half interest to W. E. Beatty, Mount Pleasant, Iowa. Excavator.....	Jan. 21, 1873	607	198	3	84
139, 267	Schultz, J. F., Chicago, Ill. Self-waiting table.....	May 27, 1873	746	236	3	589
142, 519	Schultz, L., College Point, N. Y. Hemmer for sewing-machines.....	Sept. 2, 1873	176	58	4	256
134, 706	Schultze, C. J., Vienna, Austria. Apparatus for mixing soap and other materials.....	Jan. 7, 1873	195	63	3	22
	Schulz, J. (See Pawlowski & Schulz.)					
139, 824	Schulz, L., Cincinnati, Ohio. Coffee-mill.....	June 10, 1873	361	111	3	653
142, 046	Schulze, L., Philadelphia, Pa. Cooling and purifying air in breweries, packing-houses, and other buildings.....	Aug. 19, 1873	590	193	4	200
	Schulze, L., Chicago, Ill. Car axle-box.....	Oct. 14, 1873	180	61	4	404
140, 547	Schulze, O., Saint Louis, Mo. Music-stand.....	July 1, 1873	174	59	4	22
136, 552	Schumaacher, H., Philadelphia, Pa. Folding knife and fork.....	Mar. 4, 1873	181	58	3	260
134, 613	Schumann, F. C., New York, N. Y. Music portfolio.....	Jan. 7, 1873	106	35	3	15
144, 868	Schüssler, A., and C. F. Dieterich, New York, N. Y. Paper dry gas-meter.....	Nov. 25, 1873	616	.....	4	562
142, 125	Schüssler, C., New York, N. Y. Process of ornamenting glass.....	Aug. 26, 1873	676	.....	4	216
136, 770	Schutzenberger, P., and F. de Lalande, Paris, France. Preparation of indigo for dyeing and printing.....	Mar. 11, 1873	375	.....	3	284
140, 082	Schuyler, I. S., and S. I. Thursby, Brooklyn, N. Y. Elevator for buildings.....	June 17, 1873	528	186	3	680
145, 245	Schuyler, J. F., Fostoria, Ohio. Guard for preventing leakage around chimneys.....	Dec. 2, 1873	184	63	4	600
136, 009	Schwaab, A., New York, N. Y. Barber's chair.....	Feb. 18, 1873	572	189	3	198
142, 520	Schwartz, C. C. E., assignor of one-half interest to C. Borm, Philadelphia, Pa. Decorative lantern.....	Sept. 2, 1873	177	58	4	256
	Schwartz, H. (See Schwartz, J., assignor.)					
132, 198	Schwartz, J., assignor to self and H. Schwartz, Philadelphia, Pa. Guttering-tongs.....	May 20, 1873	672	210	3	575

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
	Schwartz, M. (See Peavey, H., assignor.)					
	Schwarz, C. G. (See Gebhard & Schwarz.)					
	Schwarz, S. (See Lenn, J. F., assignor.)					
141, 670	Schwarzenbach, V., Berne, Switzerland. Process of gilding on glass	Aug. 12, 1873	244		4	163
141, 293	Schwatka, F., United States Army. Bridge-truss	July 29, 1873	890	292	4	117
	Schwenk, S. K., et al. (See Blackman, A. L., assignor.) (Reissue.)					
	Schwenesen, H. P. (See Schwenesen, J., assignor.)					
140, 649	Schwenesen, J., assignor to H. P. Schwenesen, Chicago, Ill. Toy	July 8, 1873	277	94	4	42
143, 304	Scofield, L., jr., Atlanta, Ga. Elastic seat for railway-rail joints	Sept. 30, 1873	861	295	4	361
144, 869	Scofield, L., assignor to self and J. B. Wait, Grand Haven, Mich. Ironing-table	Nov. 25, 1873	617	210	4	569
141, 893	Scofield, L. T., Cleveland, Ohio. Pipe coupling	Aug. 19, 1873	455	148	4	189
141, 466	Scott, A., Rochester, N. Y. Corn-harvester	Aug. 5, 1873	51	16	4	139
134, 707	Scott, A. M., and T. Wilson, Clearmont, Mo. Device for holding hogs in veterinary operations	Jan. 7, 1873	196	63	3	22
138, 203	Scott, D. A., Cincinnati, Ohio. Spring-fastener for bed-bottoms	Apr. 22, 1873	850	269	3	460
144, 361	Scott, D. A., and A. W. Hiltz, Calais, Me., assignors to C. & E. Curran, Milltown, New Brunswick, M. L. Whitney, and A. W. Hiltz, Calais, Me. Fire-escape	Nov. 4, 1873	158	52	4	491
	Scott, E. E. (See Hawthorn & Scott.)					
143, 260	Scott, E. E., assignor of two-thirds interest to G. E. Smith and J. Wilson, Beloit, Wis. Butter-worker	Sept. 30, 1873	824	283	4	358
143, 720	Scott, E. R., Noblesville, Ind. Car-coupling	Oct. 14, 1873	303	100	4	413
5, 400	Scott, E. W., Waukegan, Conn., assignor to self and A. Searls, Newark, N. J. Whip-socket	May 6, 1873	244	76	3	517
138, 048	Scott, J., Philadelphia, Pa. Strike or keeper for door-locks	Apr. 22, 1873	718	296	3	449
144, 035	Scott, J., assignor of one-half interest to R. Gill, Antwerp, N. Y. Fence-post	Oct. 28, 1873	613	203	4	458
140, 083	Scott, Q. A., Pittsburgh, Pa. Grain-binder	June 17, 1873	589	186	3	680
	Same. Hand-trunk and hat-box	July 1, 1873	175	60	4	22
142, 947	Scott, R., Philadelphia, Pa. Carpet	Sept. 16, 1873	554	188	4	310
142, 285	Scott, S. D., Eureka, Cal. Hand-wagon	Aug. 26, 1873	806	266	4	227
138, 347	Scott, T., assignor of one-half interest to A. Kenrick, Saint Paul, Minn. Gage for setting axle-boxes	Apr. 29, 1873	1,006	316	3	480
144, 870	Scott, W., Birmingham, and W. J. Matthews, Aston, England. Breech-loading fire-arm	Nov. 25, 1873	618	210	4	562
146, 026	Scott, W., Floyd Court-House, Va. Blade for agricultural implements	Dec. 30, 1873	913	296	4	706
	Scott, W. A., et al. (See Woodhouse, J. V., assignor.)					
	Scovill Manufacturing Company. (See Thomas, G. C., assignor.)					
138, 765	Scow, A. F., Chicago, Ill. Basket-form	May 13, 1873	277	86	3	530
139, 025	Same. same	May 20, 1873	508	160	3	562
	Scrannage, D'Este & Co. (See Scrannage, E., jr., assignor.)					
138, 700	Scrannage, E., jr., Melrose, Mass., assignor to Scrannage, D'Este & Co. Faucet	May 6, 1873	206	65	3	514
137, 726	Scrimgeour, R. C., Brooklyn, N. Y. Bath-tub plug-socket	Apr. 8, 1873	410	126	3	402
144, 036	Scripture, E. S., Brooklyn, N. Y. Wrench	Oct. 28, 1873	614	203	4	458
142, 737	Scripture, E. S., and W. Stackman, Brooklyn, N. Y. Railway-car heater	Sept. 9, 1873	369	124	4	283
136, 771	Scriven, J. A., New York, N. Y. Shirt-front	Mar. 11, 1873	376	124	3	284
	Seabert, F. A. (See Anthony & Seabert.)					
	Seabury, H. (See Fales & Seabury.)					
	Seal, C. E. (See Brooks, E. F., assignor.)					
5, 585	Seal, C. E., Winchester, Va., assignor of one-half interest to E. F. Brooks. Cut-off and regulating-cock for gas	Sept. 30, 1873	953	321	4	368
140, 549	Seal, C. E., Winchester, Va., assignor of one-half interest to E. F. Brooks, Baltimore, Md. Cut-off and regulating-cock for gas	July 1, 1873	176	60	4	23
142, 521	Seal, C. E., Winchester, Va., and E. F. Brooks, Baltimore, Md. Regulating-cock	Sept. 2, 1873	178	58	4	256
144, 705	Seaman, J., Groton, N. Y. Clothes-wringer	Nov. 18, 1873	465	157	4	539
	Searle, J. G. (See Payne, W. L., assignor.)					
135, 012	Searle, J. Q. C., Topeka, Kans. Stove-leg	Jan. 21, 1873	485	156	3	74
136, 772	Same. Base-burning stove	Mar. 11, 1873	377	125	3	284
136, 773	Same. Railway-car stove and heater	Mar. 11, 1873	378	125	3	285
	Searls, A. (See Scott, E. W., assignor.) (Reissue.)					
6, 581	Searls, A., Newark, N. J. Carriage-pole trimming	Apr. 8, 1873			3	387
6, 593	Same. Back cross-strap mountings for carriages	Apr. 15, 1873			3	417
139, 026	Same. Whip-socket	May 20, 1873	508	160	3	562
	Sears, A. R. (See Orr & Sears.)					
136, 185	Sears, E. B., San Francisco, Cal. Compound for destroying insects, vermin, &c.	Feb. 25, 1873	743		3	223
	Sears, G. E. (See White, J. N., assignor.)					
137, 244	Sears, J., Chicago, Ill. Soldering-tool	Mar. 25, 1873	813	267	3	339
141, 595	Same. Spice-box	Aug. 5, 1873	158	51	4	148
143, 190	Sears, W. H., Cheshire, Conn., assignor to T. Stowe, Readsborough, Vt. Bed-bottom	Sept. 23, 1873	758	261	4	336
	Seaver, A. (See Keith & Seaver.)					
137, 245	Seaver, G. F., E. W. Southworth, and J. M. Anthony, Ashland, Mass. Machine for pressing the soles of boots and shoes	Mar. 25, 1873	814	267	3	339
141, 958	Seavey, C. A., Hodgdon's Mills, Me. Steering-apparatus	Aug. 19, 1873	505	167	4	193
	Seavey, G. F., et al. (See Seavey, J. E., assignor.)					
146, 027	Seavey, J. E., assignor to self, R. P. Tibbetts, and G. F. Seavey, Kennebunkport, Me. Bevel rest	Dec. 30, 1873	913	296	4	706
140, 169	Sebille, R., Baltimore, Md. Potato masher and strainer	June 24, 1873	686	215	3	695
134, 614	Secomb, J. L., Chicago, Ill. Spring bed-bottom	Jan. 7, 1873	106	35	3	15
	Secombe Manufacturing Company. (See Holt, H., assignor.) (Reissue.)					
142, 522	Secor, E., Miles, Mich. Hanging-gates	Sept. 2, 1873	179	59	4	256
141, 894	Secor, J. B., Bridgeport, Conn. Shuttle for sewing-machines	Aug. 19, 1873	456	149	4	189
143, 034	Seddou, J., Susquehanna Depot, Pa. Rocking-grate	Sept. 23, 1873	634	216	4	396
	See, A. B., Yonkers, N. Y. Self-closing hatchway	Sept. 9, 1873	370	124	4	283
136, 010	Seebach, C., New York, N. Y. Process of polishing wood	Feb. 18, 1873	573		3	198
143, 999	Seeley, E. A., Scotch Plains, N. J. Paper-drier	Oct. 28, 1873	585	194	4	456
137, 246	Seely, D. B., Sterling, Ill. Hand-planter	Mar. 25, 1873	816	268	3	340
	Sefton, W. E. (See Fawcett, E. W. & R., & Sefton.)					
	Segur, J. M. (See Kennedy, A. H., assignor.) (Reissue.)					
137, 489	Seib, J. N., Boston, Mass. Veneer-cutter	Apr. 1, 1873	193	59	3	373
141, 596	Same. same	Aug. 5, 1873	159	51	4	148
145, 246	Same. Machine for cutting veneers	Dec. 2, 1873	185	64	4	600
135, 013	Seiberling, J. F., Akron, Ohio. Harvester	Jan. 21, 1873	486	156	3	74
137, 490	Seiberling, J. F., Akron, Ohio, assignor to Climax Mower and Reaper Company, Corry, Pa. Harvester	Apr. 1, 1873	195	60	3	373
139, 268	Seiberling, J. F., Akron, Ohio. Harvester	May 27, 1873	747	237	3	589
	Seibert, C., et al. (See Johnson, J. J., assignor.) (Reissue.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
135, 600	Seibert, J., assignor to the Jones and Nimick Manufacturing Company, Pittsburgh, Pa. Folding-door key.	Feb. 4, 1873	199	61	3	143
144, 481	Seibert, J., New York, N. Y. Soap-cutting machine.	Nov. 11, 1873	269	91	4	512
138, 587	Seidenstricker, W. H., Hagerstown, Md. Apparatus for making confectionery.	May 6, 1873	106	34	3	506
135, 601	Seifert, F., Knoxville, Iowa. Harness-tug buckle.	Feb. 4, 1873	199	61	3	143
145, 596	Seigh, J. W., Johnstown, Pa. Spark-arrester.	Dec. 16, 1873	507	167	4	650
143, 593	Seislove, J., Tiffin, Ohio, assignor of one-half interest to J. Neligh. Car-coupling.	Oct. 14, 1873	180	61	4	404
139, 086	Seitz, H., Palmyra, Mo. Wagon-brake shoe.	May 20, 1873	566	177	3	567
134, 708	Selden, S., Erie, Pa. Attaching knobs to spindles.	Jan. 7, 1873	196	63	3	22
142, 286	Selden, S., and O. R. Hanchett, assignors to Selden & Griswold Manufacturing Company, Erie, Pa. Pump bracket.	Aug. 26, 1873	806	267	4	237
135, 163	Seldis, K. M., New York, N. Y. Muffs.	Jan. 21, 1873	609	198	3	84
144, 149	Same. Building-block.	Oct. 28, 1873	706	235	4	466
135, 850	Selick, H., Lewistown, Pa. Plow.	Feb. 11, 1873	427	139	3	172
138, 291	Selleck, J. L., Baldwinville, N. Y. Harness-buckle.	Apr. 29, 1873	957	301	3	476
143, 721	Selleck, T., Greenwich, Conn. Protecting surfaces of articles of iron. (Extension.)	July 5, 1873	.....	.....	4	7
144, 362	Selleg, D. N., Newburgh, N. Y. Folding-chair.	Oct. 14, 1873	304	100	4	413
	Same. Spring-cushion, mattress, &c.	Nov. 4, 1873	159	52	4	491
	Sellers, C. (See Sellers, W. & C.)					
	Sellers, G. H. (See Sellers, W. & G. H.)					
	Sellers, S. (See Beschke, W., assignor.)					
	Sellers, S. (See Manly & Sellers.)					
138, 049	Sellers, S., and M. M. Manly, Philadelphia, Pa. Baluster for iron-bridge railings.	Apr. 22, 1873	719	{ 226 227 }	3	449
5, 373	Sellers, W., Philadelphia, Pa. Turn-table for railways. (Reissue).	Apr. 22, 1873	883	279	3	462
135, 851	Sellers, W., New York, N. Y. Toy velocipede.	Feb. 11, 1873	428	139	3	173
136, 100	Sellers, W., Philadelphia, Pa. Riveting-machine.	Feb. 18, 1873	651	213	3	204
136, 101	Same. Machine for forming cutters for cutting the teeth of wheels.	Feb. 18, 1873	652	{ 213 214 }	3	204
136, 389	Same. Iron bridge.	Mar. 4, 1873	33	12	3	248
139, 482	Same. Wheel-quartering machine.	June 3, 1873	35	11	3	611
141, 173	Same. Self-adjusting injector for feeding boilers.	July 22, 1873	767	252	4	99
143, 787	Sellers, W., Haverhill, Mass. Lawn-mower.	Oct. 21, 1873	379	126	4	429
145, 129	Sellers, W., Philadelphia, Pa., and G. H. Sellers, Wilmington, Del. Rolling-mill.	Dec. 2, 1873	85	28	4	592
144, 416	Same. Rotary puddler.	Nov. 11, 1873	213	72	4	507
145, 908	Sellers, W., Haverhill, Mass. Belt-tightener.	Dec. 23, 1873	789	258	4	685
141, 174	Sellers, W., and C., Philadelphia, Pa. Injector for feeding boilers.	July 22, 1873	769	252	4	99
145, 597	Sellig, D. N., Newburgh, N. Y. Spring mattress.	Dec. 16, 1873	508	167	4	650
141, 389	Selling, L., Detroit, Mich. Fruit-crate.	July 29, 1873	989	321	4	124
140, 650	Sellman, C., New York, N. Y. Sky-light bar.	July 8, 1873	278	94	4	42
134, 937	Seltzer, J. G., and A. J. Fink, Reading, Pa. Refrigerator.	Jan. 14, 1873	406	130	3	53
136, 102	Selwyn, J. H., London, England. Treating ores of silver.	Feb. 18, 1873	654	.....	3	204
145, 020	Semmendinger, A., Fort Lee, N. J. Photographic-plate holder.	Nov. 25, 1873	738	249	4	572
142, 739	Semple, J., Chicago, Ill. Stench-trap.	Sept. 9, 1873	372	125	4	284
143, 384	Same. Manufacture of plaster-patterns.	Sept. 30, 1873	936	317	4	367
6, 549	Semple, W. G., assignor to Galway, Semple & Co., Cincinnati, Ohio. Cook-stove. (Design).	Apr. 1, 1873	.....	.....	3	355
135, 247	Senderling, M. L., Jersey City, N. J. Truck.	Jan. 28, 1873	713	228	3	104
142, 126	Senieur, F., Mount Sterling, Ky. Fishing-rod holder.	Aug. 26, 1873	676	222	4	217
142, 873	Senior, W. F., Ripley, Ohio. Car-coupling.	Sept. 16, 1873	492	168	4	304
139, 825	Senk, W., Syracuse, N. Y. Sash-holder.	June 10, 1873	361	112	3	653
137, 491	Senn, J. T., assignor of one-half interest to S. Schwarz, Troy, Ala. Explosive shell.	Apr. 1, 1873	196	60	3	373
139, 923	Senour, F., Newport, assignor of one-half interest to J. A. Simpson, Covington, Ky. Re-lector.	June 17, 1873	456	142	3	668
	Serene, J. H. (See York, J. S., assignor.)					
140, 596	Sergeant, H. C., New York, N. Y. Rock-drill.	July 8, 1873	232	78, 79	4	39
143, 261	Same. Valve-movement for reciprocating-engines.	Sept. 30, 1873	825	283	4	358
143, 788	Serrell, E. W., and E. W., jr., New York, N. Y. Chain suspension-bridge.	Oct. 21, 1873	380	126	4	429
142, 740	Serrell, J. E., New York, N. Y. Derrick.	Sept. 9, 1873	372	125	4	284
	Severance, A. J. (See Severance, O., assignor.)					
	Severance, E. B. (See Hubbard & Severance.)					
144, 798	Severance, O., assignor to A. J. Severance, Middlebury, Vt. Stock-car.	Nov. 18, 1873	543	185	4	545
142, 528	Sevey, H. B., Vienna, Me. Compound metal-working machine.	Sept. 9, 1873	245	81	4	273
143, 732	Same. Same.	Oct. 14, 1873	304	100	4	413
144, 871	Same. Sap spout.	Nov. 25, 1873	619	210	4	562
	Sevey, J. A. (See Taggart, J., assignor.)					
	Same. (See Warner, D., assignor.)					
5, 632	Seward, L. A., San Francisco, Cal. Apparatus for teaching music. (Reissue).	Oct. 28, 1873	741	247	4	469
137, 727	Seward, M. D., Normal, Ill. Hot-air furnace.	Apr. 8, 1873	411	126	3	402
142, 128	Sewell, G., Brooklyn, assignor to W. K. Phillipa, New York, N. Y. Pressure gage.	Aug. 26, 1873	677	223	4	217
144, 706	Sexauer, L., assignor to self and J. B. Christoffel, Brooklyn, N. Y. Hammer for sewing-machines.	Nov. 18, 1873	465	158	4	539
	Sexton, S. B., Baltimore, Md. Stove. (Extension).	Apr. 19, 1873	.....	.....	3	416
	Same. Heating-stove. (Extension).	Apr. 19, 1873	.....	.....	3	416
6, 877	Same. Fire-place stove. (Design).	Sept. 9, 1873	.....	.....	4	270
23, 716	Same. Stove. (Disclaimer filed).	Apr. 18, 1873	.....	.....	3	416
141, 821	Same. Base-burning fire-place stove.	Aug. 12, 1873	375	123	4	173
135, 688	Seybold, F. J., Chicago, Ill. Composition for coating iron and other metals.	Feb. 11, 1873	566	.....	3	180
141, 895	Same. Car-coupling.	Aug. 19, 1873	456	149	4	189
135, 014	Seyferth, A. H., Brunswick, Germany. Treating sugar with sulphurous acid in the vacuum-pan.	Jan. 21, 1873	487	157	3	74
	Seymour, H. I., chair manufactory. (See Harwood & Wood, assignors.) (Design.)					
6, 458	Seymour, E., and C. E. Shattuck, Clinton, Iowa. Chair frame. (Design.)	Feb. 25, 1873	.....	.....	3	218
134, 938	Seymour, F. J., Wolcottville, Conn. Machine for making brass kettles and other hollow-ware.	Jan. 14, 1873	407	130	3	53
134, 939	Same. Spinning articles of sheet-metal.	Jan. 14, 1873	408	130	3	53
139, 427	Seymour, F. J., assignor to Turner, Seymour, and Judds, Wolcottville, Conn. Twine cutter.	May 27, 1873	888	286	3	600
137, 151	Seymour, G., Boone, Iowa. Washing-machine.	Mar. 25, 1873	724	241	3	333
7, 046	Seymour, J., Syracuse, N. Y. Badge. (Design.)	Dec. 9, 1873	.....	.....	4	615
	Seymour, J. H. (See Blocher, D., assignor.)					
144, 037	Seymour, P., East Bloomfield, N. Y. Cotton-planter.	Oct. 28, 1873	615	203	4	459
135, 731	Seymour, W. H., and D. S. Morgan, Brockport, N. Y. Harvester.	Feb. 11, 1873	319	{ 101 102 }	3	165
	Shackell, S. (See Tisdale, C. D., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
6, 955	Shackford, C. H., and M. V. Campbell, Syracuse, N. Y. Advertising frame.....(Design)...	Oct. 7, 1873			4	381
142, 741	Shackleton, W. S., Cleveland, Ohio. Coal-delivering sack.....	Sept. 9, 1873	374	125	4	284
139, 738	Shaffner, T. P., Louisville, Ky. Explosive compound.....	June 10, 1873	284		3	648
137, 964	Shaler, I. W., Brooklyn, N. Y. Gas-burner.....	Apr. 15, 1873	622	196	3	432
143, 385	Same..... Burner for carbureters.....	Sept. 30, 1873	936	317	4	367
143, 425	Same..... Signal-lantern.....	Oct. 7, 1873	27	10	4	383
143, 534	Same..... Carbureter.....	Oct. 7, 1873	118	40	4	390
138, 102	Shaler, J. B., Brooklyn, N. Y. Blacking-box cover.....	Apr. 22, 1873	762	242	3	453
139, 924	Shaler, R., assignor to H. L. Shaler, Madison, Conn. Exercising-machine.....	June 17, 1873	456	142	3	668
6, 891	Shales, D., and N. McCully, Boston, Mass. Parlor furniture.....(Design).....	Sept. 23, 1873			4	322
	Shalters, M. R. (See Ray & Shalters).....(Extension).....					
	Shambo, J. B. (See Lessor & Shambo.).....					
	Shangle, J. R. (See Brown & Shangle.).....					
134, 709	Shankland, J. W., Summerville, Ohio. Lifting-jack.....	Jan. 7, 1873	197	64	3	22
138, 535	Shannon, J., Cohoes, N. Y. Car-brake.....	May 6, 1873	60	20	3	502
140, 222	Shannon, S., Shellsburg, Iowa. Wind-mill.....	June 24, 1873	728	229	3	699
138, 050	Shanton, E. D., and S. Shaver, Minneapolis, Minn. Device for cooling mill-stones.....	Apr. 22, 1873	720	228	3	449
6, 693	Shantz, E. S., et al. (See Smith & Brown, assignors).....(Design).....	May 27, 1873			3	586
6, 765	Same..... Cemetery fence and gate.....(Design).....	July 8, 1873			4	36
137, 247	Sharp, A. B., Labadieville, La. Revolving rake.....	Mar. 25, 1873	816	268	3	340
	Sharp, D. (See Shaw, W. F., assignor.).....					
5, 349	Sharp, G. D., New York, N. Y. Billiard-table cushion.....(Reissue).....	Apr. 8, 1873	439	136	3	404
145, 368	Sharp, G. N., La Plata, Mo. Latch for gates, &c.....	Dec. 9, 1873	295	99	4	621
139, 269	Sharp, H. A., Harlem, Mo. Corn-planter.....	May 27, 1873	749	237	3	589
136, 774	Sharp, J. H., Doylestown, Pa. Feed-roller for straw-cutters.....	Mar. 11, 1873	378	125	3	285
141, 518	Sharp, R., Pittsburg, Pa. Composition filling for painters.....	Aug. 5, 1873	95		4	143
143, 386	Sharp, W., Portland, Me. Preparing and preserving fish.....	Sept. 30, 1873	937		4	367
138, 536	Sharp, W. A., and C. L. McClung, Tama City, Iowa. Harvester-attachment for dumping and shocking sheaves.....	May 6, 1873	61	21	3	502
140, 734	Sharpe, J., Paterson, N. J. Mold for clay and cement pipes.....	July 8, 1873	346	117	4	48
	Sharpe, J. M., et al. (See Walker, J. A., assignor.).....					
137, 625	Sharps, C., Vernon Depot, Conn. Many-barreled fire-arm.....(Extension).....	Jan. 25, 1873			3	70
138, 204	Sharps, C., Philadelphia, Pa. Breech-loading fire-arm.....	Apr. 8, 1873	315	98	3	394
	Sharta, T., New York, N. Y. Vault-cover.....	Apr. 22, 1873	851	280	3	460
	Shartzler, D. H. (See Shartzler & Cohic.).....					
134, 940	Shattuck, C. E. (See Seymour & Shattuck).....(Design).....	Jan. 14, 1873	409	131	3	53
135, 669	Shaudelle, J., Huntsville, Ala. Piano-forte action.....	Feb. 11, 1873	267	84	3	160
	Shaver, S. (See Shanton & Shaver.).....					
134, 820	Shaw, A. B., Bedford, Mass. Treadle for sewing-machines.....	Jan. 14, 1873	306	98	3	45
141, 729	Shaw, A. B., Bedford, Mass., assignor to M. W. Carr, Somerville, and H. W. Brooks, Cambridge, Mass. Buckle.....	Aug. 12, 1873	290	95	4	166
135, 373	Shaw, B. F., Cambridge, Mass. Purifying and deodorizing tallow obtained in rendering offal.....	Jan. 28, 1873	821		3	113
145, 454	Same..... Manufacture of glue.....	Dec. 9, 1873	368		4	627
139, 925	Shaw, E. F., Boston, Mass. Support for wash-tubs.....	June 17, 1873	457	143	3	669
143, 469	Shaw, G. F., West Roxbury, Mass. Support for wash-tubs.....	Oct. 7, 1873	59	21	4	365
138, 051	Shaw, G. H., Phelps, N. Y. Fire-escape.....	Apr. 22, 1873	721	228	3	449
	Shaw, G. W. (See Wardwell, S. W., Jr., assignor.).....					
141, 896	Shaw, H. F., West Roxbury, Mass. Apparatus for closing doors.....	Aug. 19, 1873	457	149	4	189
142, 047	Same..... Steering apparatus.....	Aug. 19, 1873	591	194	4	200
	Shaw, J., jr. (See Barney, C. H., assignor.).....					
	Same..... (See Mooney, G., assignor.).....					
134, 567	Shaw, J., Ballard Vale, Mass. Self-acting spinning-jack.....	Jan. 7, 1873	61	18, 19	3	12
135, 852	Same..... Winding mechanism for spinning-jacks.....	Feb. 11, 1873	428	139	3	173
135, 248	Shaw, J., Shelby, Ohio. Attaching hair-springs to watch-balances.....	Jan. 28, 1873	714	228	3	105
137, 388	Shaw, J. L., Grand Rapids, Mich. Railway water-tank.....	Apr. 1, 1873	97	32	3	365
143, 723	Shaw, L. M., and A. S. Baker, Evansville, Wis. Rotary steam-engine.....	Oct. 14, 1873	305	100	4	413
139, 428	Shaw, M., Lawrence, Kans. Refrigerator.....	May 27, 1873	888	286	3	600
	Shaw, R. (See Bowden & Shaw.).....					
141, 175	Shaw, S. J., Marlborough, Mass. Inhaler.....	July 22, 1873	773	252	4	99
135, 941	Shaw, T., Philadelphia, Pa. Planing-machine.....	Feb. 18, 1873	515	168	3	194
137, 248	Shaw, T., assignor to Gorham Manufacturing Company, Providence, R. I. Table-caster.....	Mar. 25, 1873	818	268	3	340
137, 325	Shaw, T., Philadelphia, Pa. Means for detaching boats.....	Apr. 1, 1873	46	14	3	360
140, 597	Same..... Compound-blower.....	July 8, 1873	234	79	4	39
132, 944	Shaw, W., Brooklyn, N. Y. Sash-cord guide.....	May 13, 1873	427	134	3	543
140, 436	Shaw, W., Hollister, Cal. Type.....	July 1, 1873	78	27	4	14
	Shaw, W. A., et al. (See Hook, A. H., assignor.).....					
139, 739	Shaw, W. A., and C. C. Tracy, assignors to selves and C. F. Hervé, New York, N. Y. Waste-traps.....	June 10, 1873	284	88	3	648
142, 589	Shaw, W. F., assignor to self and D. Sharp, Boston, Mass. Heater for steam fire-engines.....	Sept. 9, 1873	247	81	4	274
	Shaw, W. H. (See Hofstatter & Shaw.).....					
136, 465	Shawk, G. W., and A. Storer, Cleveland, Ohio. Electro-magnetic annunciator.....	Mar. 4, 1873	97	33	3	253
139, 826	Shawk, G. W., assignor of three-fourths interest to C. F. Uhl, A. Storer, and J. Gribben, Cleveland, Ohio. Electric annunciator.....	June 10, 1873	362	112	3	654
138, 537	Sheaffer, A. B., New Holland, Pa. Seat for vehicles.....	May 6, 1873	62	21	3	502
135, 291	Shearer, P. A., Morristown, Tenn. Hay and cotton press.....	Jan. 28, 1873	745	240	3	107
139, 087	Shedlock, A., New York, N. Y. Adjustable reamer.....	May 20, 1873	566	178	3	567
140, 955	Sheears, T. J., assignor of one-half interest to B. F. Potter, Ypsilanti, Mich. Bed-bottom.....	July 15, 1873	552	185	4	72
144, 799	Sheears, T. J., Ypsilanti, Mich. Stilt.....	Nov. 18, 1873	544	185	4	545
135, 942	Sheer, J., Lincoln, Ill. Corn planter.....	Feb. 18, 1873	516	168	3	194
135, 047	Sheffield, G. V., Boston, Mass. Sewing-machine for boots and shoes.....	Jan. 21, 1873	517	167	3	77
	Same..... Machine for making double-tapered thread.....	Mar. 18, 1873	610	202	3	313
140, 651	Sheffer, J., Deselm, Ill. Washing-machine.....	July 8, 1873	279	94	4	42
139, 827	Shelby, C. C., Spring Valley, N. Y. Railway-switch.....	June 10, 1873	362	112	3	654
	Shelbyville Manufacturing Company. (See Simpson & Ellacott, assignors.).....					
	Sheldon & Co. (See Phillips, H. F., assignor.).....					
137, 249	Sheldon, C. B., New York, N. Y. Furniture-caster.....	Mar. 25, 1873	818	268	3	340
137, 250	Same..... same.....	Mar. 25, 1873	819	269	3	340
137, 251	Same..... same.....	Mar. 25, 1873	820	269	3	340
137, 728	Same..... same.....	Apr. 8, 1873	412	126	3	402
139, 619	Same..... same.....	June 3, 1873	151	50	3	621

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140, 310	Sheldon, C. B., New York, N. Y. Wheel for furniture-casters.	June 24, 1873	804	255	3	706
140, 311	Same. same.	June 24, 1873	804	255	3	706
141, 390	Same. Table-caster	July 29, 1873	989	321	4	124
141, 391	Same. Stool	July 29, 1873	990	321	4	124
145, 909	Same. Knife-cleaner	Dec. 23, 1873	789	259	4	685
138, 766	Sheldon, C. H. (See Clogston, L. B., assignor) (Reissue.)					
	Sheldon, G. G., Chicago, Ill. Gas-fixture	May 13, 1873	277	86	3	530
	Sheldon, J. (See Bradley, E. F., assignor)					
140, 795	Sheldon, N. P., assignor to H. H. Welch, San Francisco, Cal. Pump-plunger and pump	July 15, 1873	404	137	4	60
143, 535	Sheldon, P., Jamestown, N. Y. Undermining-auger	Oct. 7, 1873	118	40	4	390
137, 389	Sheldon, R. B., Canastota, N. Y. Horse hay-rake	Apr. 1, 1873	98	32	3	365
136, 622	Shellenback, P., and F. Brilmayer, Hamilton, Ohio. Rotary balanced cut-off valve	Mar. 11, 1873	257	86	3	275
143, 594	Shelly, T. B., Chicago, Ill. Shoemakers' pinchers	Oct. 14, 1873	181	61	4	404
144, 292	Shelmandine, C., Jefferson, N. Y. Machine for riving shingles	Nov. 4, 1873	100	33, 34	4	486
5, 530	Shelton, G., Normal, Ill. Plow (Reissue.)	Aug. 12, 1873	398	130	4	175
138, 205	Same. Suspender for fly-guards upon horses	Apr. 22, 1873	851	270	3	460
136, 339	Shelton, N. K., Wabash, Ind. Carpet-stretcher	Feb. 25, 1873	874	282	3	233
140, 652	Shenfield, A., New York, N. Y. Suspenders	July 8, 1873	279	94	4	42
144, 929	Shenston, T. S., Brantford, Canada. Inkstand	Nov. 25, 1873	662	224	4	566
134, 773	Shenton, F., Slatington, assignor to Locke Slate Company, Philadelphia, Pa. Slate-dressing machine	Jan. 14, 1873	260	85	3	41
7, 075	Shepard, A., Southington, Conn. Drawor-pull (Design)	Dec. 23, 1873			4	671
	Shepard & Dudley. (See Nimmo, E. B., assignor.)					
143, 851	Shepard, C. J., Brooklyn, N. Y. Hot-air furnace	Oct. 21, 1873	437	145	4	434
140, 598	Shepard, G. L., assignor of one-half interest to C. C. Geller, Albany, N. Y. Child's carriage	July 8, 1873	235	79	4	39
140, 735	Shepard, H. E., New Haven, assignor to Bradley & Hubbard, West Meriden, Conn. Plastic composition for the manufacture of knobs and other molded articles.	July 8, 1873	347		4	48
5, 290	Shepard, H. W., New York, N. Y. Handle for milk-cans (Reissue.)	Feb. 11, 1873	453	147	3	175
135, 853	Same. Cotton or woolen cau	Feb. 11, 1873	429	139	3	173
135, 854	Same. same	Feb. 11, 1873	430	140	3	173
135, 855	Same. Sheet-metal vessel	Feb. 11, 1873	431	140	3	173
145, 534	Shepard, H. W., Madison, Ind., assignor of one-third interest to G. W. Cable, Saint Louis, Mo. Safety-valve for steam-boilers	Dec. 16, 1873	459	150	4	646
139, 088	Shepard, J., New Britain, Conn. Manufacture of umbrella-stretchers.	May 20, 1873	567	178	3	567
140, 389	Shepard, O. F., Cincinnati, Ohio. Device for attaching hubs to axles	July 1, 1873	46	15	4	12
138, 767	Shepard, S. A., Pittsburgh, Pa. Apparatus for painting or coating broom-handles, moldings, &c.	May 13, 1873	279	87	3	530
141, 671	Shepardson, H. S., Shelburne, Mass. Gimlet-handle	Aug. 12, 1873	245	78	4	163
140, 312	Shepard, J. A., Portsmouth, Ohio. Pitman-connection	June 24, 1873	805	255	3	706
	Shepherd, O. P. (See Howard, O. B., assignor) (Reissue.)					
137, 965	Shepherd, P. D., Telfair, Ga. Combined seed separator and drill	Apr. 15, 1873	622	196	3	432
	Sheplar, D. (See Sheplar, N. and D.)					
143, 100	Sheplar, N. and D., Murrayville, Ill. Wind-wheel	Sept. 23, 1873	687	236	4	330
143, 536	Sheppard, J. W., New York, N. Y. Game-register for cards	Oct. 7, 1873	119	40	4	390
144, 363	Sherck, L., Fremont, Ohio. Turbine water-wheel	Nov. 4, 1873	159	53	4	491
142, 742	Sherer, C. W., Chicago, Ill. Washing-machine	Sept. 9, 1873	375	126	4	284
142, 416	Sheridan, J. J., New York, N. Y. Boring and drilling machine	Sept. 2, 1873	82	27	4	249
144, 150	Sherman, D. H., Jersey City, N. J. Apparatus for depilating animal carcasses	Oct. 28, 1873	707	235	4	466
138, 348	Sherman, E. G., Forestville, N. Y. Spring bed-bottom	Apr. 29, 1873	1,006	317	3	480
	Sherman, H. E. (See Burruss, H. W., assignor.)					
144, 872	Sherman, H. N., Beloit, Wis. Breech-loading fire-arm	Nov. 25, 1873	619	210	4	562
139, 926	Sherman, J. A., New York, N. Y. Truss	June 17, 1873	458	143	3	669
136, 103	Sherman, W. B., Clinton, N. Y. Measuring-can for oil, &c.	Feb. 12, 1873	655	214	3	204
	Shermann, J. A. (See Rowe, J. L., assignor.)					
	Sherrerd, S. (See Hyman, J., assignor.)					
134, 615	Sherrill, J., Harrisburgh, Oreg. Cultivator	Jan. 7, 1873	107	35	3	15
142, 287	Sherwood, A., Auburn, N. Y. Alarm-bell attachment	Aug. 26, 1873	807	267	4	227
	Sherwood, D., et al. (See Dudley, G. D., assignor.)					
	Sherwood, D. (See Woods & Sherwood) (Reissue.)					
135, 943	Sherwood, D., assignor to E. P. Woods, D. Sherwood, and C. H. Latham, Lowell, Mass. Wire-basket	Feb. 18, 1873	517	169	3	194
138, 538	Same. Toilet-stand	May 6, 1873	63	21	3	502
137, 866	Sherwood, J. B., Chicago, Ill. School desk and seat	Apr. 15, 1873	540	168	3	425
136, 775	Sherwood, J. H., New York, N. Y. Grate fire-place and hot-air furnace	Mar. 11, 1873	379	125	3	285
145, 972	Shewell, J. D., Boston, Mass. Fastening for meeting-rails of sashes	Dec. 30, 1873	668	281	4	702
	Shields, W. C. (See Leet & Shields.)					
137, 252	Shinn, J., assignor of one-half interest to J. and J. Dobson, Philadelphia, Pa. Power-loom	Mar. 25, 1873	890	269	3	340
143, 470	Shinn, R. A., Georgetown, D. C. Machine for clearing streets of snow	Oct. 7, 1873	60	21	4	385
	Shipperd, J. J., et al. (See Shipperd & Curtis, assignors.)					
	Same. (See Shipperd, W. C., assignor.)					
	Same. (See Shipperd & Curtis, assignors.)					
	Same. (See Shipperd, W. C., assignor.)					
138, 701	Shipperd, W. C., assignor of three-fourths interest to S. S. Coe, J. J. and J. R. Shipperd, Cleveland, Ohio. Coupling for whiffe-trees	May 6, 1873	207	65	3	514
138, 702	Shipperd, W. C., and E. P. Curtis, assignors of three-fifths interest to S. S. Coe, J. J. and J. R. Shipperd, Cleveland, Ohio. Thill-coupling	May 6, 1873	207	65	3	514
138, 703	Shipman, A. H., Albany, N. Y. Planing-machine	May 6, 1873	208	66	3	514
142, 048	Shipman, A. H., Arcadia, N. Y. Cutter-head	Aug. 19, 1873	592	195	4	200
144, 707	Shipp, W. T., C. J. Peterson, and R. L. McLurd, Brevard Station, N. C. Plow	Nov. 18, 1873	466	158	4	539
	Shippen, E. W. (See Minnie, T. S., assignor.)					
138, 349	Shippey, J. F., Valley Falls, N. Y. Tempering harvester-knives	Apr. 29, 1873	1,007	317	3	480
141, 597	Shireman, J. H., York, Pa., assignor of one-half interest to A. R. Reese, Phillipsburgh, N. J. Harvester	Aug. 5, 1873	161	52	4	148
142, 874	Shirrell, J., Paterson, N. J. Machine for grinding cylinder-heads	Sept. 16, 1873	493	168	4	304
141, 392	Shive, S., Forks, and D. Savage, Orangeville, Pa., said Savage assignor of one-third interest to said Shive. Machine for dressing millstones	July 29, 1873	990	321	4	124
134, 941	Shiveley, C. W., Peru, Ind. Bleaching-safe	Jan. 14, 1873	409	131	3	53
135, 602	Shiveley, T., assignor of one-half interest to B. E. Hart, Lansing, Mich. Grain-scourer		200	61, 62		
142, 417	Shoales, W. E., Sherburne Four Corners, N. Y. Harvester-cutter	Sept. 2, 1873	84	28	4	249
	Shoe Machinery Manufacturing Company. (See Bean, E. E., assignor) (Reissue.)					
	Same. (See Cummings, P. D., assignor.)					
	Same. (See Dodge, J. W., assignor.)					
	Same. (See Hawkins, G. C., assignor.)					
	Same. (See Howe, J., assignor.)					

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	Shoe-Machinery Manufacturing Company. (See Keniston, C., assignor.)					
	Same..... (See Lambert, R. C., assignor.)					
	Same..... same..... (Reissue.)					
142, 948	Shoemaker, D., Kittanning Township, assignor of one-half interest to G. A. Reichert, jr., Manorville, and J. H. Reichert, Philadelphia, Pa. Blasting-plug.....	Sept. 16, 1873	555	188	4	310
142, 949	Same..... Bit for boring minerals.....	Sept. 16, 1873	556	188	4	310
142, 950	Same..... Coal-boring machine.....	Sept. 16, 1873	557	189	4	310
144, 637	Shoemaker, E., Melmore, Ohio. Spark arrester and conductor.....	Nov. 18, 1873	408	137	4	534
143, 595	Shoff, C. J., Osceola, Pa. Combined square, protractor, rule, bevel, plumb, and level.....	Oct. 14, 1873	162	62	4	404
145, 247	Sholes, A. W. (See Leeds, L., assignor.)					
	Sholes, C. W., and H. C. Kelly, Morrison, Ill. Pump.....	Dec. 2, 1873	187	64	4	600
	Sholes, E. W. (See Leeds, L., assignor.)					
	Shoninger, B. (See Lomas, J. R., assignor.)					
	Same..... same..... (Design.)					
144, 230	Shontz, A. S., assignor to Comstock, Castle & Co., Quincy, Ill. Stove-door.....	Nov. 4, 1873	56	17	4	482
6, 872	Shook, H. G., New York, N. Y. Can..... (Design.)	Sept. 2, 1873			4	242
143, 643	Shook, J. H., Normal, Ill. Bee-hive.....	Oct. 14, 1873	226	76	4	407
136, 340	Shorey, S. W., Boston, assignor to A. B. Keith, Braintree, Mass. Machine for forming staple-seams in leather.....	Feb. 25, 1873	275	289	3	234
137, 966	Shorey, S. W., Boston, Mass. Modes of forming turned seams.....	Apr. 15, 1873	623	197	3	332
139, 429	Same..... Seam for leather-work.....	May 27, 1873	289	286	3	600
139, 521	Short, J., New Brunswick, N. J., assignor to self and R. N. Woodworth, New York, N. Y. Thread dressing and winding machine.....	June 3, 1873	65	22	3	614
145, 910	Short, S., Cincinnati, Ohio. Clothes-mangle.....	Dec. 23, 1873	790	259	4	685
145, 911	Same..... Washing-machine.....	Dec. 23, 1873	791	259	4	685
145, 912	Same..... Drying-frame for lace-curtains, &c.....	Dec. 23, 1873	792	259	4	685
	Shoulders, G. H. (See Erwin & Shoulders.)					
	Shover, G. H., et al. (See Anderson, J. J., assignor.)					
141, 730	Shreiner, J. H., Wilmington, Del. Grain and seed drill.....	Aug. 12, 1873	291	95	4	167
	Shroder, J. B., et al. (See Williams, H. B., assignor.)					
	Shrote, J. H., deceased, by M. Shrote, executrix, Baltimore, Md. Cutting and panning cakes..... (Extension.)	Oct. 11, 1873			4	379
	Shrote, M., executrix. (See Shrote, J. H.)..... (Extension.)					
141, 959	Shugart, W. H., New Garden, Ind. Sawing-machine.....	Aug. 19, 1873	506	167	4	193
	Shuler, I. C., Amsterdam, N. Y. Construction of sheet-metal coffins..... (Extension.)	July 5, 1873			4	7
	Shull, A. S. (See Sayre & Shull)..... (Reissue.)					
139, 027	Shultz, J. U., Shelby, Ohio. Wagon-seat.....	May 20, 1873	509	160	3	562
137, 492	Shuman, T., Corning, Iowa. Attachment for wash-boilers.....	Apr. 1, 1873	197	60	3	373
135, 249	Shumard, W., Richmond, Ind. Diamond-gauge.....	Jan. 28, 1873	714	228	3	105
137, 601	Shurz, F., Paloma, Ill. Binding-screw.....	Apr. 15, 1873	486	152	3	421
136, 776	Shute, C. S. and L. R., Springfield, Mass. Railway-switch.....	Mar. 11, 1883	380	126	3	285
	Shute, L. R. (See Shute C. S. and L. R.)					
140, 956	Shyrma, A. F., assignor of one-half interest to B. F. McCahill, New York, N. Y. Laying cement pavements.....	July 15, 1873	553	185	4	72
	Sibley, E. E. (See Callahan, C., assignor.)					
142, 875	Sibley, J., New York, N. Y. Arm-plate shield.....	Sept. 16, 1873	493	168	4	304
141, 822	Sibley, L. D., Chicago, Ill. Stereoscope.....	Aug. 12, 1873	376	123	4	173
	Sibley, W. E. (See Babbitt, S., assignor.)					
139, 976	Sichler, G., New York, N. Y. Apparatus for pitching barrels.....	June 17, 1873	493	156	3	672
138, 945	Sickles, F. E., Marshall, Tex. Sinking pneumatic piles or caissons.....	May 13, 1873	427	134	3	543
144, 570	Sickenberger, A., Chicago, Ill. Cigar-point splitter.....	Nov. 11, 1873	344	116	4	517
140, 957	Siddens, W. P., State Line City, assignor to self and R. Craig, Warren County, Ind. Car-coupling.....	July 15, 1873	554	186	4	72
143, 724	Sidney, W. E., Knightsville, Ind. Portable pump for mines.....	Oct. 14, 1873	306	101	4	413
141, 083	Siebe, H. H., W. A. Gorman, and T. Christy, jr., London, England. Camel for raising sunken vessels.....	July 22, 1873	682	229	4	92
141, 598	Siebenshal, A., assignor to self and F. R. Dufour, Vevay, Ind. Steering-apparatus for vessels.....	Aug. 5, 1873	163	52	4	148
	Siebert, L. (See Buell & Lilley, assignors.)					
	Siefert, W. C. (See Weber & Siefert.)					
141, 294	Siemens, C. W., Westminster, England. Pneumatic dispatch-apparatus.....	July 29, 1873	892	293	4	117
141, 176	Siering, F., New York, N. Y. Weather-strip.....	July 22, 1873	774	253	4	99
145, 913	Same..... Process of preparing felt for weather strips, packings, &c.....	Dec. 23, 1873	793		4	685
139, 334	Stetz, M., Williamsburg, N. Y. Beer-cask.....	May 27, 1873	800	255	3	593
139, 089	Stievers, F., assignor of one-half interest to W. H. Hilderbrann, Fort Wayne, Ind. Ruffler and gatherer for sewing-machines.....	May 20, 1873	568	178	3	567
136, 104	Silber, A. M., and F. White, London, England. Portable-lamp cooking-apparatus.....	Feb. 18, 1873	656	214	3	204
143, 537	Silberschmidt, S., Baltimore, Md. Ankle supporter and filler.....	Oct. 7, 1873	120	41	4	390
135, 164	Sillman, H., Brooklyn, N. Y. Band saw-gang.....	Jan. 21, 1873	610	198	3	84
138, 443	Same..... Band sawing-machine.....	Apr. 29, 1873	1,091	344	3	487
	Silsby, H. C. (See Wickes, S. W., assignor.)					
	Silver, A. R. (See Faucett, Silver & Deming, assignors.)					
141, 731	Silver, A. R., assignor of one-half interest to J. Deming, Salem, Ohio. Meat-chopper.....	Aug. 12, 1873	292	95	4	167
	Silver, E. W. (See Faucett, Silver & Deming.)					
142, 288	Silver, W. J., Salt Lake City, Utah. Shaft-coupling.....	Aug. 26, 1873	808	267	4	227
	Silverberg, M. (See Pink & Silverberg.)					
139, 199	Silvernale, H. J., Golden Lake, Wis. Harvester.....	May 20, 1873	672	210	3	575
139, 270	Silvers, J. H., Hightstown, N. J. Tag-machine.....	May 27, 1873	750	238	3	589
144, 571	Silversmith, J., Chicago, Ill. Manufacture of printing-type.....	Nov. 11, 1873	345	116	4	517
	Silverthorn, N., Summerville, Canada. Boot and shoe tip..... (Extension.)	Nov. 29, 1873		117	4	558
	Silverwood, W. (See Wilders, J. M., assignor.)					
	Simendinger, T. (See Schottky & Simendinger.)					
136, 623	Simes, W. F., Philadelphia, Pa. Preparing camphor.....	Mar. 11, 1873	257		3	275
	Simmerman, J. S. (See Newlin & Simmerman.)					
141, 599	Simmons, A. J., Indianapolis, Ind. Valve for steam and vacuum pumps.....	Aug. 5, 1873	163	52	4	148
143, 725	Same..... Steam and vacuum pump.....	Oct. 14, 1873	307	101	4	413
142, 951	Simmons, C. E., Monroe, Wis. Ice-cream freezer.....	Sept. 16, 1873	559	189	4	310
142, 952	Simmons, C. J., Kansas City, Mo. Egg-carrier.....	Sept. 16, 1873	560	190	4	310
138, 444	Simmons, F., New Orleans, La. Friction-gear.....	Apr. 29, 1873	1,092	345	3	487
136, 553	Simmons, G. H., Bennington, Vt. Lamp.....	Mar. 4, 1873	182	59	3	260

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Simmons, G. W., et al. (See Howard & Jackson, assignors) (Reissue.)					
135, 493	Simmons, H. P., Paterson, and A. J. King, Hudson, N. J. Bee-hive	Feb. 4, 1873	91	29	3	134
139, 828	Simmons, I., Baltimore, Md. Gas-burner	June 10, 1873	363	112	3	654
145, 248	Same Carbureter	Dec. 2, 1873	187	64, 65	4	600
145, 760	Simmons, J. D., Quincy, Ill. Ventilator for railway-cars	Dec. 23, 1873	663	216	4	675
141, 823	Simmons, T., assignor of one-half interest to A. & C. T. Clemen, Halifax, Canada. Vapor-burners	Aug. 12, 1873	377	123	4	173
141, 084	Simon, R., Paterson, N. J. Reel	July 22, 1873	683	229	4	92
142, 177	Simon, R., New York, N. Y. Reel for skeining silk	Aug. 26, 1873	717	237	4	220
6, 766	Simon, S., New York, N. Y. Shelf-paper (Design)	July 8, 1873			4	26
6, 767	Same (Design)	July 8, 1873			4	26
6, 768	Same (Design)	July 8, 1873			4	26
6, 961	Same (Design)	Oct. 14, 1873			4	401
	Simonda, S. M., Philadelphia, Pa. Kite					
	Simonin, W. E. (See Burr, H. J., assignor.)					
	Same (See Jaycox, G. B., assignor.)					
	Simonin, C. F. A. (See Adamson & Simonin) (Reissue.)					
144, 000	Simonin, C. F. A., assignor to W. Adamson, Philadelphia, Pa. Extracting oleine from fatty matters	Oct. 28, 1873	585	194	4	456
140, 550	Simons, N. M., Saint Louis, Mo. Cooking-range	July 1, 1873	177	60	4	93
137, 034	Simons, W., Charleston, S. C. Lamp-shade	Mar. 18, 1873	612	202	3	313
136, 554	Simpson, A. B., Camden, Ohio. Medical compound for skin-diseases	Mar. 4, 1873	183		3	260
	Simpson, E., et al. (See Neil, J. W., assignor.)					
	Simpson, J. A. (See Senour, F., assignor.)					
	Simpson, J. F. (See Stark, J. P., assignor.)					
134, 568	Simpson, J. K., and S. N. Drake, New York, assignors of four-sixths interest to H. & M. Kleen, New York, N. Y., F. Kleen, Hoboken, N. J., and J. N. Thomas, Maysville, Ky. Steam vacuum-pump	Jan. 7, 1873	63	19	3	12
136, 461	Simpson, J. M., Oshkosh, Wis. Sash-balance	Mar. 4, 1873	90	31	3	253
140, 437	Simpson, M. P., Pana, and J. P. Ellacott, assignors to the Shelbyville Manufacturing Company, Shelbyville, Ill. Cultivator	July 1, 1873	78	98	4	14
140, 851	Simpson, W., Berlin, Canada. Mirror-holder	July 15, 1873	453	154	4	64
135, 670	Simpson, W., and A. Gardner, Ilford, England. Reciprocating steam-engine	Feb. 11, 1873	268	84	3	161
142, 953	Sims, E. B., Antwerp, N. Y. Door-bell	Sept. 16, 1873	561	190	4	310
5, 513	Sims, Z. B., Bonham, Tex. Cotton-plow (Reissue)	July 29, 1873	1,022	331	4	126
135, 165	Same Cultivator	Jan. 21, 1873	610	199	3	84
139, 620	Same Corn and cotton planter	June 3, 1873	152	51	3	621
135, 447	Sinclair, J. A., Bridgeport, assignor to self and M. C. McKeown, Barnesville, Ohio. Grate-bar	Feb. 4, 1873	52	17	3	131
144, 001	Sinclair, J. A., Bridgeport, Ohio. Fire-engine	Oct. 28, 1873	586	194	4	456
5, 387	Sinclair, J. D., assignor by mesne assignment to E. A. Lambert, W. S. Harris, and N. B. Rhodes, Brooklyn, N. Y. Hatchway (Reissue)	Apr. 29, 1873	1,118	353	3	489
140, 852	Sinclair, J. E., Worcester, Mass. Clamp	July 15, 1873	454	154	4	64
141, 295	Sinclair, J. P., Eldridge, N. Y. Chair-seat	July 29, 1873	894	293	4	117
	Sinclair, R. R. (See Reese, G. F. C., assignor.)					
136, 675	Siner, J. B., assignor to P. C. Kirk and M. Pendergrast, Lawrence, Mass. Converting rotary motion of a shaft into reciprocating motion	Mar. 11, 1873	300	99	3	278
141, 600	Sink, J. J., Philadelphia, Pa. Combined fountain and pump	Aug. 5, 1873	164	53	4	148
144, 708	Sipe, L., assignor of one-half interest to G. R. Eastham, Keezletown, Va. Corn-planter	Nov. 18, 1873	467	158	4	539
	Siskind, I. J. (See Hamburger, Siskind & Klein.)					
140, 223	Sisson, G. B., Buffalo, N. Y. Fastening for safety-valve cases	June 24, 1873	729	229	3	699
141, 467	Same Frame for vertical engines	Aug. 5, 1873	52	16	4	139
145, 535	Sisson, J. E., Batrop, La. Cultivator	Dec. 16, 1873	460	150	4	646
145, 130	Sitzler, C. A., Kitzinger, Germany. Paint-compound	Dec. 2, 1873	89		4	592
137, 253	Skaata, G. W., Cincinnati, Ohio. Railway-rail joint	Mar. 25, 1873	821	270	3	340
140, 633	Skaata, W. W., assignor to J. D. Henry, Cincinnati, Ohio. Bed-bottom	Sept. 23, 1873	635	217	4	326
140, 653	Skelton, W. M., Greencastle, Ind. Apparatus for making vinegar and ageing spirits	July 8, 1873	290	95	4	42
142, 954	Skidmore, W. H., assignor of one-half interest to C. A. Ellis, Philadelphia, Pa. Railway-rail joint	Sept. 16, 1873	561	190	4	310
	Skilton, C. C. (See Palmer, H. L., assignor.)					
	Same (Reissue)					
135, 015	Skinner, A. W., Providence, R. I. Condensing-tube for carding-machines, &c.	Jan. 21, 1873	490	157	3	74
	Skinner, C. (See Doherty, M., assignor.)					
	Skinner, D. S., et al. (See Ralston, J., assignor.)					
145, 536	Skinner, D. S., Providence, R. I. Cotton-bale tie	Dec. 16, 1873	461	150	4	646
146, 101	Skinner, H., Yonkers, N. Y. Loom for weaving piled fabrics	Dec. 30, 1873	979	{ 316 } { 317 }	4	711
146, 028	Skinner, H. A., Worcester, Mass. Shutter-fastening	Dec. 30, 1873	914	296	4	706
139, 271	Skinner, H. J., and S. J. Gifford, Dunkirk, N. Y. Railway-frog	May 27, 1873	752	238	3	589
140, 551	Skinner, H. M., assignor to C. C. Briggs and A. I. Enoch, Rockford, Ill. Wheel-plow	July 1, 1873	178	60, 61	4	23
144, 482	Skinner, J., Stockwell, Ind. Wood-sawing machine	Nov. 11, 1873	270	91	4	512
141, 601	Skinner, J. L., Amboy, Ill. Damper and ventilator	Aug. 5, 1873	165	53	4	148
	Skinner, J. S. (See Marston & Skinner.)					
139, 335	Skinner, W. A., and J. E. Goodson, Callao, Mo. Compound for treating iron, steel, &c.	May 27, 1873	800		3	593
145, 021	Skolnes, H., London, assignor to W. S. Mappin, Stanley Crescent, England. Manufac- ture of gas	Nov. 25, 1873	739	{ 249 } { 250 }	4	572
143, 726	Slack, J., Brooklyn, N. Y. Needle and shuttle threader, and knife	Oct. 14, 1873	308	101	4	413
	Slafter, O. A. (See Covey & Slafter.)					
141, 519	Slaight, T., Newark, N. J. Seal-lock	Aug. 5, 1873	96	29	4	143
139, 621	Slater, J., Sandy Lake, Pa. Sled-brake	June 3, 1873	153	51	3	621
135, 733	Slater, J. A., New Haven, Conn. Apparatus for treating offal	Feb. 11, 1873	321	103	3	165
	Slater, M. (See Parker, G. E., assignor.)					
142, 355	Slater, O. L., Wall Hill, Miss. Cotton-planter	Sept. 2, 1873	29	11	4	244
143, 852	Slauson, T. D., Havana, N. Y. Stove-pipe thimble	Oct. 21, 1873	438	146	4	434
	Slawson, J. B. (See Smith, R. D. O., assignor.)					
	Same (See Winchell, J. F., assignor.)					
	Same (See Wood, A. W., assignor.)					
144, 800	Slayton, E. M., Conquest, N. Y. Paper vessel	Nov. 18, 1873	544	185	4	545
6, 985	Sleeper, N., assignor to Sleeper, Wells & Aldrich, Burlington, N. J. Bottle (Design)	Nov. 4, 1873			4	478
	Sleeper, Wells & Aldrich. (See Sleeper, N., assignor) (Design)					
138, 445	Slensby, W. P., New York, N. Y. Thimble	Apr. 29, 1873	1,092	345	3	487
	Slicer, C. H., administrator. (See Slicer, W.)					
140, 064	Slicer, W., deceased, by C. H. Slicer, administrator, Baltimore, Md. Railway-car spring	June 17, 1873	592	187	3	680
142, 129	Slichter, J. C., Chicago, Ill. Car-roof	Aug. 26, 1873	678	223	4	217
142, 130	Same Fire proof roofing-cement	Aug. 26, 1873	679		4	217

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 930	Slingerland, W. A., New York, N. Y. Railway-switch	Nov. 25, 1873	662	225	4	566
144, 873	Sloan, C. M. (See Grow & Sloan.) Sloan, D. S., assignor to J. H. and L. S. Lewis, and A. D. West, Rockville, Conn. Whiffle-tree	Nov. 25, 1873	620	211	4	569
142, 356	Sloan, G. B. (See Bailey, W., assignor.) Sloan, J. O., et al. (See Forde, J. M., assignor.) Same (See Gross, E. L., assignor.)	Sept. 2, 1873	30	11	4	244
135, 166	Sloan, T. J., Tuckahoe, N. Y. Ratchet-drill Sloan, W. B., Hamburg, Iowa. Blind-slat adjuster Sloan, W. J. (See Antill & Sloan.) Sloane, W. & J. (See Carlton, R., assignor.) (Design.) Slocum, E. (See Benseman & Slocum.)	Jan. 21, 1873	611	199	4	84
141, 065	Slocumb, J. L., Raymond, Miss. Cotton-seed planter	July 22, 1873	684	229	4	92
143, 496	Sloper, B., New York, N. Y. Portable gas-machine	Oct. 7, 1873	28	10	4	383
6, 609	Slusser, B. H., and L. Pearson, South Bend, Ind. Picture-frame (Design)	Apr. 22, 1873			3	445
145, 690	Slusser, G., assignor of one-half interest to C. S. Bell and J. H. Anderson, Hillsborough, Ohio. Cultivator	Dec. 16, 1873	587	192	4	657
135, 374	Sluthour, A., New Philadelphia, Ohio. Wash-boiler	Jan. 28, 1873	653	265	3	114
135, 250	Smale, G. J., Chicago, Ill. Tilting machine Small, C. O. (See Smiley & Small.) Small, J. H. (See Allison & Homelius, assignors.) Smalley, N. F. (See Tice & Smalley.)	Jan. 28, 1873	714	228	3	105
141, 240	Smiley, F., Batavia, N. Y. Treadle for sewing-machines	July 29, 1873	645	275	4	112
135, 856	Smiley, J., Franklin, Pa. Wrench Smiley, J. B. (See Ranger & Smiley.)	Feb. 11, 1873	431	140	3	173
139, 028	Smiley, O. S., and C. O. Small, said Small assignor to said Smiley, Augusta, Mo. Lathe for turning wood	May 20, 1873	509	161	3	562
141, 602	Smillie, R., and C. H. Brooks, Virden, Ill. End-gate for wagons	Aug. 5, 1873	166	53	4	148
142, 357	Smith, A., Niagara Falls, N. Y. Apparatus for burning gas-tar	Sept. 2, 1873	31	11, 12	4	245
142, 655	Smith, A., Providence Township, Pa. Combined shovel, plow, and cultivator	Sept. 9, 1873	300	98	4	278
142, 743	Smith, A., Cincinnati, Ohio. Drying lard and tallow	Sept. 9, 1873	375		4	284
142, 744	Same. Apparatus for drying and cooling tallow or lard	Sept. 9, 1873	376	126	4	294
145, 818	Smith, A., Perryburgh, Ohio. Machine for driving nails Smith, A. A., et al. (See Taylor, T. A., assignor.)	Dec. 23, 1873	707	232	4	679
136, 777	Smith, A. B., Chambersburgh, Pa., and S. Osborn, Trenton, N. J. Saw-set	Mar. 11, 1873	382	126	3	285
138, 539	Smith, A. B., Denison, Tex. Excavator	May 6, 1873	63	21	3	503
139, 430	Smith, A. B., Memphis, Mich. Haap-lock	May 27, 1873	889	286	3	600
139, 592	Smith, A. B., Geneva, N. Y. Boiler-furnace	June 3, 1873	66	23	3	614
5, 547	Smith, A. C., Fayetteville, N. C. Cultivator (Reissue)	Aug. 19, 1873	625	206	4	203
145, 691	Same. same	Dec. 16, 1873	588	193	4	657
146, 102	Smith, A. C., Fort Madison, Iowa, assignor to self, D. W. Blackburn, Keokuk, Iowa, and S. H. Craig, Fort Madison, Iowa. Nut-lock	Dec. 30, 1873	983	317	4	711
134, 942	Smith, A. D., Cincinnati, Ohio. Corn-planter	Jan. 14, 1873	410	131	3	53
142, 127	Smith, A. D., Grafton, Ohio. Rein-guide for vehicles Smith, A. E. (See Warner, B. W., assignor.)	Aug. 26, 1873	676	222	4	217
143, 262	Smith, A. F., Montrose, Iowa. Corn-planter	Sept. 30, 1873	826	283	4	358
140, 065	Smith, A. H., et al. (See Davis, H. J., assignor.)	June 17, 1873	594	187	3	680
135, 292	Smith, A. H., Brooklyn, N. Y. Stone-crusher	Jan. 28, 1873	746	240	3	107
135, 375	Same. Glass button	Jan. 28, 1873	824	266	3	114
135, 494	Smith, A. M., Chicago, Ill. Game apparatus	Feb. 4, 1873	92	29	3	135
143, 036	Smith, A. N., Chillcothe, Mo. Corn-planter	Sept. 23, 1873	636	217	4	326
146, 029	Smith, A. P., Sacramento, Cal. Ladder	Dec. 30, 1873	914	296	4	706
134, 774	Smith, A. Q., and H. M. Ogden, assignors to themselves and D. Brown, Burlington, Iowa. Steam and air brake Smith, A. W. (See Abbott, J. D., assignor.)	Jan. 14, 1873	261	85	3	41
142, 590	Smith, A. W., Manchester, N. H. Horseshoe Smith, B., administratrix. (See Smith, J. B., assignor.) Smith, B. (See Smith, J. B. and H., and Bradley.)	Sept. 9, 1873	248	81	4	274
137, 572	Smith, B., Chicago, Ill. Making windows weather-proof	Apr. 8, 1873	274	84	3	390
137, 573	Smith, B. B., Nashville, Tenn., assignor of one-half interest to W. H. McDonald, Green Hill, Ala. Governor for steam-engine	Apr. 8, 1873	275	84	3	391
143, 797	Smith, B. F., Philadelphia, Pa. Animal-trap	Oct. 14, 1873	309	102	4	413
138, 206	Smith, B. F. & J. B., Webster, Mass. Saw-mill carriage Smith, B. H. (See Griffing, J., assignor.)	Apr. 22, 1873	652	270	3	460
139, 029	Smith, B. H., Ipswich, Mass. Box-lifter	May 20, 1873	510	161	3	562
137, 493	Smith, B. M., assignor to E. S. Smith, Topeka, Kans. Smelting-furnace	Apr. 1, 1873	197	60, 61	3	373
5, 389	Smith, B. R., and J. C. Harris, Philadelphia, Pa. Plaster for walls (Reissue)	Apr. 29, 1873	1, 121		3	490
136, 462	Smith, B. W., and E. O. Frink, Indianapolis, Ind. Steam and air brake Smith, C. (See Smith, D. D., assignor.)	Mar. 4, 1873	91	32	3	253
135, 448	Smith, C., Irwin's Station, Pa. Harrow	Feb. 4, 1873	52	17	3	131
135, 495	Smith, C. A., Napa, Cal. Finger-bar for harvesters	Feb. 4, 1873	93	29	3	135
138, 588	Smith, C. D., Chicago, Ill. Furnace for steam-boilers	May 6, 1873	107	34	3	506
143, 305	Same. Boiler-furnace Smith, C. E. (See Warner & Smith.) Smith, C. H. (See Hermann, D., assignor.)	Sept. 30, 1873	862	295	4	361
137, 626	Smith, C. H., Faribault, Minn. Sawing-machine	Apr. 8, 1873	316	98, 99	3	394
141, 086	Smith, C. H., Bloomer, Wis. Pile-driver Smith, C. S. (See Bender, Latrobe & Smith.)	July 22, 1873	685	230	4	92
144, 417	Smith, C. T., Jersey City, N. J. Baking-pan Smith, C. W. (See Guscelli, F., assignor.)	Nov. 11, 1873	219	72	4	508
138, 207	Smith, D., Springfield, Mass. Breech-loading fire-arm	Apr. 22, 1873	653	270	3	460
144, 572	Smith, D., Jamestown, N. Y. Milk-cooler	Nov. 11, 1873	347	117	4	518
141, 603	Smith, D., and J. C. Marshall, Springfield, Mass., said Marshall assignor to said Smith. Breech-loading fire-arm	Aug. 5, 1873	167	53, 54	4	148
142, 049	Smith, D. D., assignor of one-half interest to C. Smith, Louisville, Ky. Dumping-wagon Smith, E. (See Smith, N. B., assignor.)	Aug. 19, 1873	594	195	4	200
5, 709	Smith, E., Albany, N. Y. Stove (Reissue)	Dec. 30, 1873	1, 000	322	4	713
137, 494	Smith, E., Whitestown, N. Y. Washing-machine	Apr. 1, 1873	198	61	3	373
140, 438	Smith, E. D., New York, N. Y. Sewing-machine	July 1, 1873	80	28	4	15
143, 728	Smith, E. D., Sutton Township, assignor of one-half interest to L. Ford, Dunham, Canada. Car-coupling	Oct. 14, 1873	309	102	4	413
5, 388	Smith, E. H., Bergen Heights, N. J. Sewing-machine (Reissue)	Apr. 29, 1873	1, 119	353	3	490
143, 538	Smith, E. H., assignor to R. Ball & Co., Worcester, Mass. Adjustable ratchet-rod	Oct. 7, 1873	121	41	4	390
138, 704	Smith, E. J., Washington, D. C. Stair-rod	May 6, 1873	210	66	3	514

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 967	Smith, E. P. (See Lafferty, R. M., assignor) (Reissue.)	Apr. 15, 1873	693	197	3	432
137, 729	Smith, E. P., Chicago, Ill. Dress-pattern	Apr. 8, 1873	412	127	3	402
143, 101	Smith, E. S. (See Smith, B. M., assignor.)	Sept. 23, 1873	688	237	4	330
138, 569	Smith, E. S. (See Thayer, J., assignor.)	May 6, 1873	108	35	3	506
6, 744	Smith, E. S., Good Hope, Ill. Windmill	July 1, 1873			4	e
145, 914	Smith, F., Boston, assignor to J. Sully, trustee, Dedham, Mass. Rabbit-plane	Dec. 23, 1873	793	260	4	685
144, 151	Smith, F. R., Bennington, Vt. Bed-spring	Oct. 28, 1873	708	235	4	466
6, 701	Smith, F. W. (See Egge, F., assignor.)	June 10, 1873			3	640
135, 603	Smith, F. W., Bridgeport, Conn. Toy bank (Design)	Feb. 4, 1873	200	62	3	143
6, 887	Same. Game apparatus	Sept. 16, 1873			4	206
135, 603	Smith, G., Williamsburgh, N. Y. Combined frier and broiler	Oct. 28, 1873	708	235	4	466
6, 887	Smith, G., and H. Brown, Philadelphia, assignors to E. S. Shantz and O. B. Keeley, Spring City, Pa. Cooking-stove (Design)	June 10, 1873			3	640
135, 603	Smith, G. A., Boston, Mass., assignor to W. H. W. Campbell, Norwich, Conn. Pencil-holder	Feb. 4, 1873	200	62	3	143
6, 887	Smith, G. E., et al. (See Scott, E. E., assignor.)	Sept. 16, 1873			4	206
135, 603	Smith, G. E., Chicago, Ill. Aquarium-frame (Design)	Sept. 16, 1873			4	206
135, 603	Smith, G. F., et al. (See Brigham, C. H., assignor.)	Sept. 16, 1873			4	206
135, 603	Smith, G. H., et al. (See Cliff & Martin, assignors.)	Sept. 16, 1873			4	206
135, 603	Smith, G. H. (See Samson & Smith.)	Sept. 16, 1873			4	206
143, 539	Smith, G. K., assignor of one-half interest to G. W. Miller, Waterloo, Iowa. Composition-metal for casting plows	Oct. 7, 1873	122		4	390
135, 376	Smith, G. M. (See Smith, J. T. and G. M., & Sweeney.)	Jan. 28, 1873	825	266	3	114
135, 376	Smith, G. M., assignor to L. A. Smith, Louisville, Ky. Duster	Jan. 28, 1873	825	266	3	114
137, 495	Smith, G. R. (See Leslie & Smith.)	Apr. 1, 1873	199		3	373
135, 496	Smith, G. T., Minneapolis, Minn. Process of manufacturing middlings flour	Feb. 4, 1873	94	30	3	135
140, 552	Smith, G. T. and A., Minneapolis, Minn. Flour-bolt	July 1, 1873	180	61	4	23
140, 552	Smith, G. W., Darlington, Wis. Wheel for vehicles	July 1, 1873	180	61	4	23
5, 226	Smith, H., et al. (See Duckworth, W. B., assignor.)	Jan. 7, 1873	216	69	3	24
6, 790	Smith, H., Shelby Station, Tenn. Horse-power (Reissue)	July 29, 1873			4	108
6, 888	Smith, H., assignor to J. Humphries & Sons, Kidderminster, England. Carpet (Design)	Sept. 16, 1873			4	296
140, 553	Same. same (Design)	Sept. 16, 1873			4	296
140, 554	Smith, H., assignor to self, Peck, Stow and Wilcox Company, Southington, Conn. Stove-pipe thimble	July 1, 1873	181	61	4	23
5, 710	Smith, H., Southington, Conn. Wire cage	July 1, 1873	181	61	4	23
5, 535	Smith, H., and D. B. Wesson, Springfield, Mass., assignors by mesne assignment to Winchester Repeating-Arms Company, New Haven, Conn. Breech-loading and repeating fire-arm (Reissue)	Dec. 30, 1873	1,002	323	4	713
138, 103	Smith, H. B., Smithville, N. J. Molding-machine (Reissue)	Aug. 19, 1873	611	201	4	201
136, 390	Same. Scroll-saw	Apr. 22, 1873	762	242	3	453
137, 802	Smith, H. C., Cleveland, Ohio. Combined ironing-table, lap-board, and step-ladder	Mar. 4, 1873	34	12	3	248
139, 200	Same. Garden-hose holder	Apr. 15, 1873	487	152	3	421
139, 201	Smith, H. D. & Co. (See Ward, W. S., assignor.)	May 20, 1873	673	211	3	575
139, 202	Smith, H. E., Fitchburgh, Mass. Clothes-wringer	May 20, 1873	674	211	3	575
137, 574	Same. Machine for pressing clothes	May 20, 1873	675	212	3	576
137, 627	Same. Mattress	Apr. 8, 1873	276	85	3	391
139, 927	Smith, H. J., assignor to W. B. Fowle, Boston, Mass. Steering-apparatus for vessels	Apr. 8, 1873	317	99	3	394
135, 167	Smith, H. M., Chicago, Ill. Shipping can-shield	June 17, 1873	458	143	3	669
137, 152	Same. Can for oil	June 17, 1873	458	143	3	669
138, 946	Smith, I. (See McMaster, A. D., assignor.)	Jan. 21, 1873	612	199	3	84
137, 326	Smith, I., Bruceport, Wash. Oyster-tongs	Mar. 25, 1873	725	241	3	333
137, 326	Smith, I., Tomhannock, N. Y. Hoisting-machine	May 13, 1873	429	135	3	543
137, 326	Smith, I., Rochester, N. Y. Holder for brushes, mops, &c.	Apr. 1, 1873	47	14	3	361
137, 254	Smith, I. B. and H., and C. Bradley, Bradford, England. Combing-machine	Apr. 1, 1873	47	14	3	361
137, 628	Smith, J., et al. (See Schirck & Smith.)	Mar. 25, 1873	822	270	3	340
138, 590	Smith, J., Woodland, Mich. Harrow	Apr. 8, 1873	318	99	3	394
143, 644	Smith, J., Chicago, Ill. Wardrobe-bedstead	May 6, 1873	108	35	3	506
144, 874	Smith, J., Philadelphia, Pa. Gymnastic apparatus	Oct. 14, 1873	226	76	4	407
145, 131	Smith, J., Old Ford, England. Combined indicator and safety-valve	Nov. 25, 1873	621	211	4	562
140, 9-6	Smith, J., Burlington, Wis. Threshing-machine	Dec. 2, 1873	90	29	4	592
137, 101	Smith, J., assignor to self and L. F. Terry, Southold, N. Y. Bolt for doors and gates	June 17, 1873	595	188	3	680
137, 102	Smith, J. and J., assignors to C. Button, Philadelphia, Pa. Knitting-machine	Mar. 25, 1873	682	227	3	330
140, 654	Smith, J. A., Erie, assignor to New Era Organ Company, Northeast, Pa. Organ treadles	Mar. 25, 1873	683	227	3	330
141, 468	Same. Reed-organ stop-action	July 8, 1873	281	95	4	42
141, 469	Smith, J. A., Columbus, O. Sewing-machine	Aug. 5, 1873	52	16	4	139
136, 555	Smith, J. A., Erie, Pa. Reed-organ	Aug. 5, 1873	54	17	4	139
138, 208	Smith, J. B. (See Merrick, E. D., assignor.)	Mar. 4, 1873	183	59	3	260
143, 037	Same. (See Smith, B. F. and J. B.)	Apr. 22, 1873	854	270	3	460
144, 152	Smith, J. B., deceased, by B. Smith, administratrix, assignor to Randle & Heath, Memphis, Tenn. Earth-anger	Sept. 23, 1873	636	218	4	326
145, 598	Smith, J. B., Chicago, Ill. Toy-house	Oct. 28, 1873	708	236	4	466
136, 341	Smith, J. B., Sunapee, N. H. Machinery for making clothes-pins	Dec. 30, 1873			4	698
138, 947	Smith, J. D., Washington, D. C. Figures (Design)	Dec. 16, 1873	508	167	4	650
140, 655	Smith, J. D., Muskegon, Mich. Corn-planter	Feb. 25, 1873	877	282	3	234
6, 873	Smith, J. D., assignor to J. D. Smith & H. R. Garvin, New York, N. Y. Expanding mandrel	May 13, 1873	430	135	3	543
137, 730	Smith, J. D., Sacramento, Cal. Combined scrubbing-brush, mop, and wringer	July 8, 1873	291	95	4	42
142, 818	Smith, J. E., Waterbury, Conn. Belt-buckle (Design)	Sept. 2, 1873			4	242
143, 387	Smith, J. E., New York, N. Y. Circuits for electro-magnets	Apr. 8, 1873	413	127	3	402
136, 271	Smith, J. E., Jackson, Pa. Car-coupling	Sept. 16, 1873	447	151	4	300
145, 249	Smith, J. E., Sharpsburgh, assignor to self and T. J. Peters, Owingsville, Ky. Sewing-machine caster	Sept. 30, 1873	937	317	4	367
141, 604	Smith, J. G., Saint Louis, Mo. Wire-mattress frame	Feb. 25, 1873	816	263	3	229
6, 452	Same. Wire-mattress	Dec. 2, 1873	189	65	4	600
6, 453	Smith, J. G., assignor to self and J. W. Brown, Boston, Mass. Railway-telegraph	Aug. 5, 1873	168	54	4	149
6, 454	Smith, J. H., Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpet (Design)	Feb. 18, 1873			3	189
	Same. Carpet (Design)	Feb. 18, 1873			3	189
	Same. same (Design)	Feb. 18, 1873			3	189

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6, 534	Smith, J. H., Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Mar. 25, 1873			3	325
6, 610	Same..... Carpet..... (Design)	Apr. 22, 1873			3	445
6, 611	Same..... same..... (Design)	Apr. 22, 1873			3	445
6, 612	Same..... same..... (Design)	Apr. 22, 1873			3	445
6, 942	Same..... same..... (Design)	Oct. 7, 1873			4	380
6, 943	Same..... same..... (Design)	Oct. 7, 1873			4	380
6, 944	Same..... same..... (Design)	Oct. 7, 1873			4	380
6, 945	Same..... same..... (Design)	Oct. 7, 1873			4	380
7, 065	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 066	Same..... same..... (Design)	Dec. 16, 1873			4	641
135, 168	Smith, J. H., Orford, Iowa. Binders' table for harvesters.	Jan. 21, 1873	612	{ 199 200	3	84
140, 087	Smith, J. H., assignor of one-half interest to T. W. Bond & J. M. Henderson, Madison Run Station, Va. Process of welding steel to cast-iron.	June 17, 1873	596		3	680
137, 255	Smith, J. M., Fort Wayne, Ind. Insect-trap.	Mar. 25, 1873	822	270	3	340
139, 977	Smith, J. M., Milton, N. C. Tobacco-drier.	June 17, 1873	494	156	3	672
136, 778	Smith, J. P., Terre Haute, Ind. Axle-boxes for vehicles.	Mar. 11, 1873	383	126	3	285
142, 523	Smith, J. Q. A., Lee's Summit, Mo. Washing-machine.	Sept. 2, 1873	179	59	4	256
7, 005	Smith, J. R., assignor to the Waterbury Button Company, Waterbury, Conn. Buckle. (Design)	Dec. 2, 1873			4	585
136, 871	Smith, J. S. (See Drake, E., assignor.) Smith, J. T., and G. M. & J. J. Sweeney, Springfield, Mass. Cartridge-ejector for revolving fire-arms.	Mar. 18, 1873	470	156	3	301
137, 035	Smith, J. W. (See Potter & Smith) (Reissue.)	Mar. 18, 1873	612	203	3	313
138, 540	Smith, J. W., Columbus, Ga. Crushing-mill.	May 6, 1873	64	22	3	503
139, 336	Smith, J. W., Bryan, Ohio. Belt-lacing needle.	May 27, 1873	801	255	3	594
141, 087	Smith, J. W., Battle Creek, Mich. Reach for bob-sleds.	July 22, 1873	686	230	4	82
136, 779	Smith, J. W., Boston, Mass. Clasp for suspenders.	Mar. 11, 1873	383	127	3	285
136, 780	Smith, J. Y., Pittsburg, Pa. Air-ejector.	Mar. 11, 1873	385	127	3	285
136, 781	Same..... Steam air-ejector.	Mar. 11, 1873	386	127	3	285
	Same..... Steam and air brake.					
	Smith, L., administratrix. See Smith & De Coppet.)					
	Smith, L. A. (See Redheffer, W., J., jr., and T. G., & Smith.)					
	Smith, L. A. (See Smith, G. M., assignor.)					
140, 088	Smith, L. B., assignor to self and N. C. Hall, West Meriden, Conn. Can-opener.	June 17, 1873	596	188	3	680
140, 958	Smith, L. E. (See Jordan & Smith) (Reissue.)	July 15, 1873	555	186	4	72
143, 645	Smith, L. F., Philadelphia, Pa. Steam-cylinder lubricator.	Oct. 14, 1873	227	76	4	407
	Smith, L. H., Stryker, Ohio. Bolt and rod cutter.					
	Smith, L. M. (See Loomer, L. H. & A. F., & Smith.)					
	Smith, M. (See Cummings, Smith & Jordan.)					
137, 327	Smith, M. P., Baltimore, Md. Drying tomatoes.	Apr. 1, 1873	48		3	361
	Smith, N. (See Chappell, B. F., assignor.)					
136, 556	Smith, N. B., New York, N. Y., assignor to self and E. Smith, New London, Conn. Button-fastening.	Mar. 4, 1873	184	59	3	260
144, 875	Smith, N. D., Prairie City, Iowa. Lubricating compound.	Nov. 25, 1873	621		4	562
135, 377	Smith, O. A., Middlefield, Conn. Revolving fire-arm.	Jan. 28, 1873	826	266	3	114
135, 378	Same..... same.....	Jan. 28, 1873	826	266	3	114
137, 968	Same..... same.....	Apr. 15, 1873	625	197	3	432
143, 038	Smith, O. C., Ipswich, Mass. Propelling canal-boats.	Sept. 23, 1873	637	218	4	326
5, 478	Smith, O. M., Philadelphia, Pa. Umbrella-runner. (Reissue.)	July 1, 1873	206	68	4	25
137, 256	Same..... Machine for cutting nicks in umbrella-runners.	Mar. 4, 1873	823	{ 270 271	3	140
136, 272	Smith, P. A., New York, N. Y. Railway snow-plow.	Feb. 25, 1873	817	264	3	229
	Smith, P. W. (See Matchett & Smith.)					
	Smith, R. (See Crowell & Smith) (Extension)					
6, 351	Smith, R., assignor to McKellar, Smiths & Jordan, Philadelphia, Pa. Printing-type. (Design)	Jan. 21, 1873			3	70
6, 736	Same..... Printing type..... (Design)	July 1, 1873			4	7
6, 769	Same..... same..... (Design)	July 8, 1873			4	36
6, 892	Same..... same..... (Design)	Sept. 23, 1873			4	322
6, 893	Same..... same..... (Design)	Sept. 23, 1873			4	322
5, 390	Smith, R. A., Newburyport, Mass. Brick-machine. (Reissue.)	Apr. 29, 1873	1, 122	354	3	490
141, 520	Same..... Brick-yard shed.	Aug. 5, 1873	97	30	4	143
142, 745	Smith, R. A., Fond du Lac, and A. Schmid, Green Bay, Wis. Floor for refrigerator buildings, &c.	Sept. 9, 1873	377	126	4	284
143, 471	Smith, R. A., Fond du Lac, Wis. Sheet-metal roofing.	Oct. 7, 1873	61	21	4	386
143, 853	Smith, R. A., Newburyport, Mass. Truck for carrying brick.	Oct. 21, 1873	439	146	4	434
136, 105	Smith, R. D. O., Washington, D. C. Ventilating water-closet and urinal.	Feb. 18, 1873	657	215	3	204
140, 959	Smith, R. D. O., assignor to J. B. Slawson, Washington, D. C. Fare-box.	July 15, 1873	556	{ 186 187	4	73
	Smith, R. H. (See Goldthorp, S. H., assignor.)					
141, 732	Smith, R. H., Pittsburgh, Pa. Manufacture of illuminating gas from petroleum, &c.	Aug. 12, 1873	292	96	4	167
	Smith, R. T., et al. (See Fullam, A. J., assignor) (Reissue.)					
	Same..... (See Priest, J. K., assignor.)					
135, 293	Smith, R. T., assignor to self, J. G. Blunt, J. K. Priest, and W. Earle, Nashua, N. H. Device for transmitting motive-power.	Jan. 28, 1873	747	241	3	108
	Smith, S. (See Beasley, J., assignor) (Design.)					
135, 449	Smith, S., Philadelphia, P. Heating stove.	Feb. 4, 1873	54	18	3	131
137, 153	Smith, S., Brooklyn, N. Y. Ash-sifter.	Mar. 25, 1873	726	241	3	333
137, 328	Smith, S., Philadelphia, Pa. Stove-door frame.	Apr. 1, 1873	49	14	3	361
139, 740	Same..... Modes of attaching stove-doors to their frames.	June 10, 1873	285	88	3	648
141, 733	Smith, S., Halesworth, Great Britain. Mode of opening and closing the doors of vehicles.	Aug. 12, 1873	293	96	4	167
143, 854	Smith, S., and J. H. Gill, Williamsburgh, N. Y. Spring-bed.	Oct. 21, 1873	439	146	4	434
136, 391	Smith, S. A., Essex, Conn. Die for manufacturing augers.	Mar. 4, 1873	34	13	3	248
138, 350	Smith, S. C., assignor of one-fourth interest to F. Curtis, Boston, Mass. Winding-click of watches.	Apr. 29, 1873	1, 008	317	3	481
139, 431	Smith, S. H., assignor of one-half interest to W. H. Wilber, North Adams, Mich. Egg-carrier.	May 27, 1873	890	287	3	600
144, 153	Smith, S. J., New York, N. Y. Locket.	Oct. 28, 1873	710	236	4	466
	Smith, S. S., et al. (See Ross, J. G., assignor.)					
135, 048	Smith, T., Cleveland, Ohio. Dredge-box.	Jan. 21, 1873	520	168	3	77
136, 782	Same..... Lantern-guard.	Mar. 11, 1873	387	127	3	285
137, 867	Smith, T., Brooklyn, N. Y. Refrigerator water-cooler.	Apr. 15, 1873	540	168	3	425

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139, 030	Smith, T., Cleveland, Ohio. Lantern	May 20, 1873	510	161	3	562
139, 337	Smith, T., assignor of one-half interest to R. Neville, New York, N. Y. Mode of fastening diamonds into blocks or saw-teeth	May 27, 1873	801	256	3	594
141, 177	Smith, T., Waterford, N. Y. Car-coupling	July 22, 1873	775	253	4	99
142, 178	Smith, T., Brooklyn, N. Y. Water-cooler	Aug. 26, 1873	718	237	4	220
	Smith, T. G. (See Marden & Smith, assignors.)					
	Smith, T. J., et al. (See Sweet, F. M., assignor.) (Reissue.)					
139, 622	Smith, T. J., and J. Lee, assignors of part interest to J. J. Rich and J. Gallagher, Saint Louis, Mo. Wrench	June 3, 1873	153	51	3	621
	Smith, T. P., et al. (See Ross, J. G., assignor.)					
	Smith, T. S. (See Marlen & Smith.)					
141, 393	Smith, T. S., Tooner's Station, Tenn., assignor of half interest to J. P. Gildersleeve, Niverville, N. Y., and J. W. Blake, Springfield, Mass. Cotton-press	July 29, 1873	991	322	4	124
	Smith, W. (See Harper & Smith.)					
141, 241	Smith, W., Barnard Castle, England. Street-sweeper	July 29, 1873	846	276	4	112
142, 746	Smith, W., Pittsburgh, Pa. Core-barrel for casting	Sept. 9, 1873	378	127	4	284
7, 017	Smith, W. A., Niagara Falls, N. Y. Fan (Design)	Dec. 2, 1873			4	585
	Smith, W. C. (See Rousseau, D., assignor.)					
141, 242	Smith, W. H., deceased, by L. Smith, administratrix, and F. V. De Coppet, New Orleans, La. Ammoniacal-gas engine	July 29, 1873	846	276	4	113
140, 656	Smith, W. M., assignor to H. Z. Ermentrout, Reading, Pa. Fishing-rod	July 8, 1873	232	95	4	42
145, 132	Smith, W. O., Boston, Mass. Attachment for stove-doors	Dec. 2, 1873	90	29	4	592
135, 016	Smith, W. P., New Orleans, La. Draw-point for driven well-tubes	Jan. 21, 1873	490	157	3	74
145, 022	Smith, W. R. W., Glasgow, North Britain. Smoke-consuming apparatus	Nov. 25, 1873	741	250	4	573
	Smith, W. T. (See Cox & Smith.)					
	Smith, W. W., et al. (See Beach & Hanson, assignors.)					
135, 450	Smith, W. W., Newcastle-on-Tyne, England. Anchor	Feb. 4, 1873	55	18	3	132
	Smith, M. E. (See Eames, C. J., assignor.)					
	Smock, D. P. (See Minthron, D., assignor.)					
143, 855	Smoot, W. S., assignor of one-half interest to E. Remington & Sons, Ilion, N. Y. Revolving fire-arm	Oct. 21, 1873	440	146	4	434
	Smyser, G. P. (See Spencer, G. H., assignor.)					
141, 088	Smyth, D. M., Lynn, Mass., assignor to Stickler, Elliott & Wilson, New York, N. Y. Sewing-machine	July 22, 1873	687	{ 230 } { 231 }	4	92
143, 388	Smyth, D. M., Lynn, Mass., assignor to H. G. Thompson, Milford, Conn. Tacking-machine for boots and shoes	Sept. 30, 1873	938	318	4	367
140, 224	Smyth, S., East Bridgewater, Pa. Stove-grate	June 24, 1873	729	230	3	699
143, 856	Same. Grate for stoves, furnaces, &c.	Oct. 21, 1873	441	147	4	434
144, 293	Snedaker, W. B., Syracuse, N. Y. Car-coupling	Nov. 4, 1873	101	34	4	486
141, 605	Snedeker, D., New York, N. Y. Package for fruit	Aug. 5, 1873	170	54	4	149
5, 584	Snedens, S., Brooklyn, N. Y. Boat-detaching apparatus (Reissue)	Sept. 30, 1873	952	321	4	368
141, 470	Same. same	Aug. 5, 1873	56	17	4	139
142, 955	Snediker, W. E., Charlottebury, N. J. Die for the manufacture of pinchers	Sept. 16, 1873	562	190	4	310
144, 801	Sneed, J. L., Frankfort, Ky. Blacking for shoes, &c.	Nov. 18, 1873	545		4	545
143, 191	Snell, D., Springfield, Ohio. Tumbling-shaft	Sept. 23, 1873	758	261	4	336
141, 394	Snell, O., Williamsburgh, Ohio, assignor to R. B. Herron, Danville, Ind. Force-pump	July 29, 1873	992	322	4	124
	Sniffen, W. B. (See Coe & Sniffen.) (Extension.)					
	Sniffen, W. B. (See Coe & Sniffen.) (Disclaimer.)					
	Sniively, E. V., et al. (See Lindsley, W. D., assignor.)					
139, 432	Sniively, F. M., Bellaire, Ohio. Trace-fastening	May 27, 1873	891	287	3	600
143, 935	Snow, G. H., West Meriden, Conn. Circuit-closer for railway-signals	Oct. 21, 1873	501	169	4	439
140, 736	Snow, G. H., Watertown, Mass. Paper box	July 8, 1873	348	117	4	48
143, 472	Snow, H. F., and J. H. Davis, Dover, N. H. Compound for painting and coating wood	Oct. 7, 1873	61		4	386
145, 692	Snow, L., and J. Haseltine, Boston, Mass. Child's carriage	Dec. 16, 1873	589	193	4	657
137, 496	Snow, W. B., Brooklyn, N. Y. Oil-still	Apr. 1, 1873	201	61	3	373
139, 203	Snow, W. B., Brooklyn, assignor to Eaton & Cole, New York, N. Y. Union-coupling	May 20, 1873	676	212	3	576
139, 829	Snyder, B., assignor to S. D. Snyder and A. C. Leidy, Philadelphia, Pa. Crib-attachment for bedsteads	June 10, 1873	364	113	3	654
139, 978	Snyder, F., New York, N. Y. Child's carriage	June 17, 1873	495	156	3	672
138, 821	Snyder, F. H., Jersey City, N. J., assignor to T. Hyslop, New York, N. Y. Preparing sawdust for use in the arts	May 13, 1873	325		3	534
	Snyder, G. W., et al. (See Moodey, B. D., assignor.)					
136, 392	Snyder, G. W., Port Carbon, and L. W. Snyder, Lykens, Pa. Car-wheel	Mar. 4, 1873	35	13	3	248
143, 192	Snyder, I. E., Woodward, Pa. Horse hay-fork	Sept. 23, 1873	759	262	4	336
142, 050	Snyder, J. H., assignor to self, T. B. Gault, and H. Smith, Rockford, Ill. Carriage-top	Aug. 19, 1873	594	195	4	200
139, 272	Snyder, J. W., Chicago, Ill. Laying concrete pavements	May 27, 1873	752	238	3	589
	Snyder, L. W. (See Snyder, G. W. & L. W.)					
	Snyder, S. D., et al. (See Snyder, B., assignor.)					
144, 483	Snyder, U., Conshohocken, Pa. Horseshoe	Nov. 11, 1873	270	91	4	512
144, 709	Snyder, W. C., assignor of one-half interest to J. H. Beelman, Richmond Township, Huron County, Ohio. Seat for vehicles	Nov. 12, 1873	467	158	4	539
139, 741	Soetbeer, T., Irvington, N. Y. Lawn-mower	June 10, 1873	286	89	3	648
138, 948	Solliday, R., Allentown, Pa. Ore-washer	May 13, 1873	431	135	3	543
145, 455	Same. Same	Dec. 9, 1873	370	123	4	627
136, 463	Solvay, E., Brussels, Belgium. Process and apparatus for the manufacture of carbonate of soda	Mar. 4, 1873	94	{ 32 } { 33 }	3	253
143, 039	Somerville, J., and J. Robinson, Dublin, Ireland. Apparatus for charging gas-retorts	Sept. 23, 1873	638	{ 218 } { 219 }	4	326
	Sommer, G., et al. (See Moore, C., assignor.)					
137, 154	Sondheim, L. H., New York, N. Y. Breast-pin tongue	Mar. 25, 1873	726	241	3	333
5, 299	Sonnekalb, A., and J. W. Lieb, said Sonnekalb assignor to said Lieb, Newark, N. J. Traveling-bag (Reissue)	Feb. 25, 1873	895	{ 287 } { 288 }	3	235
140, 225	Sonnichsen, N., San Francisco, Cal. Kindling-wood cutter	June 24, 1873	730	230	3	699
145, 761	Sontag, F. A. R. and W. H. Lotz, Chicago, Ill. Fire-proof safe	Dec. 23, 1873	663	216	4	675
	Sontag, H. (See Dobson, H. C., assignor.)					
134, 943	Sontag, H., Saint Louis, Mo. Expanding rock-drills for shaft-boring apparatus	Jan. 14, 1873	410	131	3	53
	Soothill, J. (See Lewis & Soothill.)					
144, 710	Soper, A., New York, N. Y. Grain-drier	Nov. 18, 1873	468	159	4	539
134, 569	Sorensen, A. J., assignor to Burdett Organ Company, Erie, Pa. Cabinet-organ case	Jan. 7, 1873	64	19	3	12
139, 483	Same. Reed-organ	June 3, 1873	37	12	3	612
140, 226	Sorg, A. and S. C. Bollman, Decatur, Ind. Earth-auger	June 24, 1873	720	230	3	699
137, 868	Souder, D., Houston, Ohio. Cradle	Apr. 15, 1873	541	168	3	425
	Souder, J. D. (See Sparka, W. H., assignor.)					
	Soule, O. F. (See Merrill & Soule.)					
143, 263	Soule, S. W., New York, N. Y. Plow	Sept. 30, 1873	826	283	4	358

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Soules, S. (See Welling & Soules.)					
137, 103	Soursin, A., St. Louis, Mo. Whistle-tree attachments for vehicles	Mar. 25, 1873	685	227	3	330
139, 742	Southard, A. P., St. Louis, Mo. Tobacco-finisher	June 10, 1873	287	89	3	648
6, 831	Southard, W. D., New York, N. Y. Stove (Design)	Aug. 26, 1873			4	212
141, 734	Souther, L., Springfield, Ill. Machine for making chains	Aug. 12, 1873	294	96	4	167
135, 734	Southwick, A. N., Boston, Mass. Belt-punch	Feb. 11, 1873	322	103	3	165
142, 829	Southwick, A. P., Buffalo, N. Y. Manufacturing illuminating gas	Aug. 26, 1873	808	267	4	227
134, 821	Southwick, J. M. K., Newport, R. I. Row-lock	Jan. 14, 1873	307	98	3	45
	Southwick, O. M., et al. (See Thayer, W. H., assignor.)					
	Southworth, E. W. (See Seather, Southworth, and Anthony.)					
	Southworth, S., et al. (See Baird, O. D., assignor.)					
139, 090	Spahn, E. F., Newark, N. J. Photographic-camera	May 20, 1873	569	178	3	567
137, 629	Spalding, O. D., Mankato, Minn. Wheel for vehicles	Apr. 8, 1873	319	99	3	394
144, 573	Same. Heating-drum	Nov. 11, 1873	347	117	4	48
140, 737	Spang, H. W., Reading, Pa. Electric railway signal	July 8, 1873	349	118	4	48
141, 395	Same. Electric railway-signal apparatus	July 29, 1873	593	322	4	124
142, 131	Same. Circuit-closer for railway-signaling apparatus	Aug. 26, 1873	680	{ 223 224 }	{ 4 4 }	{ 217 217 }
141, 018	Sparks, W. H., Absecum, assignor of one-half interest to J. D. Souder, Williamstown, N. J. Axle and sleeve for vehicles	July 22, 1873	627	211	4	87
144, 418	Sparks, W. H., Absecum, N. J. Ironing-table	Nov. 11, 1873	219	73	4	508
136, 464	Sparr, J. F., Rochester, N. Y. Steering apparatus	Mar. 4, 1873	97	33	3	253
138, 705	Sparrow, J., Portland, Me. Centrifugal machine	May 6, 1873	211	60	3	514
	Spaulding, C. F., et al. (See Hollenweger, F. J., assignor.)					
139, 338	Spaulding, E., Keene, N. H. Mortar mixer and grinder	May 27, 1873	802	256	3	594
139, 339	Spaulding, E. F., Cambridge, Mass. Steam and other valves	May 27, 1873	803	256	3	594
141, 471	Spaulding, E. F., Cambridgeport, Mass. Stop-cock	Aug. 5, 1873	56	17	4	139
140, 738	Spaulding, G. H., Rockford, Ill. Harvester	July 8, 1873	351	118	4	48
135, 944	Spaulding, G. W., and W. T. Carroll, Woonsocket, R. I. Ring, rail, and holder for spinning	Feb. 18, 1873	518	169	3	194
141, 243	Spaulding, J., San Francisco, Cal. Carpet-cleaner	July 29, 1873	848	277	4	113
142, 876	Spayd, C. W., Wilkesbarre, Pa. Wheel for vehicles	Sept. 16, 1873	494	168	4	304
145, 456	Same. Railway-switch signal	Dec. 9, 1873	370	123	4	627
144, 802	Speak, J., Philadelphia, Pa. Syringe and pump	Nov. 18, 1873	545	185	4	545
5, 314	Spear, J., Philadelphia, Pa. Heating-stove (Reissue)	Mar. 4, 1873	216	71	3	363
5, 459	Same. Base-burning stove (Reissue)	June 17, 1873	629	197	3	623
5, 460	Same. same (Reissue)	June 17, 1873	630	197	3	623
	Spear, J. D., et al. (See Knowlton, C. H., assignor.)					
	Spear, V. K., et al. (See Ross & Miller, assignor.)					
	Same. (See Ross, J. G., assignor.)					
139, 273	Spear, V. K., Lynn, Mass. Heel-breasting machine	May 27, 1873	753	239	3	589
141, 735	Same. Heel-breasting machinery	Aug. 12, 1873	296	97	4	167
139, 623	Spears, J. H., and K. and R. Wells, Piper City, Ill. Corn harvester	June 3, 1873	154	51	3	621
134, 822	Specht, J., Memphis, Tenn. Composition for coating metal pipes, roofing, &c	Jan. 14, 1873	308		3	45
	Speck, J. P. (See Foreman & Speck.)					
	Speck, T. J. (See Arndt, A. H., assignor.)					
144, 231	Speelmon, P., Knox, Ind. Sulky-harrow	Nov. 4, 1873	56	17	4	482
	Speer, Clarke & Co. (See Strawn & Drum, assignors.)					
	Speer, W. H. (See Hug, D., assignor.)					
140, 089	Spellman, W. C., Hartford, Conn. Show-case	June 17, 1873	596	188	3	680
138, 949	Spelman, S., Brooklyn, N. Y. Supplementary wheel for car-trucks	May 13, 1873	431	135	3	543
145, 457	Spence, A., assignor of one-half interest to F. H. Ferguson, Montreal, Canada. Water-heater	Dec. 9, 1873	371	{ 123 124 }	{ 4 4 }	{ 627 627 }
142, 956	Spence, J. F., Williamsburg, N. Y., assignor to G. D. and M. C. Brooks, Baltimore, Md. Soldering machine	Sept. 16, 1873	563	191	4	310
137, 497	Spencer, A., Jr., Penn Yan, and T. C. Spencer, Elmira, assignors of one-third interest to E. M. Birdsall, Penn Yan, N. Y. Steam-boiler feeder	Apr. 1, 1873	202	61	3	373
135, 251	Spencer, A. B., Cleveland, Ohio. Refrigerator	Jan. 28, 1873	715	229	3	105
	Spencer, A. H. (See Palmer & Spencer.)					
144, 876	Spencer, C. B., assignor of one-half interest to M. Marx, Hastings, Minn. Umbrella	Nov. 25, 1873	622	211	4	562
145, 023	Spencer, C. B., Hastings, Minn. Bed-bottom	Nov. 25, 1873	741	250	4	573
142, 051	Spencer, C. F., Cleveland, Ohio. Self-venting bung	Aug. 19, 1873	595	106	4	200
135, 671	Spencer, C. M., Hartford, Conn. Brooch-loading fire-arm	Feb. 11, 1873	269	85	3	161
137, 630	Same. Machine for turning and cutting wire	Apr. 8, 1873	319	100	3	394
137, 631	Same. Machine for turning heads of bobbins	Apr. 8, 1873	320	100	3	394
143, 306	Same. Machine for making metal screws	Sept. 30, 1873	863	296	4	361
145, 250	Same. Machine for forming wire-loops	Dec. 2, 1873	180	65, 66	4	600
137, 104	Spencer, G. H., assignor to self and G. P. Snyser, York, Pa. Machine for grinding metal castings	Mar. 25, 1873	686	228	3	330
141, 089	Spencer, J., Chicago, Ill. Spinning-top	July 22, 1873	687	231	4	92
138, 591	Spencer, J. C., assignor to self and F. X. Gervis, Phelps, N. Y. Plane	May 6, 1873	109	35	3	506
143, 936	Spencer, J. C., assignor of two-thirds interest to J. K. Babcock, C. M. Miller, and E. C. Hoff, Phelps, N. Y. Rotary engine	Oct. 21, 1873	503	169	4	439
138, 351	Spencer, J. M., La Plata, Mo. Portable stock-feeder	Apr. 29, 1873	1,009	317	3	481
135, 169	Spencer, S., Kiantone, N. Y. Milk-cooler	Jan. 21, 1873	613	200	3	84
	Spencer, S. H. (See Sadler & Spencer.)					
	Spencer, T. C. (See Spencer, A., Jr., and T. C.)					
6, 582	Spencer, T. P., Morrisania, N. Y. Revolving bottle-stand (Design)	Apr. 8, 1873			3	387
137, 498	Spencer, W. D., and E. Parker, said Spencer assignor to said Parker, New Britain, Conn. Spring bed-bottom	Apr. 1, 1873	203	62	3	373
141, 090	Spencer, W. H., New York, N. Y. Apparatus for the manufacture of gas	July 22, 1873	688	231	4	92
142, 524	Spencer, P. L., assignor to D. Myers, Cleveland, Ohio. Suppository-mold	Sept. 2, 1873	180	59	4	256
	Sperry, A., et al. (See Sperry & Robinson, assignors.) (Reissue)					
143, 307	Sperry, C. J., and L. Chandler, New London, Minn. Bee-hive	Sept. 30, 1873	864	296	4	361
5, 331	Sperry, L., East Windsor Hill, and L. Robinson, New Haven, Conn., assignors to L. and A. Sperry. Cradle (Reissue)	Mar. 18, 1873	629	207	3	314
135, 379	Sperry, T. S., New York, N. Y. Bustle (Reissue)	Jan. 28, 1873	827	267	3	114
	Spicer, P. A. (See Crossman & Spicer.)					
137, 329	Spickler, H. D., Canton, Ohio. Wood-scraper	Apr. 1, 1873	50	15	3	361
142, 957	Spiegel, A., Indianapolis, Ind. Hinge for lounges	Sept. 16, 1873	564	191	4	310
136, 624	Spielman, G., Strasburgh, Pa. Meat-chopping machine	Mar. 11, 1873	258	87	3	275
136, 106	Spielman, C. L., Blandinsville, Ill. Stalk-chopper	Feb. 18, 1873	658	215	3	204
135, 672	Spieess, F. W. C., New York, N. Y. Candying-machine	Feb. 11, 1873	270	85	3	161
144, 232	Spiller, O. M., Cleveland, Ohio. Non-conducting filling for the walls of dinner-pails, &c	Nov. 4, 1873	57	17	4	482
	Spire, G. (See Frank & Spire.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Splawn, I. V. (See Baisley, G. H., assignor)					
138, 909	Spoifford, N., Haverhill, Mass. Brace for bits..... (Extension)	Nov. 1, 1873			4	452
145, 762	Spooner, A. F., Sterling, Ill. Baby-jumper.....	Apr. 22, 1873	855	271	3	460
145, 133	Spooner, D. B., Syracuse, N. Y. Manufacturing rubber diaphragms for water-meters.....	Dec. 23, 1873	664	217	4	675
140, 170	Spooner, W. A., Springfield, Mass. Pump-box.....	Dec. 2, 1873	91	29	4	592
	Sprague, A. J., Binghamton, N. Y. Whiffletree.....	June 24, 1873	686	215	3	695
140, 555	Sprague, A. M., deceased, by C. Sprague, administratrix, Pleasant Hill, Ky. Apparatus for skimming the surface of water in steam-boilers..... (Extension)	Mar. 22, 1873			3	272
137, 632	Sprague, A. V. M., Rochester, N. Y. Check-hook.....	July 1, 1873	182	62	4	23
	Sprague, A. W., Quincy, and J. M. Osgood, Somerville, Mass.; said Osgood assignor to said Sprague. Automatic draught-regulator for stoves and furnaces.....	Apr. 8, 1873	321	100	3	394
	Sprague, C., administratrix. (See Sprague, A. M.)..... (Extension.)					
134, 944	Sprague, D. J., et al. (See Roosevelt, W. H., assignor.)					
137, 105	Sprague, E., Allegheny, Pa. Cam for operating valves for steam-engines.....	Jan. 14, 1873	411	132	3	53
139, 433	Sprague, E. H., Mount Vernon, Ohio. Horse-collar fastening.....	Mar. 25, 1873	687	228	3	330
140, 313	Sprague, E. J., Youngstown, Ohio. Cooking-utensil.....	May 27, 1873	891	237	3	601
141, 178	Same..... Lap-board.....	June 24, 1873	805	255	3	706
	Same..... Combined sash-fastener and weather-strip.....	July 22, 1873	775	253	4	99
143, 389	Sprague, W. (See Russell, J., assignor.)					
	Sprague, W. N., Keene, N. H., assignor to self and G. Goodyear, Elizabeth, N. J. Shank-stiffener.....	Sept. 30, 1873	939	318	4	367
145, 024	Same..... Machinery for making wood-shanks for boots and shoes.....	Nov. 25, 1873	742	250	4	573
	Spring, A. (See Spring, C. and A.)..... (Extension.)					
137, 731	Spring, C. and A., Hyde Park, Mass. Lathe for turning irregular forms..... (Extension)	May 10, 1873			3	457
141, 606	Springer, H., Brady Township, Mich. Milling-pail.....	Apr. 8, 1873	415	127	3	402
146, 103	Same..... Fertilizing-attachment to seed-sowers.....	Aug. 5, 1873	171	55	4	149
142, 525	Springer, T., assignor to self and G. Autenrieth, Hunter's Point, N. Y. Piano-pedal stool	Dec. 30, 1873	963	317	4	711
	Springer, T. G., New York, N. Y. Apparatus for carbureting and regulating the pressure of gas.....	Sept. 2, 1873	181	59, 60	4	256
142, 526	Same..... Blind-slat fastener.....	Sept. 2, 1873	183	60	4	256
142, 290	Springer, W. A., Marlborough, Mass. Trimming-attachment for sewing-machines.....	Aug. 26, 1873	810	268	4	228
142, 819	Springer, W. A., assignor to self, T. Corey, and C. D. Hunter, Marlborough, Mass. Guide for sewing-machines.....	Sept. 16, 1873	447	151	4	300
136, 783	Springer, W. P., Oswego, N. Y. Summer furnace.....	Mar. 11, 1873	388	128	3	265
144, 711	Springsteen, A., Oquawka, Ill. Corn-planter.....	Nov. 18, 1873	469	159	4	539
137, 155	Springwater, M., Evansville, Ind. Liquid-measuring register.....	Mar. 25, 1873	727	242	3	333
136, 941	Sprinkle, G., North Leverett, Mass. Stone-puller.....	Mar. 18, 1873	531	176	3	306
139, 274	Sprogle, D. M., Annapolis, Md. Process of making artificial stone.....	May 27, 1873	756	239	3	590
	Squier, G. L. (See Stevens, H. B., assignor.)					
135, 945	Squires, J. A., New York, N. Y. Stay-log.....	Feb. 18, 1873	518	169	3	194
142, 591	Same..... Machine for cutting veneers.....	Sept. 9, 1873	249	82	4	274
135, 946	Squires, R. S., Cleveland, Ohio. Dinner-pail.....	Feb. 18, 1873	520	170	3	194
145, 073	Staata, R. P., assignor to self and E. A. Stout, New York, N. Y. Clasp for elastic bands.....	Dec. 2, 1873	30	10	4	588
140, 739	Stackhouse, P. M., Pineville, Pa. Butter-worker.....	July 8, 1873	352	118	4	48
	Stackman, W. (See Scripture & Stackman.)					
144, 364	Stackpole, G., Elizabeth, N. J. Rubber eraser.....	Nov. 4, 1873	160	53	4	491
	Stackpole, G. W. (See Wentworth, F. W., assignor)					
	Stacy, C. L., Cincinnati, Ohio. Hydrant..... (Extension.)	Oct. 4, 1873			4	353
144, 638	Stacy, G., Nanuet, N. Y. Revolving hammer.....	Nov. 18, 1873	408	137	4	534
144, 639	Same..... Mode of fastening cutters in stone-cutters' and other tools.....	Nov. 18, 1873	410	138	4	534
144, 640	Same..... Stone-cutter.....	Nov. 18, 1873	411	138	4	534
136, 942	Stacy, M. E., Thomasville, Ga. Rice-huller.....	Mar. 18, 1873	532	176	3	306
146, 104	Stachlen, W., assignor to C. F. A. Hinrichs, Brooklyn, N. Y. Drop-light and hanger.....	Dec. 30, 1873	984	318	4	711
136, 872	Stafford, J. A., and H. C. Fowler, Cleveland, Ohio. Process for treating tobacco.....	Mar. 18, 1873	471		3	301
140, 090	Staffin, N., Chicago, Ill. Watch-regulator.....	June 17, 1873	597	188	3	680
135, 604	Stahl, J. H., Stanton's Mills, Pa. Mortising-machine.....	Feb. 4, 1873	201	62	3	143
	Stalb, J. (See Doubrava & Stalb.)					
146, 105	Stairs, J. F., Halifax, Canada. Coating oakum with tar, &c.....	Dec. 30, 1873	985	318	4	711
142, 747	Staley, A., San Francisco, Cal. Reciprocating engine.....	Sept. 9, 1873	379	127	4	284
	Staley, G. W. (See Frankfoder, D., assignor.)					
141, 897	Stall, F. A., Boston, Mass. Compound for paint.....	Aug. 19, 1873	458		4	189
145, 025	Saint Amand, O., assignor of one-half interest to J. Woodley, Quebec, Canada. Sewing-machine.....	Nov. 25, 1873	743	{ 251 } { 252 }	4	573
137, 390	Stamberger, F., Clarion, Ill. Apparatus for supplying salt to cattle.....	Apr. 1, 1873	100	32	3	365
	Stanbery, G. A. (See Platt & Stanbery.)					
138, 950	Stancliff, G., New York, N. Y. Hoisting and conveying apparatus.....	May 13, 1873	432	136	3	543
139, 743	Standing, W., Du Quoin, Ill. Process of preparing corn for grinding.....	June 10, 1873	287		3	648
	Standish, S. (See Packard & Standish.)					
136, 273	Standish, S., Eureka, Nev. Broom.....	Feb. 25, 1873	818	264	3	229
140, 314	Same..... Paint-brush.....	June 24, 1873	806	256	3	706
	Standt, E. (See Bright & Standt.)					
139, 523	Stanford, C. P., San Francisco, Cal. Ore-feeder for grinding and crushing mills.....	June 3, 1873	67	23	3	614
139, 204	Same..... same.....	May 20, 1873	676	212	3	576
137, 969	Stanford, E. C. C., Glasgow, Scotland. Deodorizing animal matters for fertilizers, &c.....	Apr. 15, 1873	626		3	432
	Stanley, R. (See Baird, J. M., assignor.)					
	Stanley Rule and Level Company. (See Sargent, S. D., assignor.)					
	Same..... (See Traut, J. A., assignor.)					
137, 633	Stanley, W. B., Groveton, N. H. Wagon-brake.....	Apr. 8, 1873	322	100	3	395
137, 575	Stansbury, J. A., Salem, Ohio. Printers' miter-machine.....	Apr. 8, 1873	277	85	3	391
134, 775	Stanton, J. P., and R. C. Pedrick, Pedricktown, N. J. Transplanter.....	Jan. 14, 1873	262	86	3	41
137, 330	Stanton, J. W., Brooklyn, N. Y. Generator for generating carbonic-acid gas.....	Apr. 1, 1873	50	15	3	361
145, 134	Stanton, J. W., assignor to J. H. Colton, Brooklyn, said Colton assignor of one-half interest to C. M. Martin, New York, N. Y. Method of extinguishing fire in oil-tanks, &c.....	Dec. 2, 1873	92	29	4	592
	Stanwood, J. E., Malden, Mass. Gas-pipe cutter..... (Extension)	Apr. 26, 1873			3	444
141, 019	Staples, E. W., jr., Norwich, Conn. Fastening for sliding-doors.....	July 22, 1873	627	211	4	88
140, 796	Staples, M. W., Richmond, Va. Reciprocating churn.....	July 15, 1873	405	138	4	60
142, 958	Same..... Washing-machine.....	Sept. 16, 1873	565	191	4	310
144, 365	Same..... same.....	Nov. 4, 1873	161	53	4	491
	Stapleton, W. H. (See Preston, F. B., assignor.)					
135, 605	Starbrick, R., Wilmington, Ohio. Ditching-machine.....	Feb. 4, 1873	202	63	3	143
	Starbuck, B., et al. (See Richardson, G. W., assignor.)					
	Starbuck, G. H., et al. (See Richardson, G. W., assignor.)					
139, 205	Stark, A. H., Nevada, Iowa. Corn-planter.....	May 20, 1873	677	{ 212 } { 213 }	3	576
141, 824	Stark, J., Waltham, Mass. Watchmakers' lathe-chuck.....	Aug. 12, 1873	378	124	4	173

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 857	Stark, J., Waltham, Mass. Watchmakers' staking-tool	Oct. 21, 1873	441	147	4	434
142, 132	Stark, J. P., assignor of one-half interest to J. F. Simpson, Morrisville, Ill. Weather-threshold	Aug. 26, 1873	681	224	4	217
141, 960	Starke, A. (See Jones, J. D., assignor.)					
138, 446	Starke, P. H., Richmond, Va. Plow	Aug. 19, 1873	506	167	4	193
144, 712	Starke, W., Chicago, Ill. Spring bed-bottom	Apr. 29, 1873	1,093	345	3	487
143, 540	Starke, G., assignor to the Albert Field Tack Company, Taunton, Mass. Coating tacks, nails, and screws to prevent corrosion, and to color them	Nov. 18, 1873	470	159	4	539
142, 527	Starnes, J. E., Worthington, Ind. Attachment to chimneys or flues	Oct. 7, 1873	123	41	4	390
144, 484	Starr, E. F. (See Houston, E. J., assignor.)					
141, 521	Starr, H. D., Texas, Tex. Cotton-bale tie	Sept. 2, 1873	183	60	4	256
142, 527	Starr, J. M., Richmond, Ind. Mechanism for stopping and starting street-cars	Nov. 11, 1873	271	92	4	512
141, 521	Starr, J. W., Camden, N. J. Valve-register	Aug. 5, 1873	97	30	4	143
142, 538	Starr, S. H., Philadelphia, Pa. Subaqueous gas-stove	Dec. 9, 1873	372	124	4	627
143, 308	Starrett, G. W., Dublin, Ohio. Corn-planter	Sept. 9, 1873	300	99	4	278
137, 803	Starrett, L. S., assignor to Athol Machine Company, Athol Depot, Mass. Meat or fruit press	Apr. 15, 1873	487	152	3	421
144, 419	Starritt, J. D., Chicago, Ill. Rotary-cultivator	Nov. 11, 1873	220	73	4	508
145, 313	Staten, W. F., Jasper, Fla. Medical compound for treating the hair	Dec. 9, 1873	253		4	618
144, 233	Statz, J., Cross Plains, Wis. Corn-planter	Nov. 4, 1873	57	17, 18	4	493
138, 052	Staudt, H., Troy, N. Y. Pocket-knife	Apr. 22, 1873	721	238	3	449
145, 312	Staugaard, H. H., Chicago, Ill. Bureau and wardrobe combined	Dec. 9, 1873	252	84	4	618
141, 672	Stearns, A. C. (See Hungerford, F., assignor.)					
143, 264	Stearns, E. H., Erie, Pa. Circular saw-mill	Aug. 12, 1873	245	78	4	163
144, 154	Same. Edging-machine	Sept. 30, 1873	827	294	4	358
143, 026	Same. Sawing-machine	Oct. 28, 1873	710	237	4	466
143, 308	Same. Saw-mill dog	Nov. 25, 1873	746	252	4	573
5, 574	Stearns, G., Eldorado Mills, Wis. Windmill	Sept. 30, 1873	865	296	4	361
5, 344	Stearns, G. N., Syracuse, N. Y. Vise (Reissue)	Sept. 16, 1873	583	197	4	312
134, 776	Stearns, H. A. (See Brown, J. R., assignor.)					
136, 274	Stearns, J. B., Boston, Mass., assignor to The Western Union Telegraph Company. Duplex-telegraph apparatus (Reissue)	Apr. 1, 1873	227	69	3	375
136, 873	Stearns, J. B., Boston, Mass. Repeater for duplex telegraphs	Jan. 14, 1873	263	86	3	41
136, 874	Same. Duplex-telegraph instrument	Feb. 25, 1873	818	264	3	229
136, 875	Same. Duplex-telegraph	Mar. 18, 1873	472	150, 157	3	302
136, 876	Same. same	Mar. 18, 1873	473	157	3	302
6, 487	Same. Duplex-telegraph key	Mar. 18, 1873	475	157	3	302
24, 668	Same. Telegraph relay and sounder	Mar. 18, 1873	475	158	3	302
142, 592	Stearns Manufacturing Company. (See Torrent, J., assignor.)					
132, 053	Stearns, T. J., Natick, Mass., assignor to Roxbury Carpet Company, Boston, Mass. Carpet (Design)	Mar. 4, 1873			3	245
135, 017	Stearns, W., Manchester, N. H. Picker-motion for power-looms (Extension)	July 5, 1873			4	7
136, 186	Same. same (Disclaimer filed)	June 30, 1873			4	7
137, 732	Same. Loom-picking mechanism	Sept. 9, 1873	249	82	4	274
139, 624	Stebbins, E. E., Meadville, Pa. Instrument for drawing scrolls	Apr. 22, 1873	722	223	3	449
143, 789	Stebbins, G. P. (See Stebbins, L., assignor.)					
137, 106	Stebbins, L., Hinsdale, N. H., assignor to self and P. G. Stebbins, Vernon, Vt. Railway-car brake	Jan. 21, 1873	492	158	3	75
134, 710	Stebbins, M. C., Springfield, Mass. Inkstand-filler	Feb. 25, 1873	743	240	3	223
144, 234	Stebbins, M. C., and E. J. Piper, said Stebbins assignor to said Piper, Springfield, Mass. School-desk	Apr. 8, 1873	415	128	3	402
142, 179	Stebbins, T., San Francisco, Cal. Hydraulic elevator	June 3, 1873	155	52	3	621
141, 961	Steck, G., New York, N. Y. Grand piano	Oct. 21, 1873	381	126	4	429
140, 960	Stedman, E. E., Ravenna, Ohio. Clasp for preventing ingrowing of toe-nails	Mar. 25, 1873	688	229	3	330
137, 106	Stedman, O. F., Westfield, N. Y. Draught-pipe for aerated liquids	Jan. 7, 1873	198	64	3	22
144, 234	Same. Attachment for soda-fountains	Nov. 4, 1873	58	18	4	483
142, 179	Steel, R., assignor of one-half interest to J. S. and H. S. Richards, Philadelphia, Pa. Railway-rail	Aug. 26, 1873	718	237	4	220
144, 235	Steel, R., and S. Austin, assignors of one-half interest to J. Leeds, Philadelphia, Pa. Car-propeller	Nov. 4, 1873	59	18	4	483
6, 535	Steel, S. S. (See Salisbury & Steel.)					
6, 583	Steele & Condit, et al. (See Kirkup, L., assignor.)					
6, 723	Steele, D. S., et al. (See Stevens, W. J., assignor.)					
143, 858	Steele, E. J., assignor to Sargent & Co., New Haven, Conn. Boot-jack (Design)	Mar. 25, 1873			3	325
145, 369	Same. Paper-file (Design)	Apr. 8, 1873			3	387
141, 961	Same. Lock-front (Design)	June 24, 1873			3	691
140, 960	Steele, F., assignor to self, H. S. and E. M. Jewell, Brooklyn, N. Y. Alarm safety-valve	Oct. 21, 1873	442	147	4	434
137, 499	Steele, F., assignor to American Steam and Water Recording Company, Brooklyn, N. Y. Low-water indicator	Dec. 9, 1873	296	100	4	622
141, 961	Steenbergen, P. H., Chico, Cal. Medical compound or piles-liniment	Aug. 19, 1873	508		4	193
140, 960	Steera, T., assignor of one-half interest to W. G. Hamilton, Milton, Wis. Farm-gate	July 15, 1873	558	187	4	
137, 499	Steffensen, J., Lyons, Iowa. Road-scraper	Apr. 1, 1873	204	62	3	373
144, 294	Steger, J. (See Field & Steger.)					
145, 370	Stehlin, C. V. and J., New York, and H. A. Haan, Brooklyn, N. Y. Process of manufacturing paper from grains	Nov. 4, 1873	102		4	486
134, 570	Stehlin, J. (See Stehlin, C. V. and J., & Haan.)					
141, 825	Stein, H., New York, assignor to self and H. Dale, Brooklyn, N. Y. Lock	Dec. 9, 1873	297	100	4	622
6, 536	Stein, S., Rochester, N. Y. Burial-casket	Jan. 7, 1873	64	20	3	12
135, 857	Steiner, J. H., Cincinnati, Ohio, assignor of one-half interest to L. Canady, Albany, N. Y. Fire-extinguisher	Aug. 12, 1873	378	124	4	173
141, 961	Steinhilper, L., and L. Welker, Williamsport, Pa. Picture-frame (Design)	Mar. 25, 1873			3	325
144, 574	Steinmetz, M. V. B. (See Biesel, J. J., assignor.)					
143, 729	Steinway, A., et al. (See Steinway, C. F. T., assignor.)					
141, 091	Steinway, C. F. T., assignor to self, W. and A. Steinway, New York, N. Y. Piano sound-ing-board	Feb. 11, 1873	432	140	3	173
143, 729	Steinway, W., et al. (See Steinway, C. F. T., assignor.)					
141, 091	Stempel, A., Chicago, Ill. Process of painting signs on cloth	Nov. 11, 1873	348		4	518
137, 500	Stenhouse, J. (See Thom & Stenhouse.)					
143, 729	Stensland, C., Negaunee, Mich. Machine-gun	Oct. 14, 1873	310	102, 103	4	413
141, 091	Stephens, A. P., Brooklyn, N. Y., assignor to The Stephens Patent Company, New York, N. Y. Broaching-machine	July 22, 1873	689	232	4	93
137, 500	Stephens, C. B., et al. (See Hastings, G. S., assignor.)					
137, 500	Stephens, H., Saint Louis, Mo. Reservoir cooking-stove	Apr. 1, 1873	205	62	3	373

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Orig.	Vol.	Page.
142, 291	Stephens, H., assignor to J. Boyle, New York, N. Y. Awning-frame.....	Aug. 26, 1873	810	268	4	228
141, 472	Stephens, H. C., Glenville, Ohio. Seeding-machine.....	Aug. 5, 1873	57	17	4	139
	Stephens, M. (See Pearce, J., assignor.)					
5, 494	Stephens, M., Brooklyn, N. Y. Device for lining cement-pipes..... (Reissue)...	July 15, 1873	596	200	4	76
137, 970	Same..... Cement-lined pipe.....	Apr. 15, 1873	627	197	3	432
142, 528	Same..... same.....	Sept. 2, 1873	124	60	4	236
143, 473	Same..... Machine for punching sheet-metal.....	Oct. 7, 1873	62	22	4	366
	Stephens Patent Company. (See Stephens, A. P., assignor.)					
144, 295	Stephens, W., Pittston, Pa. Slide-valve.....	Nov. 4, 1873	102	34	4	486
142, 052	Stephens, W. H., Evansville, and G. B. F. Cooper, New Albany, Ind. Rolling-mill.....	Aug. 19, 1873	595	196	4	200
137, 107	Stephenson, A. M., Manteno, Ill. Adding-machine.....	Mar. 25, 1873	688	229	3	330
	Stephenson, D. W. (See Stephenson, W. J. and D. W.)					
143, 730	Stephenson, G., Zionsville, Ind. Forceps for snouting hogs.....	Oct. 14, 1873	312	103	4	413
134, 615	Stephenson, J., New York, N. Y. Street-car coupling.....	Jan. 7, 1873	108	35	3	15
135, 170	Stephenson, W. H., Bluffton, Ind. Stove-pipe.....	Jan. 21, 1873	614	200	3	24
145, 251	Stephenson, W. J. and D. W., Yellow Springs, Ohio. Stove-pipe shelf.....	Dec. 2, 1873	191	66	4	600
136, 625	Stephenson, W. O., Marion County, Ind., assignor to self, H. C. Lord, and D. Ricketts. Car-chock for railroad rails.....	Mar. 11, 1873	259	87	3	275
134, 945	Sterick, S. T. F., assignor to W. M. King, Georgetown, D. C. Hub for vehicles.....	Jan. 14, 1873	412	132	3	53
140, 830	Sterick, S. T. F., Georgetown, D. C. Wheel for vehicles.....	June 10, 1873	364	113	3	654
144, 156	Sterling, D., Eaton Rapids, Mich. Hand shower-bath.....	Oct. 23, 1873	713	237	4	467
	Sterling, J. A. (See Plumb, W. H., assignor.)					
139, 031	Sterling, W. H., San Francisco, Cal. Railway-tie.....	May 20, 1873	511	161	3	562
142, 959	Same..... Process and composition for the manufacture of illuminating gas.....	Sept. 16, 1873	565		4	310
	Stern & Co. (See Weil, E., assignor.)					
142, 748	Sternberg, A. J., Butler, Ind. Bee-hive.....	Sept. 9, 1873	380	127	4	284
135, 171	Sternberger, L., Philadelphia, Pa. Starching-machine.....	Jan. 21, 1873	614	200	3	85
	Sterne, L. (See Jaques, Oakley & Sterne.)					
141, 826	Stetson, B., Fitchburgh, Mass. Water-wheel.....	Aug. 12, 1873	380	124	4	174
145, 819	Stevens, A. J., Sacramento, Cal. Locomotive-furnace.....	Dec. 23, 1873	707	233	4	679
5, 551	Stevens, C. A., New York, N. Y., assignor to I. D. Clift. Packing for journals and other parts of machinery..... (Reissue)...	Aug. 26, 1873	639		4	230
141, 396	Stevens, C. and G. M., Boston, Mass. Fog-alarms.....	July 29, 1873	994	323	4	124
139, 032	Stevens, C. B., Donnellson, Iowa. Wheel-plow.....	May 20, 1873	512	162	3	562
	Stevens Company, J. and E. (See Frisbie, R., assignor.)					
145, 763	Stevens, E. M., Boston, Mass. Loom-shuttle guard.....	Dec. 23, 1873	665	217	4	675
145, 459	Stevens, G., and J. H. Watson, Tawas City, Mich. Plastering-machine.....	Dec. 9, 1873	373	124	4	627
137, 869	Stevens, G. J., Charlestown, Mass. Stilts.....	Apr. 15, 1873	541	169	3	425
	Stevens, G. M. (See Stevens, C. and G. M.)					
140, 853	Stevens, G. M., Portland, Me. Miter-box.....	July 15, 1873	454	154	4	64
137, 501	Stevens, G. W., San Francisco, Cal. Fruit-knife.....	Apr. 1, 1873	205	62	3	373
137, 502	Same..... Tray for drying fruit.....	Apr. 1, 1873	206	63	3	374
144, 877	Stevens, H., Brazoria, Tex. Manufacture of fertilizers.....	Nov. 25, 1873	622		4	562
137, 503	Stevens, H. B., assignor to G. L. Squier, Buffalo, N. Y. Metallic grinding-mill.....	Apr. 1, 1873	207	63	3	374
144, 803	Same..... Machine for separating rice.....	Nov. 18, 1873	546	186	4	545
145, 693	Same..... Machine for hulling rice.....	Dec. 16, 1873	589	193	4	637
137, 576	Stevens, H. C. and T. W., Enosburgh, Vt. Sugar-evaporator.....	Apr. 8, 1873	278	85	3	391
142, 820	Stevens, H. K., and S. Miller, said Miller assignor to said Stevens, Waterloo, N. Y. Screw-propeller.....	Sept. 16, 1873	448	151	4	300
	Stevens Company, J. and E. (See Frisbie, R., assignor.)..... (Design.)					
	Stevens, J. F. (See Freeman, Lowe & Stevens.)					
140, 797	Stevens, J. H., Cambridge, Mass. Water-closet.....	July 15, 1873	406	138	4	61
141, 179	Stevens, L., Washington, D. C. Gas-furnace.....	July 22, 1873	776	253	4	99
141, 180	Same..... same.....	July 22, 1873	777	254	4	99
141, 181	Same..... Furnace for roasting and smelting ores.....	July 22, 1873	778	254	4	99
144, 155	Stevens, M., Brooklyn, N. Y. Rotary shears for metal.....	Oct. 28, 1873	712	237	4	467
145, 764	Stevens, N. P., Hopkinton, N. H. Balanced valve for steam-engines.....	Dec. 23, 1873	666	217	4	675
	Stevens, Roberts & Havell. (See Havell, G., assignor.)					
138, 784	Stevens, S. M., assignor of half interest to S. W. Brunt, Lancaster, Iowa. Turbine water-wheel.....	Mar. 11, 1873	389	128	3	285
	Stevens, T. B., et al. (See Gifford, E. N., assignor.)					
145, 973	Stevens, W. F., Melrose, Mass. Hinge for safe-doors, &c.....	Dec. 26, 1873	869	281	4	702
142, 292	Stevens, W. J., New York, N. Y., assignor to self, D. S. Steele, and N. W. Condict, jr., Jersey City, N. J. Device for operating the valves of steam-engines.....	Aug. 26, 1873	811	268	4	228
139, 922	Stevens, W. X., East Brookfield, Mass. Dominoes.....	June 17, 1873	459	143	3	669
138, 447	Stevenson, G., Zionsville, Ind. Corn-knife.....	Apr. 29, 1873	1,094	345	3	487
137, 971	Stevenson, G. B., Upper Sandusky, Ohio. Automatic gate.....	Apr. 15, 1873	628	198	3	432
137, 634	Stevenson, J., Sparta, Ill. Fruit-drier.....	Apr. 8, 1873	322	101	3	395
5, 341	Stevenson, J. E., New York, N. Y. Water-wheel..... (Reissue)...	Mar. 25, 1873	854	279	3	343
	Stevenson, J. W. (See Fend & Stevenson.)					
136, 785	Stevenson, S., Danaville, N. Y. Horse hay-rake.....	Mar. 11, 1873	389	128	3	286
6, 737	Stevenson, W. S., assignor to Thomas, Roberts, Stevenson & Co., Philadelphia, Pa. Cooking-stove..... (Design)...	July 1, 1873			4	7
140, 091	Stever, J., Bristol, assignor to T. C. Morton, Waterbury, Conn. Loom-picking mechanism.....	June 17, 1873	598	189	3	680
5, 528	Stewart, A., Chicago, Ill. Thread show-case..... (Reissue)...	Aug. 5, 1873	194	61	4	151
144, 236	Stewart, A. J., Chillicothe, Mo. Harrow.....	Nov. 4, 1873	60	18	4	483
142, 180	Stewart, C., assignor of one-half interest to W. Allen, Worcester, Mass. Steam-boiler.....	Aug. 26, 1873	719	238	4	220
144, 062	Same..... Month-piece for steam-boiler furnaces.....	Oct. 28, 1873	587	195	4	456
145, 537	Same..... Mallet for driving tubes, &c.....	Dec. 16, 1873	461	151	4	646
136, 676	Stewart, E., Fort Madison, Iowa. Ruffing-attachment for sewing-machines.....	Mar. 11, 1873	300	100	3	278
	Stewart, E. C., executrix. (See Stewart, P. P.)..... (Extension.)					
138, 104	Stewart, E. P., Cotton Plant, Miss. Music notation.....	Apr. 22, 1873	763	242	3	453
138, 210	Stewart, G. W., assignor of three-fourths interest to J. A. Ansley and H. Lewis, Atlanta, Ga. Hay and cotton press.....	Apr. 22, 1873	855	271	3	460
5, 268	Stewart, H. S., Newark, N. J. Elevator..... (Reissue)...	Feb. 4, 1873	217	67	3	144
141, 397	Stewart, J., jr., Yonkers, N. Y. Sewing-machine for handling hats.....	July 29, 1873	995	323	4	124
140, 315	Stewart, J., and W. Campbell, Fowler, Ill. Apple-paring, coring, and slicing machine.....	June 24, 1873	807	256	3	706
144, 237	Stewart, J. C., Eureka, Ill. Washing-machine.....	Nov. 4, 1873	61	19	4	433
140, 854	Stewart, J. F., Modesto, Cal. Windmill.....	July 15, 1873	455	154	4	65
136, 557	Stewart, J. L., and J. B. Dubler, Philadelphia, Pa. Oil-still.....	Mar. 4, 1873	185	59, 60	3	260
	Stewart, J. T. (See Hugg & Stewart.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
137, 108	Stewart, J. T., Philadelphia, Pa. Tack-creaser for sewing-machines.	Mar. 25, 1873	689	299	3	330
136, 466	Stewart, L., San Francisco, Cal. Medicated towel.	Mar. 4, 1873	98		3	253
	Stewart, P. P., deceased, by E. C. Stewart, executrix, Troy, N. Y. Cooking-stove. (Extension)	Jan. 18, 1873			3	37
	Same. Cooking-stove. (Extension)	Apr. 12, 1873			3	386
137, 804	Stewart, S. M., Rochester, N. Y. Combined raves and fenders for sleighs.	Apr. 15, 1873	488	152	3	421
145, 915	Stewart, T. E. (See Eayra, W. P., assignor.)					
144, 366	Stewart, W. A., Bethel, assignor of one-half interest to T. H. Dinsmore, Skowhegan, Me. Fog-signal.	Dec. 23, 1873	794	260	4	685
	Stewart, W. H., Brooklyn, N. Y., assignor to self and A. Robinson, Morristown, N. J. Treadle for sewing-machines.	Nov. 4, 1873	161	53, 54	4	491
	Stickler, Elliott, and Wilson. (See Smyth, D. M., assignor.)					
	Stickney, E. R. (See Longley & Stickney.)					
	Stiefvater, H. (See Lavies & Stiefvater.)					
140, 556	Stiff, W. C., Birmingham, England. Rale-tie.	July 1, 1873	183	62	4	23
	Stiles and Parker Press Company. (See Stiles, N. C., assignor.)					
141, 182	Stiles, J. S., Springfield, Vt. Banjo.	July 23, 1873	779	255	4	99
137, 331	Stiles, J. W., New York, N. Y. Pressure gage.	Apr. 1, 1873	52	15	3	361
135, 380	Stiles, N. C., assignor to The Stiles and Parker Press Company, Middletown, Conn. Mode of adjusting the length of pitmen.	Jan. 28, 1873	828	267	3	114
	Stiles, P. B. (See Collins & Stiles.)					
138, 541	Stiles, R., Cincinnati, Ohio. Scoop for raising sunken coal.	May 6, 1873	64	22	3	503
137, 109	Stiles, W. C., Nevada City, Cal. Rotary steam-engine.	Mar. 25, 1873	690	229	3	330
138, 352	Same. same.	Apr. 20, 1873	1,010	318	3	481
137, 257	Stillman, E. C., Hopkinton, R. I., and E. F. Burrows, Mystic River, Conn. Tag-holder.	Mar. 25, 1873	825	271	3	340
139, 275	Stillson, J. B., Chicago, Ill. Fire-extinguisher.	May 27, 1873	757	239	3	500
141, 962	Stilwell, A., Dwaar's Kill, N. Y. Device for preventing horses from cribbing.	Aug. 19, 1873	508	167	4	193
138, 706	Stimely, W. H., Buchanan, assignor of one-half interest to W. H. Doyle, Pittsburgh, Pa. Trace-detacher.	May 6, 1873	211	67	3	514
136, 877	Stimens, E. P., and T. C. Martin, Perryville, assignors of half interest to A. Clark, Osna-	Mar. 18, 1873	477	158	3	302
	burgh, Ohio. Haap-lock.	May 13, 1873	433	136	3	543
138, 951	Stimpson, E. B., New York, N. Y. Machine for skiving leather.	July 29, 1873	996	323	4	124
141, 398	Same. Machinery for folding leather.			324		
	Stimpson, E. S. (See Allen & Stimpson.)					
139, 929	Stimpson, E. S., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple.	June 17, 1873	459	144	3	669
	Stimpson, J., Baldwinville, Mass. Machine for making box-joints. (Extension)	Nov. 8, 1873			4	504
143, 309	Stimson, A. L., Chicago, Ill. Metallic vault.	Sept. 30, 1873	865	296	4	361
				297		
				187		
140, 961	Stinde, H. F., Saint Louis, Mo. Seeding-machine.	July 15, 1873	559	188	4	73
145, 135	Stirling, W. B. C., and J. W. Pohlman, Batavia, Ohio. Carriage-top joint.	Dec. 2, 1873	93	30	4	593
	Stiles, C. F. (See Walker, O. E., assignor.)					
140, 439	Stiles, C. F., Cincinnati, Ohio. Well-bucket.	July 1, 1873	80	28	4	15
	Stiles, J. S. (See Morrison, E. R., assignor.)					
138, 707	Stith, H. T., Peoria, Kans. Traction-wheel.	May 6, 1873	212	67	3	514
144, 575	St. John, C., New York, N. Y. (Combined fan and parasol.	Nov. 11, 1873	348	117	4	518
	St. John, L. E., et al. (See Palmer, G. N., assignor.)					
5, 679	St. John, M. W., Leonardville, N. Y. Ball and socket joint. (Reissue)	Dec. 9, 1873	392	129	4	629
142, 293	Same. same.	Aug. 26, 1873	812	269	4	228
142, 358	St. John, W. H., New York, N. Y. Purification of illuminating-gas.	Sept. 2, 1873	32	12	4	245
	Saint Louis Rail-Fastening Company. (See O'Conner, T., assignor.)					
	Saint Louis Railway Supplies Manufacturing Company. (See Tobey, E. H., assignor.)					
136, 275	St. Martin, W., Cincinnati, Ohio. Billiard-light.	Feb. 25, 1873	819	264	3	229
	Same. Billiard-cushion.	May 27, 1873	892	267	3	601
139, 434	Stock, C. A., New York, N. Y. Locking-device for a series of drawers.	Apr. 1, 1873	101	33	3	365
137, 391	Stock, F. and J., San José, Cal. Pump-box. (Extension)	Apr. 26, 1873			3	444
	Stock, J. (See Rein & Stock.)					
	Stock, J. (See Stock, F. & J.) (Extension)					
135, 858	Stockley, G. W. (See Billings & Stockley.)					
137, 258	Stockmarr, T., New York, N. Y. Bustle.	Feb. 11, 1873	433	141	3	173
137, 870	Same. Fluting-machine.	Mar. 25, 1873	826	271	3	340
	Stockstill, S. L., Medway, Ohio, and H. D. Kutz, Harrisburgh, Pa. Plow.	Apr. 15, 1873	542	169	3	425
	Stockton, H. P. (See Inman, S., assignor.)					
	Stockton, J. C., et al. (See Chapman, J. L., assignor.)					
136, 276	Stockton, J. K., New York, N. Y. Sofa-bedstead.	Feb. 25, 1873	820	265	3	229
138, 592	Same. Wood-screw.	May 6, 1873	110	35	3	506
	Stockton, V. (See Rogers, J. G., assignor.)					
	Stockton, W. D. (See McNeir & Stockton.)					
136, 786	Stockwell, A., Woonsocket, R. I. Loom-picking mechanism.	Mar. 11, 1873	390	129	3	286
142, 529	Stockwell, E., Stamford, Conn. Permutation-lock.	Sept. 2, 1873	185	61	4	257
140, 092	Stockwell, E., and W. H. Taylor, Stamford, Conn. Post-office box.	June 17, 1873	599	189	3	680
143, 937	Stockwell, J. H., Bronson, Mich. Bee-hive.	Oct. 21, 1873	503	170	4	439
137, 504	Stockwell, J. W., Portland, Me. Machine for operating drills.	Apr. 1, 1873	208	63	3	374
140, 171	Same. Mixing-machine.	June 24, 1873	687	216	3	695
141, 244	Stockwell, L. W., Ravenna, Ohio. Device for holding gas-pipe nipples.	July 29, 1873	849	277	4	113
140, 962	Stoddard, C. H., and E. D. Norton, Ithaca, N. Y. Feeding paper to printing presses.	July 15, 1873	562	188	4	73
137, 577	Stoddard, C. T., Colebrook, N. H. Buggy.	Apr. 8, 1873	279	85, 86	3	391
	Stoddard, J. C., Lockport, N. Y. Hay-spreader. (Extension)	June 28, 1873			3	690
94, 588	Same. same. (Disclaimer filed)	July 1, 1873			4	7
145, 538	Stoddard, D., San Francisco, Cal. Condenser for steam-pumps.	Dec. 16, 1873	462	151	4	646
144, 420	Stokes, J., jr., New York, N. Y. Ticket-case.	Nov. 11, 1873	221	73	4	508
140, 316	Stoll, C., Brooklyn, N. Y. Machine for polishing malt.	June 24, 1873	810	256	3	706
135, 381	Stoll, M. J., Middletown, Conn. Binder for sewing-machines.	Jan. 28, 1873	829	267	3	114
140, 557	Same. Buffer for sewing-machines.	July 1, 1873	184	62	4	23
6, 550	Stoll, N., Chicago, Ill. Billiard-table. (Design)	Apr. 1, 1873			3	357
143, 938	Stoll, W. W., Brooklyn, N. Y. Malt-steep.	Oct. 21, 1873	504	170	4	439
145, 027	Same. Malt-polishing apparatus.	Nov. 25, 1873	747	252	4	573
138, 708	Stolpe, E. J. F., Washington, D. C. Button-fastening.	May 6, 1873	214	67	3	515
143, 193	Stomba, J. H., Winona, Minn. Balanced valve.	Sept. 23, 1873	759	262	4	336
144, 157	Same. Self-adjusting telegraph-relay.	Oct. 28, 1873	713	238	4	467
144, 367	Stone, C. S., Indianapolis, Ind. Harvester.	Nov. 4, 1873	162	54	4	492
	Stone, E. (See Moody, W. F., assignor.)					
140, 855	Stone, H., Galveston, Tex. Combined spade and fork.	July 15, 1873	456	155	4	65

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
	Stone, J. H. (See Aikin & Stone)..... (Reissue.)					
	Stone, J. H., et al. (See Davis, H. D., assignor.)					
	Same..... (See McGovern, P., assignor.)					
	Same..... (See Stone, J. M., assignor.)					
137, 972	Stone, J. H., Chapel Hill, Tex. Gate-hinge.....	Apr. 15, 1873	628	198	3	432
	Stone, J. M., et al. (See McGovern, P., assignor.)					
	Same..... (See Davis, H. D., assignor.)					
139, 330	Stone, J. M., assignor to self, G. L. Davis, J. A. Wiley, G. G. Davis, J. H. Stone, and J. H. Davis, North Andover, Mass. Spooling-machine.....	June 17, 1873	460	144	3	669
141, 296	Stone, J. M., North Andover, Mass. Shaft-coupling.....	July 29, 1873	895	294	4	117
135, 735	Stone, J. R., Round Grove, Kans. Stove-grate.....	Feb. 11, 1873	323	103	3	165
140, 093	Stone, J. W., Lynchburg, Va. Tobacco case.....	June 17, 1873	600	189	3	680
135, 322	Stone, M., Vermillion, Ohio. Self-waiting table.....	Jan. 28, 1873	829	267	3	114
139, 831	Same..... Ear-cover.....	June 10, 1873	365	113	3	654
	Stone, W. F., et al. (See Hunter, G. W., assignor.)					
	Stone, W. N., et al. (See Bingham, S. H., assignor.)					
142, 053	Stone, W. S., New Philadelphia, Ohio. Mowing-machine.....	Aug. 19, 1873	597	196	4	900
138, 292	Stoner, J. B., New York, N. Y. Floating light-house.....	Apr. 29, 1873	957	{ 301 302 }	3	476
138, 293	Same..... same.....	Apr. 29, 1873	959	302	3	476
	Stoops, N. D. (See Bendor, J., assignor.)					
	Stoops, N. D., et al. (See Bendor, J., assignor.)					
	Same..... same..... (Reissue.)					
	Stoops, N. D. (See Cushman, C. S., assignor.)					
137, 635	Storck, H., and F. M. Lyte, Paris, France. Manufacture of acid phosphates.....	Apr. 8, 1873	323		3	395
	Storer, A. (See Shawk & Storer.)					
	Storer, A., et al. (See Shawk, G. W., assignor.)					
141, 898	Storer, A., Cleveland, Ohio. Electric annunciator.....	Aug. 19, 1873	459	149	4	189
139, 625	Storer, G. W., Philadelphia, Pa. Evaporating-pan.....	June 3, 1873	156	52	3	621
140, 963	Same..... Driven-well.....	July 15, 1873	563	188	4	73
143, 939	Same..... Evaporating-pan.....	Oct. 21, 1873	505	170	4	439
144, 158	Same..... same.....	Oct. 28, 1873	714	238	4	467
144, 159	Same..... Evaporating pan and plant for salt-manufacture.....	Oct. 28, 1873	716	{ 238 239 }	4	467
5, 703	Storer, J. J., Boston, Mass. Process and apparatus for deodorizing and destroying the gases from offal-treating establishments..... (Reissue.)	Dec. 23, 1873	817	267	4	697
135, 383	Same..... Treating offal and manufacturing fertilizers.....	Jan. 28, 1873	830	268	3	114
136, 943	Same..... Treating offal and manufacture of fertilizers.....	Mar. 18, 1873	533	176	3	306
143, 310	Same..... Fertilizer from offal..... (Reissue.)	Sept. 30, 1873	667		4	361
	Stork, W. L., et al. (See Bushfield, S. B., assignor.)					
139, 626	Storle, O. O., assignor to self and W. Johnson, Milwaukee, Wis. Clasp for securing the ends of leather straps.....	June 3, 1873	156	52	3	622
	Storms, A. (See McKnight, J. J., assignor.)					
138, 822	Story, A. G., Waterloo, N. Y. Pipe or car couplings.....	May 13, 1873	325	100	3	534
139, 435	Stott, J., Norwich, Conn. Lid-supporter for trunk.....	May 27, 1873	693	288	3	601
137, 036	Stouffer, H. C., Canfield, Ohio. Earth-auger.....	Mar. 18, 1873	613	203	3	313
138, 211	Same..... Horse hay-fork.....	Apr. 22, 1873	857	271	3	480
141, 297	Stough, C. B., Monticello, Ill. Hoisting and conveying apparatus.....	July 29, 1873	895	294	4	117
139, 931	Stout, C., assignor to self and C. Rorer, Waverly Heights, Pa. Clamping-device.....	June 17, 1873	461	144	3	669
	Stout, F. A. (See Staats, R. P., assignor.)					
141, 183	Stout, P. F., assignor of one-half interest to W. C. Roberts, Philadelphia, Pa. Locomotive head-light.....	July 22, 1873	780	255	4	99
139, 627	Stout, S., Tremont, Ill. Spring-bed.....	June 3, 1873	157	52	3	622
145, 765	Stover, D. C., Freeport, Ill. Windmill-regulator.....	Dec. 23, 1873	666	217	4	675
137, 973	Stow, H. M., San Francisco, Cal. Wood pavement.....	Apr. 15, 1873	629	198	3	432
140, 657	Stow, H. M., Milan, Ohio. Sawing-machine.....	July 8, 1873	283	96	4	43
136, 558	Stow, N., Binghamton, N. Y. Shears for counters.....	Mar. 4, 1873	186	60	3	260
141, 399	Stow, N. C., Rockland, Me. Shoe-edge burnishing-machine.....	July 29, 1873	999	324	4	124
144, 238	Stow, O. W., Plantsville, Conn. Paper bag.....	Nov. 4, 1873	62	19	4	483
5, 462	Stowe, A. F., Worcester, Mass. Strap-machine..... (Reissue.)	June 24, 1873	836	265	3	708
139, 744	Same..... Leather-splitting machine.....	June 10, 1873	288	89	3	648
144, 931	Stowe, F., Huron, Ohio. Door-latch.....	Nov. 25, 1873	663	225	4	566
141, 827	Stowe, S. F., assignor of one-half interest to S. G. Trippe, Providence, R. I. Windmill.....	Aug. 12, 1873	381	125	4	174
	Stowe, T. (See Sears, W. H., assignor.)					
136, 944	Stowell, J. M., Milwaukee, Wis. Machine for sawing laths.....	Mar. 18, 1873	534	177	3	306
142, 294	Same..... Sawing-machine.....	Aug. 26, 1873	813	269	4	228
134, 571	Stowell, W. J., Baltimore, Md. Fastening mail-bags.....	Jan. 7, 1873	65	20	3	12
	Saint Paul Harvester-Works. (See Elward, J. H., assignor.)					
	St. Pierre, P. (See Luppert & St. Pierre.)					
144, 038	St. Pierre, X., Ophir City, Utah Territory. Car-coupling.....	Oct. 28, 1873	616	204	4	459
	Strader, J. J., et al. (See Clarkson, F. E., assignor.)					
135, 859	Strahl, J., Lee, Ohio. Washing-machine.....	Feb. 11, 1873	433	141	3	173
145, 371	Strain, A., Greenfield, Ohio. Car-coupling.....	Dec. 9, 1873	297	100	4	622
	Strain, P. J. (See Twamly, J., assignor.)					
136, 677	Strait, J. V., Litchfield, Ohio. Traction-wheel.....	Mar. 11, 1873	301	100	3	278
137, 805	Stranahan, J. L., Chicago, Ill. Broom-corn duster.....	Apr. 15, 1873	489	153	3	421
142, 181	Strange, F., Detroit, Mich. Low-water indicator and alarm.....	Aug. 26, 1873	720	236	4	220
139, 033	Strange, J. W., Bangor, Me. Rotary valve and cut-off.....	May 20, 1873	513	162	3	563
139, 622	Strasser, W., assignor to self and S. S. Baughman, Taylorsville, Ohio. Skate.....	June 3, 1873	157	53	3	682
140, 964	Strasser, W., Taylorsville, Ohio, assignor to self and S. S. Baughman, Muskingum County, Ohio. Mode of uniting boot and shoe soles to the uppers.....	July 15, 1873	563	188	4	73
135, 018	Strassle, B., Chicago, Ill. Parlor sawing.....	Jan. 21, 1873	492	158	3	75
145, 974	Straszler, G., assignor of one-half interest to H. McNeill, Manchester, Mo. Shirt-collar fastening.....	Dec. 30, 1873	870	282	4	702
141, 673	Straszler, J., Saint Louis, Mo. Wick-raiser.....	Aug. 12, 1873	947	78	4	163
141, 828	Strattan, A. M., Ladoga, Ind. Crozing and chamfering plane.....	Aug. 19, 1873	383	125	4	174
138, 952	Stratton, F., Wilmington, Del. Tire-heater.....	May 13, 1873	434	136	3	543
135, 860	Stratton, H., assignor to Bradley & Hubbard, West Meriden, Conn. Call-bell.....	Feb. 11, 1873	434	141	3	173
	Stratton, O. G. (See Noves & Stratton.)					
138, 593	Straub, I., Kenton County, Kentucky. Wind-wheel power.....	May 6, 1873	110	36	3	507
	Straub Mill Company. (See Cathart, R. S., assignor.)					
5, 609	Straus, J., Saint Louis, Mo. Side-saddle tree..... (Reissue.)	Oct. 14, 1873	335	111	4	415
139, 524	Same..... Back-band book.....	June 3, 1873	68	23	3	614
	Strauss, L. & Co. (See Davis, J. W., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 823	Strawn, T. C., and W. C. Drum, Perry Township, assignor to Speer, Clarke & Co., Pittsburgh, Pa. Rotary sieve.	May 13, 1873	326	101	3	534
142, 054	Street, E. A., South Orange, N. J. Manufacture of hydraulic hose.	Aug. 19, 1873	597	196	4	200
144, 368	Streeter, N. B., Groton, N. Y. Last-block fastener.	Nov. 4, 1873	163	54	4	492
145, 028	Same. same.	Nov. 25, 1873	748	253	4	573
136, 878	Streeter, S. F., Bernardston, Mass. Trowel.	Mar. 18, 1873	478	158	3	302
145, 252	Streeter, S. F., Greenfield, Mass. Tool-handle.	Dec. 2, 1873	192	66	4	600
142, 295	Strehli, J. H., Cincinnati, Ohio. Steam-engine.	Aug. 26, 1873	815	269	4	228
143, 859	Streightoff, C. H., New York, N. Y. Pen and pencil-case.	Oct. 21, 1873	443	147	4	434
137, 505	Streit, C., Cincinnati, Ohio. Sofa bedstead.	Apr. 1, 1873	210	64	3	374
	Striber, E., et al. (See Bedell, O. T., assignor.)					(Reissue.)
	Same. (See Taber, W. D., assignor.)					(Reissue.)
144, 296	Stribling, U. B., Madison, Ind. Furnace for steam-boilers.	Nov. 4, 1873	103	35	4	486
142, 296	Strickler, J., Columbiana, Ohio, assignor to W. W. Wallace, Pittsburgh, Pa. Boring-machine.	Aug. 26, 1873	815	270	4	228
143, 194	Striker, G. W., Iowa Falls, Iowa. Bag-holder.	Sept. 23, 1873	760	262	4	337
	Strobridge & Co. (See Wolff, O. P., assignor.)					
140, 558	Strobridge, L. H., Naples, N. Y. Washing-machine.	July 1, 1873	185	63	4	23
144, 804	Strode, R., Coatesville, Pa. Safety-platform for railway-cars.	Nov. 18, 1873	549	186	4	546
141, 829	Strong, A. D., Ashtabula, Ohio. Blacking for leather.	Aug. 12, 1873	383	127	4	174
5, 374	Strong, C., Winsted, Conn. Coffin-handle.	Apr. 22, 1873	886	279	3	462
138, 768	Same. same.	May 13, 1873	280	87	3	536
	Stroug, F. M., Vergennes, and T. Ross, Rutland, Vt. Platform scales.	May 24, 1873				(Extension) 3 558
	Same. Weighing-scales.	Aug. 16, 1873				(Extension) 4 159
141, 899	Strong, H. N., Portland, Conn. Hook for hanging tobacco.	Aug. 19, 1873	459	150	4	189
141, 900	Strong, J. E., Newton Brook, Canada. Automatic gate.	Aug. 19, 1873	460	150	4	189
146, 030	Strong, W. H., Clinton Township, Ohio. Wheel-cultivator.	Dec. 30, 1873	915	297	4	706
141, 143	Stroud, G. F., assignor to W. D. Stroud, Oshkosh, Wis. Seeding-machine.	July 22, 1873	736	244	4	96
141, 400	Same. Cultivator-teeth.	July 29, 1873	998	324	4	124
	Stroud, W. D. (See Stroud, G. F., assignor.)					
136, 107	Strowbridge, J. W., Cortland, N. Y. Seeding-machine.	Feb. 18, 1873	650	215	3	205
138, 953	Strunz, S., Birmingham, Pa. Soap-crutching machine.	May 13, 1873	435	136	3	543
138, 954	Strunz, S., Pittsburgh, Pa. Disinfecting soap-boiling establishments.	May 13, 1873	435	137	3	543
143, 541	Stryker, W. H., Syracuse, N. Y. Stove-grate.	Oct. 7, 1873	121	41	4	390
139, 206	Stuart, A. A., Cedar Rapids, Iowa. Door-bell.	May 20, 1873	678	213	3	576
145, 253	Stuart, D., and L. Bridge, assignors to Stuart, Peterson & Co., Philadelphia, Pa. Stove-grate.	Dec. 2, 1873	193	66	4	600
140, 390	Stuart, L. W., Hawley, Pa., assignor to G. Ames, Rochester, N. Y. Process of hardening edge-tools.	July 1, 1873	46		4	12
	Stuart, Peterson & Co. (See Stuart & Bridge, assignors.)					
137, 156	Stuart, R. J., Yonkers, N. Y. Printing-press feeder.	Mar. 25, 1873	728	242	3	333
144, 160	Same. Paper-folding machine.	Oct. 28, 1873	717	239 240	4	467
	Stuart, T. E. (See Eayrs, W. P., assignor.)					
140, 227	Stuart, W. (See Lobdell, G. G., assignor.)					
143, 102	Stubbings, M. J., Youngstown, Ohio. Combined scissors and tape-line.	June 24, 1873	731	230	3	699
142, 960	Same. Coffee-pot.	Sept. 23, 1873	689	237	4	330
136, 277	Stubbs, H. J., Kennett Square, Pa. Thill-coupling attachment.	Sept. 16, 1873	567	192	4	311
136, 787	Stubbs, J. W., Cheraw, S. C. Fertilizer.	Feb. 25, 1873	821	265	3	229
146, 031	Stuckman, H., Bourbon Township, Ind. Washing-machine.	Mar. 11, 1873	391	129	3	286
	Studer, J. A. (See Martin & Studer.)					
135, 294	Stull, H., Ione City, Cal. Process for the reduction of copper and other ores.	Dec. 30, 1873	916		4	706
143, 940	Stults, S. S., Cedar Bluffs, Nebr. Hand-planter.	Jan. 28, 1873	748	241	3	108
	Sturdevant, A. T., Mount Pleasant, N. Y. Manufacture of paper stock.	Oct. 21, 1873	506	171	4	440
	Sturgeon, I. H. (See Hull & Brown, assignors.)					
	Sturges, F., & Co. (See Mather, E., assignor.)					
139, 276	Sturges, G. A., assignor to self and D. Pettengill, Delhi, N. Y. Railway rail-joint.	May 27, 1873	758	239 240	3	590
141, 184	Same. Saah-holder.	July 22, 1873	781	255	4	99
143, 790	Same. Railway rail-joint fastening.	Oct. 21, 1873	382	127	4	429
134, 946	Sturgis, J., Minneapolis, Minn. Two-horse evener.	Jan. 14, 1873	413	132	3	53
135, 384	Sturgis, J. I., Milwaukee, Wis. Printer's lead-casting machine.	Jan. 28, 1873	831	268	3	114
	Sturtevant, B. F., West Roxbury, Mass. Blank for shoe-pegs.	Aug. 16, 1873			4	159
	Same. Lathe attachment for cutting veneers.	Dec. 27, 1873			4	671
26, 627	Same. same.	Dec. 26, 1873			4	671
	Same. (Disclaimer filed.)					
144, 421	Sturtevant, S. C., Cleveland, Ohio. Bridge-wall for furnaces.	Nov. 11, 1873	222	74	4	508
137, 332	Sturtevant, T. L., Framingham, Mass. Powder-flask.	Apr. 1, 1873	53	16	3	361
138, 294	Same. Machine for loading cartridges.	Apr. 29, 1873	962	302	3	477
141, 185	Same. Device for loading cartridges.	July 22, 1873	782	256	4	100
143, 427	Stützel, F., Wabashaw, Minn. Medical compound or stomach-bitters.	Oct. 7, 1873	29		4	383
143, 474	Subit, P., Boston, Mass. Belt-fastening.	Oct. 7, 1873	63	22	4	386
136, 011	Succosa, J. R., assignor of two-thirds interest to J. Krein and W. Succosa, Birmingham, Pa. Car-coupling.	Feb. 18, 1873	573	189	3	198
	Succosa, W., et al. (See Succosa, J. R., assignor.)					
138, 105	Suggs, I. T., Green Hill, Tex. Seed-planter.	Apr. 22, 1873	763	243	3	453
142, 961	Suitt, J. B., Indianapolis, Ind. Thrashing-machine.	Sept. 16, 1873	568	192	4	311
	Sullenberger, W. H. (See Bird & Sullenberger.)					
	Sullivan, D. (See Bordner & Sullivan.)					
139, 207	Sullivan, D., Washington, D. C. Apparatus for treating horses.	May 20, 1873	679	213	3	576
140, 658	Sullivan, J., and J. Minka, Newark, Ind. Band-cutter and feeder for thrashing-machines.	July 8, 1873	283	96	4	43
	Sullivan Machine Company. (See Ball, A., assignor.)					
	Sully, J., trustee. (See Baldwin, J. F., assignor.)					
	Same. (See Hardy, C. F., assignor.)					
	Same. (See Smith, H., assignor.)					
142, 055	Summers, W. D., Hopkinsville, Ky. Harrow.	Aug. 19, 1873	598	197	4	200
140, 599	Summitter, P., Marlborough, Mass. Hand peg-cutter.	July 8, 1873	235	80	4	39
135, 606	Sumption, E., South Bend, Ind. Ironing apparatus.	Feb. 4, 1873	203	63	3	143
	Sundermann, J. H. (See Matson, M., assignor.)					
137, 110	Sunter, H. J., Buffalo, N. Y. Method of heating photographic negative baths.	Mar. 25, 1873	691	230	3	330
	Sursa, J. W. (See Wright & Sursa.)					
5, 375	Sutcliffe, E. A., New York, N. Y. Breech-loading ordnance.	Apr. 22, 1873	887	279	3	462
145, 766	Sutherland, A. J., Ann Arbor, Mich. Machine for shaping pickets.	Dec. 23, 1873	667	218	4	676
135, 232	Sutherland, S. F., Baltimore, Md. Process for treating lamp-wicks.	Jan. 28, 1873	716		3	105
135, 861	Sutherland, B. W., Fillmore, Minn. Three-horse evener.	Feb. 11, 1873	434	141	3	173
137, 733	Sutor, W. B., Indiana, Pa. Grate for stoves and fire-places.	Apr. 8, 1873	416	128	3	402
6, 650	Sutro, L., New York, N. Y. Ruffle-stand.	May 13, 1873			3	527

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144,039	Sutter, J. D., Chicago, Ill. Apparatus for extinguishing fires in buildings.	Oct. 28, 1873	617	204	4	459
140,440	Sutton, F. R. and W. O., Wellington, Ill. Thrashing-machine	July 1, 1873	81	28	4	15
141,298	Same. Harvester-cutter	July 29, 1873	897	284	4	117
137,974	Sutton, J., New York, N. Y. Bread-raising apparatus.	Apr. 15, 1873	630	198	3	433
136,879	Sutton, J. M., Sutton's Corners, Pa. Car-coupling.	Mar. 18, 1873	478	159	3	302
136,342	Sutton, L. B., Windsor, N. C. Cotton-seed planter.	Feb. 25, 1873	877	283	3	234
	Sutton, W. O. (See Sutton, F. R. and W. O.)					
145,916	Suydam, C. V. N., Millstone, N. J. Spring-brace for vehicles	Dec. 23, 1873	796	261	4	685
128,448	Svedberg, J. A., Washington, D. C. Rotary blower.	Apr. 29, 1873	1,094	346	3	487
140,967	Svendsen, C., Blair, Nebr. Potato-planter	July 15, 1873	564	189	4	73
143,941	Svensen, C., Blair, Nebr. Harrow	Oct. 21, 1873	507	171	4	410
142,056	Swain, D., Dover, N. H. Tile-roofing	Aug. 19, 1873	599	197	4	200
140,600	Swain, E., Chelmsford, Mass. Shaft-coupling.	July 8, 1873	236	80	4	39
	Swain, Fuller & Co. (See Johnson, J. R., assignor.)					
	Swamscot Machine Company. (See Rundlett, G. B., assignor.)					
142,057	Swan, A. L., Cherry Valley, N. Y. Bell-pull	Aug. 19, 1873	599	197	4	200
141,963	Swan, G. W., San Francisco, Cal. Veneer-peg	Aug. 19, 1873	509	168	4	193
142,297	Same. Machine for making boxes	Aug. 26, 1873	816	270	4	228
142,298	Same. Process for softening and toughening blocks of wood.	Aug. 26, 1873	817	271	4	228
143,103	Same. Box-former	Sept. 23, 1873	689	237	4	330
142,299	Swan, G. W., and W. Finch, said Finch assignor to said Swan, San Francisco, Cal. Fruit and berry basket.	Aug. 26, 1873	817	270	4	228
5,624	Swan, J., Seymour, Conn., assignor to R. P. Bruff. Machine for manufacturing auger-bits. (Reissue)	Oct. 21, 1873	534	176	4	442
139,091	Swan, J., Seymour, Conn. Machine for turning the lips of augers	May 20, 1873	570	179	3	567
141,401	Same. Machine for forming auger-bits	July 29, 1873	999	324	4	124
143,475	Swan, J., Richmond, Ohio. Pitman	Oct. 7, 1873	64	22	4	386
135,451	Swank, J., Delano, Pa. Ratchet-drill	Feb. 4, 1873	55	18	3	132
	Swann, J. B. (See Atkins, L., assignor.)					
6,946	Swann, T., Philadelphia, Pa. Toy-bank (Design)	Oct. 7, 1873	.....	.....	4	380
145,694	Swanson, C., Newton, Iowa. Combined punching and sheating-machine	Dec. 16, 1873	591	193	4	657
137,111	Swartz, G. A., Twin Grove, Wis. Windmill	Mar. 25, 1873	692	230	3	330
136,278	Swartz, S., Buffalo, N. Y. Lifting bridge	Feb. 25, 1873	822	265 266	3	229
	Sweatt, L. A. (See Lombard, Morrill & Sweatt.)					
137,734	Sweeney, H. M., assignor of one-half interest to O. N. Pond, Worcester, Mass. Fertilizing-distributor	Apr. 8, 1873	416	128	3	402
	Sweeney, J. J. (See Smith, J. T. and G. M., and Sweeney.)					
	Sweeney, N. D. (See Ground, R. B., assignor.)					
	Sweeney, T. (See Hawson & Sweeney)					
137,975	Sweeney, W. P., Marine, Ill. Wheel-plow	Apr. 15, 1873	641	199	3	433
	Sweet, Barnes & Co. (See Deering, M., assignor.)					
143,731	Sweet, B. B., Wilmington, Del., and J. Noble, Philadelphia, Pa. Snow-plow	Oct. 14, 1873	312	103	4	414
5,311	Sweet, F. M., Newark, N. J., assignor to D. D. and A. E. Codding, and T. I. Smith. Bracket (Reissue)	Mar. 4, 1873	213	70	3	262
140,094	Sweet, G., Danville, N. Y. Wheelwright-machine	June 17, 1873	601	189	3	681
140,317	Same. Plaster-sower	June 24, 1873	811	256	3	706
145,029	Same. Horse-hay rake	Nov. 25, 1873	749	253	4	573
139,932	Sweetland, A. C., North Attleborough, Mass. Stove-pipe joint	June 17, 1873	462	144	3	669
141,820	Same. Pipe-coupling	Aug. 12, 1873	384	126	4	174
	Sweetland, J. B. (See Thompson & Rice, assignors.)					
135,862	Sweetland, J. B., Pontiac, Mich. Sectional steam-generator	Feb. 11, 1873	435	142	3	173
136,788	Same. Wash-bench for wringing-machines	Mar. 11, 1873	392	129	3	296
139,208	Same. Churn-motor	May 20, 1873	680	213	3	573
144,161	Same. Elevator	Oct. 28, 1873	719	240	4	467
146,106	Same. Nut-lock	Dec. 30, 1873	985	318	4	711
	Sweetser, W. A. (See Merritt, I., assignor.)					
139,209	Swenson, G., Hackensack, N. J. Safety-valve	May 20, 1873	680	214	3	576
140,441	Same. Saw-set	July 1, 1873	81	29	4	15
144,932	Swenson, G., assignor to self and P. Bogart, jr., Hackensack, N. J. Spark-arrester	Nov. 25, 1873	663	225	4	566
139,232	Swett, C., Copiah County, Miss., assignor to C. Swett and W. Palfry, New Orleans, La. Fire-tongs	June 10, 1873	366	113	3	654
	Swezey, H. W., et al. (See Lee, G. D., assignor.)					
136,108	Swickard, J. W., assignor of one-half interest to J. Hough, Galva, Illinois. Cultivator	Feb. 18, 1873	660	216	3	205
	Swift, C. (See Moody, W. F., assignor.)					
143,791	Swineford, P., Middleburgh, Pa. Car-coupling	Oct. 21, 1873	383	127	4	429
137,392	Swingle, A., assignor to self and F. A. Huntington, San Francisco, Cal. Magazine-gun	Apr. 1, 1873	101	33	3	365
138,542	Swingle, A., San Francisco, Cal. Combined shears and button-hole cutters	May 6, 1873	65	22	3	503
135,947	Swingle, A., and F. A. Huntington, San Francisco, Cal. Magazine fire-arm	Feb. 18, 1873	530	170	3	194
136,880	Switzer, J. J., Boston, Mass. Loom-stop mechanism	Mar. 18, 1873	479	159	3	302
145,917	Switzer, W. L., Zanesville, Ohio. Connecting-rod	Dec. 23, 1873	797	261	4	685
135,863	Swofford, J. P., Brownville, Miss. Scraper-attachment for plows	Feb. 11, 1873	436	142	3	173
136,279	Swope, Z., Lancaster, Pa. Harvester	Feb. 25, 1873	823	266	3	230
143,542	Sykes, H., New York, N. Y. Awning	Oct. 7, 1873	124	42	4	391
143,428	Sykes, S., Portland, Oreg. Device for detaching horses	Oct. 7, 1873	29	11	4	383
	Sykes, W. R. (See Clark & Sykes.)					
138,709	Sylvester, G. W., Plain View, Minn. Coupling-joint for reapers	May 6, 1873	215	67	3	515
143,195	Same. Coupling-joint for reapers, &c.	Sept. 23, 1873	761	262	4	337
137,571	Sylvester, H., Saint Louis, Mo. Felly-plate	Apr. 8, 1873	273	84	3	390
141,092	Symonds, C. E., Salem, Mass. Grafting	July 22, 1873	690	232	4	93
136,187	Symonds, T., Portland, Me. Dredger	Feb. 25, 1873	745	240	3	223
132,054	Same. Curtain-fixture	Apr. 22, 1873	723	229	3	449
138,295	Same. Dredger	Apr. 29, 1873	964	303	3	447
	Taber, G. R. (See Roby, J. B., assignor.)					
138,296	Taber, J., South Wolfborough, N. H. Washing-machine	Apr. 29, 1873	965	303	3	477
140,442	Taber, J., Rockford, Mich. Dog for circular-saw mills	July 1, 1873	83	29	4	15
	Taber, W. D., et al. (See Bedell, O. T., assignor.) (Reissue)					
	Taber, W. D. (See Goodwin, S. A., assignor.)					
5,300	Taber, W. D., Buffalo, N. Y., assignor of one-half interest to P. P. Josef and E. Striber. Egg-carrier (Reissue)	Feb. 25, 1873	897	288	3	235
141,040	Tadlock, J. S., assignor to self and J. M. Howell, Belmont, Tex. Horse-power	Oct. 28, 1873	617	204	4	459
139,340	Taft, D. F., New Bedford, Mass. Corn-planter	May 27, 1873	804	256	3	191
5,417	Taft, G. C., Worcester, Mass. Letter-copying press (Reissue)	May 20, 1873	701	220	3	578
145,975	Same. Nail-extractor	Dec. 30, 1873	870	282	4	702

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr & G.	Vol.	Page.
140, 740	Taft, G. E., assignor to Whitin Machine Works, Whitinsville, Mass. Traversing-cam } for card-stripping machines	July 8, 1873	353	{ 118 119 120	4	48
144, 162	Taft, J. C., Pawtucket, R. I. Stopping-mechanism for drawing-frames	Oct. 28, 1873	720	240	4	467
144, 576	Tage, C., Philadelphia, Pa. Dress-elevator	Nov. 11, 1873	349	118	4	518
145, 539	Taggart, J., assignor to J. A. Seney, Boston, Mass. Machine for splitting whalebone or rattan	Dec. 16, 1873	463	151	4	647
24, 963	Taggart, S., Indianapolis, Ind. Flour-packer (Extension)	Aug. 2, 1873			4	84
145, 107	Same same (Disclaimer filed)	July 19, 1873			4	85
136, 012	Same same	Dec. 30, 1873	986	318	4	711
140, 172	Tailbouis, E., and A. Renevey, Saint Just-en-Chaussee, France, assignors to J. Freeman, } Windsor Locks, Conn. Knitting-machine	Feb. 18, 1873	574	{ 189 190	3	196
140, 172	Taine, M., South Boston, Mass. Pantaloon-tree	June 24, 1873	688	216	3	696
	Tainter, W. V. (See Chandler & Tainter.)					
	Taisey, J. (See Morrison, R. H. D., assignor.)					
144, 577	Tait, A. H., Jersey City, N. J. Apparatus for the manufacture of ice, cooling build- ings, &c.	Nov. 11, 1873	350	118	4	518
145, 460	Same Cleansing sugar from molasses, &c.	Dec. 9, 1873	374		4	626
135, 673	Tait, A. H., Jersey City, N. J., and J. W. Avis, Matteawan, N. Y., said Tait assignor to said Avis. Still for petroleum and other liquids	Feb. 11, 1873	271	85	3	161
	Talbot, S., jr. (See Barnea, W. B., assignor.)					
138, 710	Tall, J., Southwark, England. Construction of buildings	May 6, 1873	215	68	3	515
146, 032	Tallmadge, J. W., Boston, Mass. Broom-corn-seed flour, for the manufacture of paste	Dec. 30, 1873	916		4	706
144, 425	Talmage, J. O., Cardington, Ohio. Hand corn-planter	Nov. 11, 1873	272	92	4	512
139, 484	Talpey, J. A., Somerville, assignor to J. Hitchcock, trustee, Boston, Mass. Fire-escape	June 3, 1873	37	12	3	612
141, 093	Same same	July 22, 1873	690	232	4	93
136, 449	Taltavull, P., assignor to self and E. M. Boteler, Washington, D. C. Corpse-preserver	Apr. 29, 1873	1,097	346	3	468
136, 678	Tamin, J. M. O., New York, N. Y. Medical compounds and medicated food	Mar. 11, 1873	302		3	278
141, 831	Same Purifying sugar, molasses, and saccharine juices	Aug. 12, 1873	385		4	174
141, 832	Same Manufacture of chocolate	Aug. 12, 1873	386		4	174
142, 058	Tamkins, J., sr., Conklin, N. Y. Market-wagon	Aug. 19, 1873	600	197	4	200
138, 055	Tamplin, E. V., Peoria, Ill. Implements for rolling, guiding, and controlling barrels, &c.	Apr. 22, 1873	724	229	3	149
5, 662	Taney, J., Bangor, Me. Water-wheel (Reissue)	Dec. 9, 1873	396	130	4	629
143, 040	Same same	Sept. 23, 1873	641	220	4	326
5, 552	Tangeman, W. A., Lockland, Ohio. Knitting-machine (Reissue)	Aug. 26, 1873	839	278	4	230
	Tanite Company. (See Cole, J. M., assignor.) (Four cases.)					
140, 559	Tanner, B., New Brighton, England. Manufacture of superphosphate of lime	July 1, 1873	186		4	23
138, 955	Tanner, E. B., Attica, Ohio. Hay-carrier	May 13, 1873	436	137	3	514
141, 607	Tapley, D. J., Danvers, Mass. Fire-extinguisher	Aug. 5, 1873	172	55	4	149
	Tapley Heel-Burnishing Association. (See Beasley, J., assignor.)					
	Tapley Heel-Burnishing-Machine Association. (See Lambert, R. C., assignor.)					
137, 735	Tappan, W. S., Washington, D. C. Suspension-hook for eye-glasses	Apr. 8, 1873	417	198	3	402
	Tappy, Lamsden & Co. (See Rash, R. A., assignor.)					
136, 960	Tarbell, M. W., and J. H. P. Inales, Jersey City, N. J. Crib-attachment for bedsteads	Feb. 25, 1873	824	966	3	230
136, 188	Tarble, F. W., Charlestown, and H. W. Sawyer, Chelsea, Mass. Knife-polisher	Feb. 25, 1873	746	240	3	223
142, 821	Tarr, J. B., Fairhaven, Mass. Mold for casting car-wheels	Sept. 16, 1873	449	152	4	301
5, 487	Tarrant, E., assignor to A. Rodgers, Muskegon, Mich. Machine for turning logs (Reissue)	July 15, 1873	590	199	4	75
5, 536	Tarrant, E., Muskegon, Mich. Sawing-machine for edging lumber (Reissue)	Aug. 19, 1873	613	202	4	292
141, 736	Same Log-turner	Aug. 12, 1873	297	97	4	167
139, 210	Tarrant, F., Saratoga Springs, N. Y. Stove-pipe thimble	May 20, 1873	681	214	3	576
139, 341	Tarring, L., Washington, D. C. Book-rest	May 27, 1873	805	257	3	594
138, 728	Tarring, L. A., Washington, D. C. Book-rest for desks	May 6, 1873	235	73	3	516
	Tartiere, L. A. (See Kreisler & Tartiere.)					
	Same (See Van Zandt & Tartiere.)					
138, 956	Tartiere, L. A., New York, N. Y. Fire and water proof compositions for ceilings, walls, and floors	May 13, 1873	437		3	544
143, 196	Same Fire-proof building	Sept. 23, 1873	761	963	4	337
143, 197	Same same	Sept. 23, 1873	762	963	4	337
136, 674	Tasker, S. P. M., Philadelphia, Pa. Furnace for heating metallic bars, tubes, &c.	Feb. 11, 1873	273	86	3	161
137, 259	Tasker, S. P. M., and W. H. McMillan, assignors to Morris Tasker & Co., Philadelphia, Pa. Weighted gage cock	Mar. 25, 1873	826	272	3	340
	Tate, S. T. (See Van Houten, E. F., assignor.)					
	Tate, S. T., et al. (See Van Houten, J. H., assignor.)					
139, 436	Tatom, I. I., West Point, Ga. Insulator for telegraph-line	May 27, 1873	893	288	3	601
138, 297	Tattershall, J. G., De phi, Ind. Saw-set	Apr. 29, 1873	966	303	3	477
	Taws & Hartman. (See Hartman, J. M., assignor.)					
	Taylor, W., et al. (See Adamson, J. H., assignor.)					
137, 976	Taylor, A., assignor of one-half interest to H. G. Curtis, Newtown, Conn. Dome for stoves	Apr. 15, 1873	631	199	3	433
139, 833	Taylor, A., Brooklyn, N. Y. Letter-box alarm	June 10, 1873	366	114	3	654
141, 674	Taylor, A. E., New Britain, Conn. Bell for sleigh-shafts	Aug. 12, 1873	248	79	4	163
136, 189	Taylor, A. J., Rome, Pa. Revolving rake-shoe	Feb. 25, 1873	746	240	3	223
144, 641	Taylor, B. L., Marlin, Tex. Portable fence	Nov. 18, 1873	413	139	4	534
141, 094	Taylor, C. A., Hartford, Conn. Windmill	July 22, 1873	692	232	4	93
142, 877	Taylor, C. H., New York, N. Y. Nut-lock	Sept. 16, 1873	494	169	4	304
137, 960	Taylor, D. E., Charlton, Mass. Spring-bed	Mar. 25, 1873	827	272	3	340
137, 506	Taylor, E., Memphis, Tenn. Harvester	Apr. 1, 1873	211	64	3	374
143, 792	Taylor, E. T., Philadelphia, Pa. Pantaloons	Oct. 21, 1873	383	127	4	430
	Taylor, F. F. (See Withington & Taylor.)					
142, 962	Taylor, F. F., San Francisco, and G. Withington, Ione City, Cal. Car-coupling	Sept. 16, 1873	568	192	4	311
145, 695	Taylor, G. B., Oakland, Cal. Barrel-tap and faucet	Dec. 16, 1873	591	194	4	657
140, 443	Taylor, G. C., Thibodeaux, La. Apparatus for treating cane-juice	July 1, 1873	83	29	4	15
142, 418	Same Combined chair and secretary	Sept. 2, 1873	84	28	4	249
137, 961	Taylor, H., Baltimore, Md. Rotary steam-engine	Mar. 25, 1873	828	272	3	341
136, 789	Taylor, J., Lock No. 4, Monongahela River, Pa. Sash for hot-beds, &c.	Mar. 11, 1873	392	130	3	296
135, 995	Taylor, J., jr., and J. Preat, Sheffield, England. Bearings for spindles	Jan. 22, 1873	749	241	3	106
145, 254	Taylor, J. C., Roanoke, Ala. Monument	Dec. 2, 1873	193	67	4	600
	Taylor, J. E. (See Thomson & Taylor.) (Design.)					
144, 572	Taylor, J. F., Charleston, S. C. Hydraulic car-brake	Nov. 11, 1873	351	{ 118 119	4	518
	Taylor, J. M. (See Humphrey, G. W., assignor.)					
138, 711	Taylor, J. P., Elizabethton, Tenn. Breech-loading fire-arm	May 6, 1873	217	68	3	515
145, 599	Taylor, J. P., Hudson City, N. J. Device for converting motion	Dec. 16, 1873	510	167	4	651
140, 856	Taylor, J. V., La Cygne, Kans. Bed-bottom	July 15, 1873	456	155	4	65
140, 095	Taylor, J. W., Ashland, Va. Barrel-head	June 17, 1873	602	190	3	681

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'e	Vol.	Page.
141, 402	Taylor, J. W., Ashland, Va. Washing-machine.....	July 29, 1873	1,001	325	4	195
	Taylor, L., Springfield, Vt. Mop-head..... (Extension)	Feb. 15, 1873			3	127
	Taylor, M. (See Thorp, T. J., assignor.)					
141, 901	Taylor, M., Hartford, Conn. Clamp for thill-couplings.....	Aug. 19, 1873	461	150	4	189
	Taylor, M. S. (See Adamson, J. H., assignor.)					
143, 646	Taylor, O., Grand Rapids, Wis. Car-coupling.....	Oct. 14, 1873	228	76	4	408
137, 112	Taylor, R., New York, N. Y. Refrigerator.....	Mar. 25, 1873	693	230	3	330
138, 298	Taylor, R. L., Golden Prairie, Iowa. Stretching-tool for wires and ropes.....	Apr. 29, 1873	966	303	3	477
142, 593	Same..... Harrow.....	Sept. 9, 1873	250	82	4	274
136, 281	Taylor, S., Cold Water, Mich. Lifting-jack.....	Feb. 25, 1873	825	266	3	230
140, 096	Taylor, S., Olamou, assignor to self and J. C. Towle, Bangor, Me. Guide for circular saws.....	June 17, 1873	602	190	3	681
139, 342	Taylor, S. J., Rome, N. Y. Washing-machine.....	May 27, 1873	805	257	3	594
	Taylor, S. P. (See Parker, J., assignor)					
138, 957	Taylor, S. T., Baltimore, Md. Feed-water heater for steam-boilers.....	May 13, 1873	437	137	3	544
140, 798	Taylor, T. A., assignor of one-half interest to G. M. Whipple and A. A. Smith, Salem, Mass. Toy money-box.....	July 15, 1873	406	138	4	61
	Taylor, T. B. et al. (See York, J. W., assignor.)					
135, 253	Taylor, W., assignor of one-half interest to W. Maynard, Maynard, Mass. Picker for looms.....	Jan. 28, 1873	716	229	3	105
135, 736	Taylor, W., Mansfield, Mass. Cultivator.....	Feb. 11, 1873	323	103	3	185
144, 163	Taylor, W. B. S., New York, N. Y. Elastic connection for flexible tubing.....	Oct. 28, 1873	721	240	4	467
	Taylor, W. H. (See Stockwell & Taylor.)					
	Same..... (See Towne & Taylor.)					
141, 833	Taylor, W. H., Stamford, Conn. Key-hole guard.....	Aug. 12, 1873	386	126	4	174
141, 834	Same..... Post-office letter-box.....	Aug. 12, 1873	387	126	4	174
141, 835	Taylor, W. H., Baldwinville, N. Y. Harness-pad tree.....	Aug. 12, 1873	388	126	4	174
	Taylor, W. J. (See Walsh & Taylor.)					
145, 461	Taylor, W. J., High Bridge, N. J. Manufacture of iron.....	Dec. 9, 1873	374		4	628
145, 462	Same..... same.....	Dec. 9, 1873	376		4	628
143, 198	Taylor, W. S., Brooklyn, N. Y. Skirt.....	Sept. 23, 1873	762	263	4	337
5, 594	Tayman, B. J., Philadelphia, Pa. Carving-machine..... (Reissue)	Oct. 7, 1873	149	49	4	392
136, 790	Same..... Machine for trimming soles of boots and shoes.....	Mar. 11, 1873	393	130	3	286
139, 034	Same..... Edge-plane for trimming the soles and welts of boots and shoes.....	May 20, 1873	514	162	3	563
139, 343	Same..... Last and shoe-holder.....	May 27, 1873	806	257	3	594
140, 601	Same..... Machine for trimming and burnishing shoe-soles.....	July 8, 1873	237	80	4	39
139, 344	Teachout, S. T., assignor to self and J. C. Peck, Troy, N. Y. Water-wheel.....	May 27, 1873	807	258	3	594
5, 345	Teal, D. E., New Lisbon, N. Y., assignor to Heywood Brothers & Co. Revolving and tilting chair..... (Reissue)	Apr. 1, 1873	229	70	3	375
144, 164	Teas, A., Cincinnati, Ohio. Saddle-tree.....	Oct. 28, 1873	721	241	4	467
139, 437	Tebbeta, C. F., and G. Nutting, Fitchburgh, Mass., assignors to Shoe-Machinery Manufacturing Company, Conn. Button-hole cutter.....	May 27, 1873	894	288	3	601
143, 793	Teed, T., Alexandria, Va., assignor of one-half interest to L. H. Chandler and C. P. Culver, Washington, D. C. Endless-chain propeller.....	Oct. 21, 1873	384	127	4	430
138, 543	Teets, S., New York, N. Y. Range for cooking and heating.....	May 6, 1873	66	22	3	503
	Teff, F. (See Morahan, B., assignor.)					
143, 390	Telling, W. A., and S. Johnson, assignors to Imperial Meter Company, London, England. Gas-meter.....	Sept. 30, 1873	940	318	4	367
	Temple, C. I. (See Birch, W., assignor.)					
136, 679	Temple, D. G., Farmersville, La. Wood fence.....	Mar. 11, 1873	303	100	3	278
	Temple, J., Dayton, Ohio. Water-wheel..... (Extension)	Feb. 8, 1873			3	188
22, 901	Temple, J., Middletown, Ohio. Water-wheel..... (Disclaimer filed)	Feb. 20, 1873			3	189
135, 948	Temple, J., Danville, Pa., assignor of one-half interest to R. P. Barbour, Chicago, Ill. Car-coupling.....	Feb. 18, 1873	521	170	3	194
141, 608	Temple, J., assignor by mesne assignment to self and D. J. Rote, Mooresburgh, Pa. Car brake.....	Aug. 5, 1873	173	55	4	149
142, 059	Temple, J., assignor of one-half interest to D. J. Rote, Mooresburgh, Pa. Car-coupling.....	Aug. 19, 1873	601	198	4	201
136, 881	Templeton, D. D., New York, N. Y. Apparatus for treating linseed-oil.....	Mar. 18, 1873	480	159	3	302
136, 559	Templeton, N. J., Cincinnati, Ohio, assignor to self and H. C. Ezekiel. Machine for sawing staves.....	Mar. 4, 1873	187	60	3	260
142, 963	Tenny, W. P., Boston, Mass. Disinfectant package.....	Sept. 16, 1873	569	192	4	311
137, 333	Terhume, W. S., assignor of one-fourth interest to T. A. Weston, Ridgewood, N. J. Claw-bar.....	Apr. 1, 1873	54	16	3	361
139, 979	Terrel, G. J., North Blanford, Mass. Clothes-washer.....	June 17, 1873	495	157	3	672
	Terry, A. W. (See Wood and W. S. R. Y. H. & A. W. Terry.)					
138, 450	Terry, C., assignor of one-half interest to J. L. Hickok, Saint Louis, Mo. Carpet-stretcher.....	Apr. 29, 1873	1,098	346	3	488
	Terry Clock Company. (See Terry, S. B., assignor.)					
143, 199	Terry, D., Wake-man, Ohio. Holdback for carriages.....	Sept. 23, 1873	763	263	4	337
	Terry, J. (See Cowles, H. D., assignor.)					
	Terry, L. F. (See Smith, J., assignor.)					
139, 438	Terry, N. M., Lyme, Conn. Carriage-curtain fastener.....	May 27, 1873	895	288	3	601
	Terry, R. Y. H. (See Wood and W. S. R. Y. H. & A. W. Terry.)					
140, 560	Terry, S. B., Waterbury, Conn. Machine for making paper boxes..... (Extension)	Sept. 6, 1873			4	240
	Terry, S. B., assignor to Terry Clock Company, Waterbury, Conn. Detached-lever escapement.....	July 1, 1873	188	63	4	23
	Terry, T. D. (See James, Tucker & Terry.)					
142, 964	Terry, T. D., A. Case and C. Larkin, Knobhooster, Mo. Wheel-plow.....	Sept. 16, 1873	570	193	4	311
	Terry, W. S. (See Wood and W. S. R. Y. H. & A. W. Terry.)					
139, 439	Tesseyman, J., and E. I. Howard, Dayton, Ohio. Valve-gear for direct-acting steam-engines.....	May 27, 1873	896	289	3	601
140, 857	Tester, A., assignor to self and J. Cunningham, Brooklyn, N. Y. Box-scraper.....	July 15, 1873	457	155	4	65
	Tew, A. F. (See Wright & Tew.)					
139, 211	Thanhauser, S. G., Baltimore, Md. Feather-renovator.....	May 20, 1873	682	214	3	576
135, 385	Tharp, O. P., Cincinnati, Ohio. Rudder for vessels.....	Jan. 23, 1873	832	268	3	114
	Thayer, B. D. (See Remington, Thayer & Manton.)					
	Thayer, H. E. (See Lewis, W. H., assignor.)					
5, 323	Thayer, H. H., Sandwich, Mass., assignor of one-half interest to J. A. Woodbury. Journal-box..... (Reissue)	Mar. 11, 1873	414	137	3	287
137, 507	Thayer, J., assignor of one-fourth interest to E. S. Smith, Topeka, Kan. Sand-ejector.....	Apr. 1, 1873	212	64	3	374
	Thayer, L. O. N. (See Duval, J., assignor.)					
138, 299	Thayer, O. S., Attleborough, Mass. Shirt-stud.....	Apr. 29, 1873	967	304	3	477
136, 282	Thayer, W. H., Somerville, assignor to A. J. Tower, Boston, and O. M. Southwick, Somerville, Mass. Bobbin for sewing-machine shuttles.....	Feb. 25, 1873	826	267	3	230
143, 104	Thayer, W. H., Somerville, assignor of one-half interest to A. J. Tower and J. J. Cilley, Boston, Mass. Shuttle for sewing-machine.....	Sept. 23, 1873	690	237	4	331

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 977	Theaker, T. C., New York, N. Y. Railway-car axle.....	Apr. 15, 1873	632	199	3	433
	Theberath, C. M. (See Bauer, J., assignor.)					
	Theberath, J. H. (See Bauer, J., assignor.)					
138, 451	Thebe, C., Aledo, Ill. Cultivator.....	Apr. 29, 1873	1,098	347	3	489
136, 620	Themel, H., Escanawba, Mich. Medical compound.....	Mar. 11, 1873	303		3	279
142, 822	Thian, R. P., Georgetown, D. C. Stamp-affixer.....	Sept. 16, 1873	450	152	4	301
145, 696	Thibault, M., Hull, Canada. Machine for cutting nails.....	Dec. 16, 1873	592	194	4	657
	Thiel, J. B. (See Gorman & Thiel.)					
142, 594	Thiele, A., Tickfaw, assignor of one-half interest to L. Schormann, New Orleans, La. Paving-composition.....	Sept. 9, 1873	251		4	274
142, 595	Same..... Composition mastic.....	Sept. 9, 1873	251		4	274
139, 485	Thielemann, J., Newark, N. J. Latch for coach-doors.....	June 3, 1873	39	12	3	612
145, 314	Thielen, N., Sacramento, Cal. Grain and malt cleaner and crusher.....	Dec. 9, 1873	253	84	4	618
136, 190	Thiery, L. C., Newark, N. J. Watch-chain catch.....	Feb. 25, 1873	747	241	3	223
143, 105	Thilmany, W., Cleveland, Ohio. Tanning compound.....	Sept. 23, 1873	692		4	331
141, 020	Thissell, E. A., assignor of one-half interest to J. Churchill, Lowell, Mass. Kettle-lifter.....	July 22, 1873	628	211	4	88
137, 636	Thom, J., Chorley, and J. Stenhouse, London, Great Britain. Recovering fatty and coloring matters from waste wash-liquors.....	Apr. 8, 1873	225		3	395
	Thomas & Robinson. (See Kistler, W. F., assignor.)					
140, 173	Thomas, A. P., and W. J. Evans, Copper Falls Mine, Mich. Rock-drill carriage.....	June 24, 1873	689	216	3	696
5, 563	Thomas, A. W., Philadelphia, Pa. Tourmure..... (Reissue.)	Sept. 2, 1873	207	67	4	258
140, 966	Same..... Bustle.....	July 15, 1873	565	189	4	73
144, 165	Thomas, C. A., Bellbuckle, Tenn. Portable fence.....	Oct. 28, 1873	722	241	4	407
141, 186	Thomas, C. H., Williamsburgh, Ohio. Bag-holder.....	July 22, 1873	783	256	4	100
141, 675	Thomas, C. H., Cassville, N. Y. Colter-clasp.....	Aug. 12, 1873	248	79	4	163
139, 496	Thomas, E. H., Louisville, Ky. Hand canceling-stamp.....	June 3, 1873	39	13	3	612
138, 769	Thomas, G. C., Chicago, Ill. Table-leaf support.....	May 13, 1873	280	87	3	530
139, 933	Same..... Shirt.....	June 17, 1873	462	145	3	669
145, 030	Thomas, G. C., Brooklyn, N. Y. Ticket-box for railway-cars.....	Nov. 25, 1873	750	253	4	573
145, 315	Thomas, G. C., Brooklyn, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn. Stop-hinge.....	Dec. 9, 1873	254	84	4	618
146, 108	Thomas, G. C., Brooklyn, N. Y. Ticket-box for railway-cars.....	Dec. 30, 1873	987	319	4	712
136, 681	Thomas, H., San Francisco, Cal. Sash-holder.....	Mar. 11, 1873	304	100	3	279
139, 980	Thomas, H., Brooklyn, N. Y. Carving-machine.....	June 17, 1873	496	157	3	672
140, 174	Thomas, J., Hoboken, N. J. Trimming.....	June 24, 1873	690	217	3	696
139, 834	Thomas, J., Middleborough, England. Metallurgic gas-furnace.....	June 10, 1873	367	114	3	654
140, 741	Same..... Apparatus for ventilating ships and heating steam-boilers.....	July 8, 1873	354	120	4	48
	Thomas, J. H., et al. (See Knight, L., assignor.)					
136, 191	Thomas, J. H., assignor of one-half interest to A. G. Tomay, Baltimore, Md. Insulator for battery-cups.....	Feb. 25, 1873	747	241	3	223
	Thomas, J. J. (See Brown & Thomas.)					
	Thomas, J. N., et al. (See Simpson & Drake, assignors.)					
140, 749	Thomas, J. S., Saint Louis, Mo. Brick-machine.....	July 8, 1873	356	120	4	48
137, 037	Thomas, N., assignor of one-half interest to T. Hull, Chicago, Ill. Valve for air-brake cylinders.....	Mar. 18, 1873	614	203	3	313
138, 594	Thomas, N. G., Ringgold, Tenn. Cistern-strainer.....	May 6, 1873	111	36	3	507
141, 909	Thomas, O. F., Barnes' Corners, assignor to self and A. C. Hughes, Rodman, and A. J. Glasure, Pinkney, N. Y. Pitman.....	Aug. 19, 1873	462	151	4	190
148, 300	Thomas, O. G., Taunton, Mass. Threshold for doors.....	Apr. 29, 1873	967	304	3	477
138, 459	Thomas, R. H., Newport, Ky. Device for adjusting the elevating and depressing screws of rolls.....	Apr. 29, 1873	1,099	347	3	488
	Thomas, Roberts, Stevenson & Co. (See Stevenson, W. S., assignor.)..... (Design.)					
134, 712	Thomas, R. F., San Francisco, Cal. Manufacture of soap.....	May 6, 1873	219		3	515
142, 530	Thomas, S., Catawanna, assignor to J. W. Mickley, Hockendauqua, Pa. Gudgeon or bearing for ore-washers.....	Sept. 2, 1873	187	61	4	257
134, 572	Thomas, S. T., Gilford, N. H. Loom.....	Jan. 7, 1873	66	20, 21	3	12
145, 316	Same..... same.....	Dec. 9, 1873	254	85	4	618
139, 277	Thomas, S. W., North Royakton, Ohio. Insect-destroyer.....	May 27, 1873	758	240	3	590
	Thomas, T. C. (See Barker, C., assignor.)..... (Reissue.)					
143, 300	Thomas, W. E., Queenstown, assignor to self and J. T. Lowe, Saint Michael's, Md. Steering-apparatus.....	Sept. 23, 1873	764	264	4	337
140, 444	Thomas, W. J., Frederick City, Md. Wash-boiler.....	July 1, 1873	85	29	4	15
	Thomas, W. L. G. (See Thompson & Beerbrower, assignors.)					
138, 713	Thomason, W. J. (See Greer & Thomason.)					
	Thompson, A., Boston, Mass. Machine for rubbing and rolling seams of boots.....	May 6, 1873	220	69	3	515
	Thompson, A. J. (See Westmoreland, J. M., assignor.)					
141, 522	Thompson, A. S., assignor to self and L. Vasaly, Little Falls, Minn. Paint-brush.....	Aug. 5, 1873	98	30	4	143
143, 311	Same..... Coal-scuttle.....	Sept. 30, 1873	868	297	4	361
	Thompson, A. W. (See Myers, E., assignor.)					
136, 393	Thompson, A. W., New York, N. Y. Construction of ships.....	Mar. 4, 1873	36	13	3	248
136, 560	Thompson, A. W., and J. Pattison, said Pattison assignor to said Thompson, New York, N. Y. Building docks.....	Mar. 4, 1873	187	60	3	260
139, 035	Thompson, C. G., assignor of one-half interest to A. B. Push, Memphis, Tenn. Heating-stove.....	May 20, 1873	515	162, 163	3	563
	Thompson, C. M. (See Huffman, J. D., assignor.)					
6, 968	Thompson, D. K., Clark, Pa. Fly-trap..... (Design.)	Oct. 28, 1873			4	452
135, 864	Thompson, D. O., and B. A. Rice, assignors of one-third interest to J. B. Sweetland, Pontiac, Mich. Nut-lock.....	Feb. 11, 1873	436	142	3	173
143, 202	Thompson, E., and W. H. Greene, assignor of one-third interest to S. Greene, Philadelphia, Pa. Manufacture of sulphuric acid.....	Sept. 23, 1873	765	264	4	337
141, 403	Thompson, F. P., Frederickton, Canada. Nut-lock.....	July 29, 1873	1,001	325	4	125
133, 212	Thompson, G. S., Philadelphia, Pa. Hopper for grinding-mills.....	Apr. 22, 1873	857	271	3	460
	Thompson, H. G. (See Smyth, D. M., assignor.)					
134, 617	Thompson, I. L., Sardin, Ohio. Butt-hinge.....	Jan. 7, 1873	109	36	3	16
	Thompson, J. (See Wright & Thompson.)					
	Thompson, J. A., et al. (See Kugler, O., assignor.)					
140, 967	Thompson, J. A., Readington, N. J. Window-screen.....	July 15, 1873	566	189	4	73
146, 109	Thompson, J. A., Brooklyn, N. Y. Illuminating-apparatus.....	Dec. 30, 1873	988	319	4	712
143, 596	Thompson, J. C., New Haven, Conn. Thill-coupling.....	Oct. 14, 1873	182	62	4	404
	Thompson, J. E. (See Unglish, J. F., assignor.)..... (Reissue.)					
143, 901	Thompson, J. E., Buffalo, N. Y. Seal-lock.....	Sept. 23, 1873	764	264	4	337
145, 600	Thompson, J. G., assignor of one-half interest to F. M. Briggs, Stockton, N. Y. Car-starter.....	Dec. 16, 1873	510	168	4	651
140, 318	Thompson, J. M., San Francisco, Cal. Sectional-cam for ore-stamps.....	June 24, 1873	812	257	3	706

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145, 255	Thompson, K., and S. D. Beerbrower, assignors of one-fifth interest to W. L. G. Thomas, Oxford, Pa. Construction of railway-cars	Dec. 2, 1873	194	67	4	600
143, 732	Thompson, N. C., San Francisco, Cal. Stirrup	Oct. 14, 1873	313	103	4	414
141, 523	Thompson, N. S., Augusta, Me. Buffing-mandrel	Aug. 5, 1873	98	30	4	143
142, 965	Thompson, P. M., Toronto, Canada. Car-coupling	Sept. 16, 1873	571	193	4	311
137, 637	Thompson, R. A., Beaver Falls, Pa. Molder's draw-spike	Apr. 8, 1873	327	100	3	395
143, 041	Thompson, R. F., Batavia, N. Y. Tire-heater	Sept. 23, 1873	641	230	4	327
138, 056	Thompson, S. A., Manchester, Mich., and C. T. Kendrick, Brooklyn, N. Y. Spring bed-bottom	Apr. 22, 1873	725	229	3	450
138, 824	Thompson, S. B., Portsmouth, N. H. Machine for preparing pottery-stock	May 13, 1873	327	101	3	534
141, 473	Same. Bushing for faucet-holes	Aug. 5, 1873	58	18	4	139
144, 422	Same. Faucet	Nov. 11, 1873	222	74	4	508
	Thompson, T. (See Reed & Thompson.)					
145, 372	Thompson, W., Gardiner, Me. Railway-rail joint	Dec. 9, 1873	298	100	4	622
140, 445	Thompson, W. M., and J. L. Mahurin, Rockfield, Ind. Reciprocating churn	July 1, 1873	85	30	4	15
144, 369	Thoms, J. B., assignor of one-half interest to S. Eccles, jr., Baltimore, Md. Process of extracting sugar from molasses	Nov. 4, 1873	163		4	492
7, 082	Thomson, A. M., and J. E. Taylor, Chicago, Ill. Label (Design)	Dec. 30, 1873			4	698
137, 113	Thomson, G. G., New Haven, Conn. Game-table top	Mar. 25, 1873	694	230	3	331
143, 201	Thomson, J. E., Buffalo, N. Y. Seal-lock (Disclaimer filed)	Nov. 1, 1873			4	525
143, 544	Same. Seal-lock same	Oct. 7, 1873	126	42	4	391
144, 370	Same. Seal-bolt	Nov. 4, 1873	164	55	4	492
	Thomson, J. L. (See Tunnick & Thomson.)					
135, 452	Thomson, J. L., Syracuse, N. Y. Straw or mill board	Feb. 4, 1873	56		3	132
132, 714	Thomson, J. M., and J. Cordley, Adrian, Mich. Musical blackboard	May 6, 1873	221	69	3	515
	Thomson, L. B. (See Colby & Thomson.)					
145, 317	Thomson, R., Springfield, Ohio. Refrigerator	Dec. 9, 1873	257	85	4	618
136, 467	Thomson, W. F., Oyster Bay, N. Y. Cooking-vessel	Mar. 4, 1873	99	33	3	253
	Thorn, H., et al. (See Dilworth, J., assignor) (Reissue.)					
137, 736	Thornburg, J. W., assignor of one-half interest to L. H. McGinnis, Woodstock, Va. Fertilizer-spreader	Apr. 8, 1873	418	129	3	402
139, 629	Thorne, W. H., Philadelphia, Pa. Drilling-machine	June 3, 1873	158	53	3	622
142, 966	Thorne, W. H., and I. N. De Haven, Philadelphia, Pa. Drilling-machine	Sept. 16, 1873	572	193	4	311
143, 942	Thornley, J., Charlottesville, Va. Grading-level	Oct. 21, 1873	507	171	4	440
142, 967	Thornton, J., Geneseo, and E. G. Latta, Friendship, N. Y. Bench-iron for harness-makers	Sept. 16, 1873	574	194	4	311
144, 371	Thornton, J., Wellsville, and E. G. Latta, Friendship, N. Y. Hame	Nov. 4, 1873	165	55	4	492
138, 595	Thornton, J. T., Providence, R. I. Shirt button and stud	May 6, 1873	112	37	3	507
5, 687	Thornton, W. M., and T. A. Buckland, Saint Louis, Mo. Spark-arrester for locomotive engines (Reissue.)	Dec. 16, 1873	612	200	4	659
				201		
138, 958	Thoroughgood, W. M., Salisbury, Md. Device for heading bolts	May 13, 1873	438	137	3	544
5, 418	Thorp, J. H., New York, N. Y. Coal-oil stove (Reissue.)	May 20, 1873	701	220	3	578
139, 440	Thorp, J. H., Saint Louis, Mo. Portable burglar-alarm	May 27, 1873	697	229	3	601
140, 743	Thorp, J. H., New York, N. Y. Coal-oil stove	July 8, 1873	357	121	4	49
135, 019	Thorp, T. J., assignor of one-half interest to M. Taylor, Buffalo, N. Y. Blackboard	Jan. 21, 1873	493	158	3	75
	Thorpe, C. N. (See Leeds & Thorpe.)					
142, 749	Thrale, J. L., Warsaw, Ind. Machine for sawing spokes	Sept. 9, 1873	381	128	4	284
141, 964	Thrasher, T. L., Paris, Tex. Plow-coupling	Aug. 19, 1873	510	168	4	193
	Three Rivers Manufacturing Company. (See Caldwell, W. G., assignor.)					
136, 675	Throop, G. E., Syracuse, N. Y. Grain-cleaning machine	Feb. 11, 1873	273	86	3	161
	Throop, J. W. (See Kendrick, H. H., assignor.)					
136, 882	Thurber, A. E., assignor to E. F. Kent and G. Hall, Providence, R. I. Button	Mar. 18, 1873	480	159	3	302
	Thursby, S. I. (See Hope, E. T., assignor) (Reissue.)					
	Same. (See Schuyler & Thursby.)					
5, 633	Thurston, C. H., Marlborough, N. H. Mode of attaching knobs to screws (Reissue.)	Oct. 28, 1873	744	247	4	469
145, 136	Thurston, C. H., Marlborough, N. H., assignor to self and J. H. Fowler, Boston, Mass. Machine for making double-pointed screws for knobs	Dec. 2, 1873	93	30, 31	4	593
136, 561	Thurston, E. H., Montreal, Canada, assignor to self and R. Boyd, Marlborough, Mass. Mode of cutting out uppers for shoes	Mar. 4, 1873	188	61, 62	3	260
135, 296	Thurston, J. B., and F. M. West, New York, N. Y. Inkstand	Jan. 24, 1873	749	242		108
140, 744	Tibbets, J. S., Jeffersonville, Ind. Fire-extinguisher	July 8, 1873	358	121	4	49
143, 203	Same. same	Sept. 23, 1873	768	264	4	337
				265		
141, 737	Tibbetts, L., assignor of one-half interest to J. H. Clarke, Augusta, Me. Coal-sifter	Aug. 12, 1873	297	97	4	167
	Tibbetts, K. P., et al. (See Seavey, J. E., assignor.)					
144, 713	Tice, A. W., and N. F. Smalley, Boston, Mass. Measuring-can	Nov. 18, 1873	471	159	4	539
136, 343	Tice, I. P., New York, N. Y. Towing canal-boats	Feb. 25, 1873	878	223	3	234
136, 344	Same. Steam vacuum-pump	Feb. 25, 1873	880	223	3	234
137, 393	Same. Dynamometer-pulley	Apr. 1, 1873	103	33	3	365
143, 794	Same. Automatic fire-extinguisher	Oct. 21, 1873	385	128	4	430
143, 795	Same. Heating-drum	Oct. 21, 1873	385	128	4	430
137, 394	Tice, L. D., New York, N. Y. Exercising-machine	Apr. 1, 1873	104	33	3	365
142, 531	Tichenor, G. K., Wayland, N. Y. Carriage	Sept. 2, 1873	188	61	4	257
	Tiedemann, H. (See McGroder & Tiedemann.)					
143, 106	Tiemann, P. C., New York, N. Y. Preservation of pulp, paste, or slip pigments	Sept. 23, 1873	692		4	331
142, 878	Tierney, J. P., Sacramento, Cal. Miter-box (Reissue.)	Sept. 16, 1873	495	169	4	304
	Tiffany & Co. (See Dimes, R., assignor) (Design.)					
	Same. same (Reissue.)					
136, 626	Tiffany, D. B., Xenia, Ohio. Tension-indicator for sewing-machines	Mar. 11, 1873	260	87	3	275
5, 324	Tiffany, J. C., Portsmouth, N. H. Apparatus for the manufacture of illuminating gas. (Reissue.)	Mar. 11, 1873	414	137	3	288
125, 172	Same. Gasometer or gas-holder	Jan. 21, 1873	615	201	3	85
145, 256	Same. Gas-retort	Dec. 2, 1873	195	67	4	601
145, 257	Tiffany, J. C., Portsmouth, N. H., assignor of one-half interest to C. F. Dodge, New York, N. Y. Method of burning gases in furnaces	Dec. 2, 1873	196	68	4	601
143, 204	Tighe, F., Rockland, Me. Coffin	Sept. 23, 1873	770	265	4	337
141, 738	Tilden, E. B., Prairie City, Iowa. Ice-cream freezer	Aug. 12, 1873	298	98	4	167
138, 715	Tilden, H., Philadelphia, Pa. Gas-machine	May 6, 1873	222	69	3	515
141, 095	Tilston, F. L., San Francisco, Cal. Tuck-marker	July 22, 1873	693	233	4	93
	Tillesen, M. (See Frantze, Tillesen & Gregersen.)					
140, 858	Tilley, J. S., West Troy, N. Y. Adjustable scaffold	July 15, 1873	458	155	4	65
136, 394	Tillinghaast, W. F., Burlington, N. J. Frame for making straw envelopes for bottles	Mar. 4, 1873	38	13	3	284
	Tillman, A. (See Croghwell, Tillman & Vanderburg.)					
146, 033	Tillman, S. D., Jersey City, N. J. Plate for tramways	Dec. 30, 1873	917	297	4	706

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137, 737	Tillson, D., Rockland, Me. Steam crane	Apr. 8, 1873	419	129	3	402
136, 283	Tilton, J. C., Pittsburgh, Pa. Wash-boiler	Feb. 25, 1873	826	267	3	230
145, 767	Same..... same	Dec. 23, 1873	668	218	4	676
138, 596	Tilton, W. C., Spring Place, Ga., assignor to self and H. Dieston & Son, Philadelphia, Pa. Cotton-chopper	May 6, 1873	112	37	3	507
	Timm, C. (See Helm, J., assignor.)					
139, 276	Timberlake, J. B., Salem, Ohio. Pocket car-ventilator and dust-screen	May 27, 1873	759	240	3	590
135, 173	Timby, T. R., Tarrytown, N. Y. Plant-protector	Jan. 21, 1873	617	201	3	85
135, 386	Same..... Car-axle lubricator	Jan. 28, 1873	832	268	3	114
136, 284	Same..... Spring for vehicles	Feb. 25, 1873	827	267	3	230
136, 791	Same..... Car-axles	Mar. 11, 1873	394	130	3	226
145, 258	Same..... Railway-tie	Dec. 2, 1873	197	68	4	601
	Timm, C. (See Helm, J., assignor.)					
136, 285	Timm, F., and T. Fantini, Stapleton, N. Y. Cigar-tip cutter	Feb. 25, 1873	827	267	3	230
135, 453	Timpe, G. C., New Orleans, La. Automatic safety-lock for elevators	Feb. 4, 1873	57	18	3	132
135, 454	Same..... Elevator	Feb. 4, 1873	58	19	3	132
5, 472	Tingley, C. B. F., Pawtucket, R. I., assignor to W. H. Haskell. Wood-screw machine. (Reissue)	July 1, 1873	200	67	4	94
5, 301	Tinnerholm, C. J., Quincy, Ill., assignor to J. C. White. Manufacture of leather. (Reissue)	Feb. 25, 1873	698	.....	3	235
137, 806	Tippett, R., Harrisburgh, Pa. Man-hole lid for boilers	Apr. 15, 1873	489	153	3	421
142, 968	Tiranoff, J. and N., and A. Kousakoff, St. Petersburg, Russia. Car-wheel	Sept. 16, 1873	574	194	4	311
	Tiranoff, N. (See Tiranoff, J. and N., & Kousakoff)					
139, 630	Tirrell, J. P., Charlestown, Mass. Lamp-post attachment for supporting electrical wires	June 3, 1873	159	53	3	622
5, 382	Tisdale, C. D., Boston, Mass. Changeable-gage car-truck (Reissue)	Apr. 29, 1873	1, 113	352	3	459
139, 279	Same..... Railway-switch	May 27, 1873	759	240	3	590
139, 835	Tisdale, C. D., assignor to self and S. Shackell, Boston, Mass. Connecting and disconnecting car bodies and trucks	June 10, 1873	369	114	3	654
135, 297	Tisdale, J., assignor to self and J. Putnam, Norwood, Mass. Clutch-mechanism for treadles for sewing-machines	Jan. 28, 1873	750	242	3	108
143, 543	Tisdale, J., J. Putnam, and H. N. Allen, assignors to J. Tisdale and J. Putnam, Norwood, Mass. Treadle	Oct. 7, 1873	125	42	4	391
136, 627	Tisdale, W. D., assignor to self and C. Babcock, Cortland, N. Y. Car-coupler	Mar. 11, 1873	260	87	3	275
135, 298	Tissot, J., Paris, France. Furnaces for burning coal-dust, small fuel, &c	Jan. 28, 1873	751	242	3	108
136, 792	Tittman, A., Evansville, Ind. Wax-thread sewing-machine	Mar. 11, 1873	395	131	3	226
140, 446	Same..... Door-spring	July 1, 1873	86	30	4	15
6, 795	Titus, H. B., Brooklyn, assignor to E. Todd & Co., New York, N. Y. Sign (Design)	Aug. 5, 1873	.....	.....	4	135
140, 319	Tobey, E. H., assignor to self and Saint Louis Railway-Supplies Manufacturing Company, Saint Louis, Mo. Draw-bridge safety switch and signal	June 24, 1873	813	257	3	706
137, 038	Tobey, E. S., Boston, Mass. Fire-proof roof	Mar. 18, 1873	615	203	3	313
138, 716	Tobey, J. F., assignor to self and J. De Eate, Medford, Mass. Leg for folding lounges	May 6, 1873	224	70	3	515
139, 745	Tobey, J. T., Haverhill, Mass. Sewing-machine	June 10, 1873	289	90	3	648
145, 697	Tobias, F. H., New York, N. Y. Mechanism for operating screw-propellers	Dec. 16, 1873	594	194	4	658
145, 601	Tobin, J., Newark, N. J. Drop-hammer	Dec. 16, 1873	512	168	4	651
137, 508	Tobin, T. M. and W. F., Middleburgh, Vt. Door-plate and indicator	Apr. 1, 1873	212	64	3	374
	Tobin, W. F. (See Tobin, T. M. and W. F.)					
7, 006	Todd, E., Brooklyn, N. Y. Pencil case (Design)	Dec. 2, 1873	.....	.....	4	585
	Todd, E., & Co. (See Titus, H. B., assignor)					
145, 463	Todd, G. H., Montgomery, Ala. Horseshoe	Dec. 9, 1873	377	124	4	628
136, 109	Todd, H. B., Plymouth, Conn. Eave-trough hanger	Feb. 18, 1873	661	216	3	205
135, 676	Todd, T. J., Somerville, N. J. Device for straightening railway-rails	Feb. 11, 1873	274	86	3	161
134, 823	Todd, W., Allegheny City, assignor to self and E. A. Kitzmiller, Pittsburgh, Pa. Rubber jam-nut	Jan. 14, 1873	309	98	3	45
135, 387	Todd, W., Portland, Me. Car-coupling	Jan. 28, 1873	833	269	3	114
139, 212	Toler, J., Newark, N. J. Caster	May 20, 1873	683	215	3	576
142, 419	Tolle, M., Saint Louis, Mo. Manufacture of white lead to collect the dust	Sept. 2, 1873	85	28	4	249
143, 943	Tolles, C. F., Nashua, N. H. Fetter for cows' tails	Oct. 21, 1873	508	171	4	440
	Tomay, A. G. (See Thomas, J. H., assignor.)					
5, 409	Tomlinson, J., Onslow, Iowa. Machine for bending tires (Reissue)	May 13, 1873	462	145	3	546
135, 497	Same..... Bolt-cutter	Feb. 4, 1873	95	30	3	135
135, 498	Same..... Tire-bender	Feb. 4, 1873	95	30	3	135
143, 597	Tommasi, F., Paris, France. Hydrostatic and electric telegraph-cable	Oct. 14, 1873	183	62, 63	4	404
140, 320	Tompkins, C. and I., Troy, N. Y. Machine for napping, brushing, &c., tubular-knitted fabrics	June 24, 1873	814	{ 257 } { 258 }	3	706
	Tompkins, H. B., et al. (See Dayton, M. E., assignor.)					
	Tompkins, I. (See Tompkins, C. and I.)					
144, 579	Tompkins, R. C., New York, N. Y. Animal-carcaass scraping-machine	Nov. 11, 1873	351	119	4	518
	Tompkins, S. E. (See Perrin, C. H., assignor.)					
	Tompkins, S. E., Sing Sing, N. Y., and J. Maclure, Newark, N. J. Harness saddle-tree. (Extension)	Feb. 1, 1873	.....	.....	3	70
5, 495	Tompkins, S. E., Sing Sing, N. Y. Saddle-tree (Reissue)	July 15, 1873	597	201	4	76
140, 968	Same..... Harness-saddle	July 15, 1873	566	190	4	73
140, 969	Same..... same	July 15, 1873	567	190	4	73
140, 970	Same..... same	July 15, 1873	569	191	4	74
144, 486	Toner, J. L., Edinburgh, Ind. Hominy-mill	Nov. 11, 1873	273	92	4	512
139, 213	Tongue, H., Chicago, Ill. Spittoon	May 20, 1873	684	215	3	576
136, 945	Tonner, E. A., Saint Louis, Mo. Lubricating-compound	Mar. 18, 1873	535	.....	3	306
136, 468	Tooth, W. H., Brixton, England. Cartridge made of fusible metals, &c	Mar. 4, 1873	100	.....	3	254
140, 971	Tope, G. M., Leesville, Mo. Corn-harvester	July 15, 1873	570	{ 191 } { 192 }	4	74
	Topham, J. P. (See Gilbert & Topham.)					
5, 514	Topham, W. H., Longmeadow, Mass. Spittoon (Reissue)	July 29, 1873	1, 022	331	4	126
	Torley, J. J., et al. (See Kinzer, J., assignor.)					
141, 739	Torrent, J., Muskegon, Mich. Log-turner	Aug. 12, 1873	299	98	4	167
145, 031	Torrent, J., Muskegon, Mich., assignor to Stearns Manufacturing Company, Erie, Pa. Saw-mill dog	Nov. 25, 1873	750	253	4	573
	Torrey, D. (See Murch, I. F., assignor.)					
	Torrey, E. S. (See Fowler, G. B., assignor.)					
	Torrey, J. (See Fowler, G. B., assignor.)					
	Torrey, U. (See Finch, J. M., assignor.)					
135, 865	Torrey, W. A., Mont Clair, N. J. Coating and preserving rope and cordage	Feb. 11, 1873	437	.....	3	173
137, 509	Same..... Vulcanized-rubber compound	Apr. 1, 1873	213	.....	3	374
5, 426	Totten, S. E., jr., New York, N. Y., assignor to W. Bloodgood. Sash-holder for carriage-windows (Reissue)	May 27, 1873	907	292	3	602
136, 793	Totten, S. E., jr., New York, N. Y. Sash-holder for carriage-windows	Mar. 11, 1873	396	131	3	286

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Touge, R. (See Rushton & Touge.)					
141, 474	Toulmin, M., New Orleans, La., assignor of one-fourth interest to O. F. Cawthorn, Mobile, Ala. Car-starter for street-railways	Aug. 5, 1873	59	18	4	139
142, 823	Toulmin, M., New Orleans, La. Beam-compass	Sept. 16, 1873	451	152	4	301
142, 969	Same. Pressure gage and alarm	Sept. 16, 1873	575	194	4	311
140, 799	Toussaint, W. W. J., Boston, Mass. Construction of doors	July 15, 1873	407	138	4	61
134, 824	Tower, A. C., Mendota, Ill. Cultivator	Jan. 14, 1873	309	98, 99	3	45
138, 301	Same. Machine for pulverizing soil	Apr. 29, 1873	968	304	3	477
	Tower, A. H. (See Caswell, E., assignor.)					
	Tower, A. J., et al. (See Thayer, W. H., assignor.)					
	Towers, W. H. (See Kerr, J., assignor.)					
144, 166	Towers, W. H., Boston, Mass. Child's carriage	Oct. 28, 1873	723	241	4	467
	Towle, H. E., (See Hollely, J., assignor.)					
	Same. (See Unger & Towle.)					
	Towle, J. C. (See Taylor, S., assignor.)					
138, 959	Towne, G. E., and W. W. Bailey, assignors to Barleigh Rock-Drill Company. Rock-drill carriage	May 13, 1873	439	138	3	544
142, 060	Towne, H. A., Hannibal, Mo. Condenser	Aug. 19, 1873	601	198	4	201
135, 949	Towne, H. R., and W. H. Taylor, said Taylor assignor to said Towne, Stamford, Conn. Ink-pad	Feb. 18, 1873	522	171	3	194
143, 860	Townley, G. J., Parma, Mich. Check-rein	Oct. 21, 1873	444	148	4	434
139, 631	Townus, E., Ciane, Ill. Governor	June 3, 1873	160	53	3	622
144, 423	Townsend, C. H., T. E. Hughes, and A. A. Keith, Minneapolis, Minn. Postal-card case	Nov. 11, 1873	223	74	4	508
136, 192	Townsend, D. A., Unionville, S. C. Automatic manger	Feb. 25, 1873	748	241	3	223
	Townsend, F. (See Blessing, J. H., assignor.)					
	Same. same. (Reissue.)					
134, 711	Townsend, G. W., assignor to self, O. C. Townsend, and H. W. Hitchcock, Hubbardston, Mich. Extension-table slide	Jan. 7, 1873	196	64	3	22
	Townsend, H. E. (See Dawes, A., assignor.)					
	Same. (See Ferren, M. J., assignor.)					
	Townsend, H. E., et al. (See Howard & Jackson, assignors) (Reissue.)					
137, 638	Townsend, H. H., Milton Mills, N. H. Press for printing fabrics	Apr. 8, 1873	328	101	3	395
	Townsend, O. C., et al. (See Townsend, G. W., assignor.)					
141, 187	Townsend, W., assignor of one-half interest to J. W. Pierce, Auburn, N. Y. Picking-mechanism for looms	July 22, 1873	783	256	4	100
	Townsend, W. H. (See Rommel, C., assignor.)					
136, 562	Towse, C. A., Battle Creek, Mich. Invalid bed-bottom	Mar. 4, 1873	189	62	3	260
	Towson, S. T. (See McDonald, E. H., assignor.)					
	Tracy, C. C., et al. (See Hook, A. H., assignor.)					
	Tracy, C. C. (See Shaw & Tracy.)					
	Tracy, G. S. (See Galt & Tracy.)					
	Same. same. (Reissue.)					
143, 429	Tracy, J. B., Lincoln, Del. Car-coupling	Oct. 7, 1873	30	11	4	383
145, 698	Tracy, J. D., and J. F. Platt, Sterling, Ill. Hand corn-planter	Dec. 16, 1873	595	195	4	658
143, 476	Tracy, W. C., Brooklyn, N. Y. Artificial teeth	Oct. 7, 1873	65	23	4	386
139, 487	Trafton, A. C., Worcester, Mass. Drill-gage	June 3, 1873	41	13	3	612
	Trafton, J. W. (See Hyde, A., assignor.)					
143, 042	Trafton, J. W., Chicopee Falls, Mass. Self-closing faucet	Sept. 23, 1873	642	220	4	327
135, 950	Trophagen, H. L., assignor to self and R. N. Pratt, New York, N. Y. Curtain-fixture	Feb. 18, 1873	523	171	3	194
139, 632	Trapp, T. J., Williamsport, Pa. Hose-coupling	June 3, 1873	160	54	3	622
	Trask, C. H., et al. (See Fischer, W. E., assignor) (Reissue.)					
142, 657	Trask, C. H., Lynn, and H. F. Wheeler, Boston, Mass. Machinery for lasting boots and shoes	Sept. 9, 1873	301	{ 99 100	4	278
143, 205	Trask, W. R., assignor of one-third interest to T. H. Dinsmore, Skowhegan, Me. Combined shirt-bosom and lung-protector	Sept. 23, 1873	771	265	4	337
136, 469	Traut, J. A., New Britain, Conn. Carpenter's plane	Mar. 4, 1873	101	34	3	254
141, 475	Traut, J. A., assignor to The Stanley Rule and Level Company, New Britain, Conn. Carpenter's gage	Aug. 5, 1873	60	18	4	140
142, 420	Travers, J., Roslyn, N. Y. Machine for making window-sashes	Sept. 2, 1873	86	28	4	249
141, 188	Travis, C. L., Minneapolis, Minn. Machine for perforating drive-well points	July 22, 1873	784	{ 256 257	4	100
6, 808	Travis, J. F., New York, N. Y. Gasalier (Case A. Design)	Aug. 19, 1873			4	185
6, 809	Same. Gas-bracket (Case B. Design)	Aug. 19, 1873			4	185
5, 690	Travis, J. H., Charlestown, Mass. Extension foot-rest for chairs (Reissue.)	Dec. 16, 1873	615	201	4	660
6, 834	Travis, J. H., Charlestown, Mass. Chair-frame (Design)	Sept. 2, 1873			4	241
140, 097	Same. Caster-attachment for furniture	June 17, 1873	603	190	3	681
142, 532	Travis, R., assignor of one-half interest to J. Russell, Elkton, Ky. Hair-wash	Sept. 2, 1873	189		4	257
137, 978	Travis, W. E., Ypsilanti, Mich. Crosscut-saw handle	Apr. 15, 1873	634	199	3	433
143, 647	Trayser, F. L., Maysville, Ky. Piano-action	Oct. 14, 1873	228	77	4	408
	Treadwell, N. P. (See Hopkins, E. R., assignor.)					
134, 573	Treadwell, W. B., Albany, N. Y. Heating-stove	Jan. 7, 1873	68	21	3	12
145, 074	Treat, J. E., Boston, Mass. Clasp for supporting stockings, &c	Dec. 2, 1873	30	10	4	588
	Tremlett, J. (See Harris, D., assignor.)					
137, 738	Trevitt, C. S., Washington, D. C. Cabinet chair and secretary combined	Apr. 8, 1873	422	130	3	403
	Triboulet, L. (See Dallemagne & Triboulet.)					
144, 805	Trickett, J., Quincy, Ill. Washing-machine	Nov. 18, 1873	549	186	4	546
	Trimble, J. L. (See Borden & Trimble.)					
5, 254	Trinder, W., Philadelphia, Pa. Medical compound for lung and other diseases. (Reissue.)	Jan. 21, 1873	651		3	87
140, 321	Tripler, J. L., Merchantville, N. J. Refrigerating-apparatus	June 24, 1873	816	{ 258 259	3	707
142, 300	Tripp, H. B., Boston, Mass. Bolt-work for safe-doors	Aug. 26, 1873	818	{ 270 271	4	228
145, 032	Same. Device for operating safe-doors	Nov. 25, 1873	751	254	4	573
5, 439	Tripp, L. A., deceased, assignor by mesne assignment to The Salem Shade-Roller Manufacturing Company, Salem, Mass. Curtain-fixture (Reissue.)	June 3, 1873	188	61	3	624
140, 800	Tripp, O. F., Battle Creek, Mich. Knitting-machine	July 15, 1873	408	139	4	61
142, 301	Same. Knit mitten	Aug. 26, 1873	819	271	4	228
	Trippe, S. G. (See Stowe, S. F., assignor.)					
135, 737	Trissler, W. D., Dunkirk, N. Y. Fruit-basket	Feb. 11, 1873	324	104	3	165
142, 533	Troll, F. N., Baltimore, Md. Corpse-cooler	Sept. 2, 1873	189	61	4	257
	Tronchon, A. P. (See Guebard & Tronchon.)					
	Troop, J. (See Middleton, S., assignor.)					
141, 189	Trossin, O., Berlin, Germany. Air and gas engine	July 22, 1873	785	257	4	100
	Trotter, C. W., administrator. (See Trotter, J. G.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 976	Trotter, J. G., deceased, by C. W. Trotter, administrator, Brooklyn, N. Y. Apparatus for condensing and collecting white silic	Dec. 30, 1873	871	282	4	702
135, 174	Trouard, A., New Orleans, La. Sugar-cane cultivator	Jan. 21, 1873	618	201	3	85
143, 545	Trowbridge, J. H., New Haven, Conn. Machine for packing, wrapping, and labeling tobacco	Oct. 7, 1873	127	43, 44	4	391
144, 167	Trowbridge, W. O., Newton, assignor to Mason and Hamlin Organ Company, Boston, Mass. Fall for parlor-organs	Oct. 28, 1873	724	242	4	467
142, 534	Trowbridge, W. P., New Haven, Conn. Steam-generator	Sept. 2, 1873	190	62	4	257
137, 578	Troxel, J., Nankin, Ohio. Universal joint	Apr. 8, 1873	280	86	3	391
137, 157	Truax, J. K., Pittsburgh, Pa. Oils for lubricating from petroleum	Mar. 25, 1873	730		3	333
143, 598	True, M. E., Oakfield, N. Y. Saw-set	Oct. 14, 1873	185	63	4	404
138, 960	Truesdale, C., Cincinnati, Ohio. Molders' flask	May 13, 1873	440	138	3	544
136, 286	Truesdell, L. E., Warren, Mass. Motor	Feb. 25, 1873	828	268	3	230
136, 287	Same. Wagon for hauling stone or heavy bodies	Feb. 25, 1873	830	268	3	230
143, 796	Truesdell, L. W., and F. Curtis, Owego, N. Y. Wash-boiler	Oct. 21, 1873	386	128	4	430
137, 979	Truesdell, W. (See McConnell, Truesdell & Mertsheimer.)					
145, 033	Trump, F., Springfield, Ohio. Stock for millstone-picks	Apr. 15, 1873	634	200	3	433
135, 866	Trussell, J. W., assignor to W. P. Kellogg & Co., Troy, N. Y. Curry-comb	Nov. 25, 1873	753	254	4	574
136, 628	Truxell, A., and F. J. Williams, Toledo, Ohio. Car-coupling	Feb. 11, 1873	437	142, 143	3	173
137, 510	Truxell, J. S., Greensburgh, Pa. Harvester	Mar. 11, 1873	261	88	3	275
143, 391	Same. Harvester-rake	Apr. 1, 1873	213	65	3	374
	Same. Harvester dropper	Sept. 30, 1873	941	318	4	367
	Tryon, S., et al. (See Pease, J., assignor.)					
	Tubbs, T. J. (See Blom, C., Jr., assignor.)					
144, 642	Tuck, J. P., Houlton, Me. Combined door-securer and key-ring	Nov. 18, 1873	414	139	4	535
5, 566	Tucker, C. (See Collyer, C. W., assignor.)					
	Tucker, C. and W. H., Indianapolis, Ind., assignors by mesne assignment to N. Tucker and R. S. Dorsey. Till-alarm	Sept. 9, 1873	391	130	4	285
134, 947	Tucker, H. (See Jones, Tucker & Terry.)					
139, 214	Tucker, H., Newton, Mass. Can for packing and transporting paint, &c	Jan. 14, 1873	414	132	3	53
	Same. Box or can for paints, &c	May 20, 1873	684	215	3	576
	Tucker, H. A. (See Jameson, J., assignor.)					
	Tucker, J. A. (See Hammond & Tucker.)					
	Tucker Manufacturing Company. (See Hull, L., assignor.)					
135, 175	Tucker, N., et al. (See Tucker, C. and W. H., assignors) (Reissue.)					
135, 388	Tucker, S., Wabash, Ind. Sheep-holder	Jan. 21, 1873	618	201	3	85
136, 110	Tucker, T. M., Newark, N. J. Casting centers on cast-iron screws	Jan. 28, 1873	834	269	3	114
140, 098	Tucker, W., Fiskedale, Mass. Saw-gumner	Feb. 18, 1873	662	216	3	205
135, 607	Tucker, W., assignor to self and C. F. Grosvenor, Fiskedale, Mass. Loom-shuttle	June 17, 1873	604	190	3	681
138, 770	Tucker, W. B., assignor to J. G. McCulloch, Baltimore, Md. Fire-kindling	Feb. 4, 1873	204		3	143
	Tucker, W. B., assignor to F. Lloyd, Baltimore, Md. Manufacture of artificial hydraulic cement	May 13, 1873	281		3	530
	Tucker, W. H. (See Tucker, C. and W. H.) (Reissue.)					
	Tucker, W. R., executor. (See Fritz, G.)					
	Tufts, J. W. (See Andrews, M. S., assignor.)					
	Same. (See Cady, W. R., assignor.)					
	Same. (See Kennedy, J. C., assignor.)					
	Same. (See Meacham, G. F., assignor.) (Design.)					
	Same. (See Wilder, E. F., assignor.)					
136, 345	Tufts, J. W., Medford, Mass. Soda-water apparatus	Feb. 25, 1873	881	283	3	234
25, 061	Tufts, O., deceased, by L. A. Bigelow and J. A. Brodhead, administrators, Boston, Mass. Elevator or hoisting-apparatus for hotels, &c (Extension)	Aug. 9, 1873			4	108
143, 392	Same. Passenger-elevator (Disclaimer filed)	Aug. 7, 1873			4	108
143, 944	Tufts, O., Boston, Mass. Device for suspending hammocks	Sept. 30, 1873	942	319	4	367
144, 168	Same. Elevator	Oct. 21, 1873	509	172	4	440
144, 424	Same. Hammock-support	Oct. 28, 1873	725	242	4	467
141, 404	Tufts, W. H., Lynn, Mass. Buffet-table	Nov. 11, 1873	294	74, 75	4	508
145, 602	Tugby, H., Woodville, England. Brick-kiln	July 29, 1873	1,002	325	4	125
144, 714	Tull, J. W., and J. W. Weston, Windsor, Ill. Washing-machine	Dec. 16, 1873	512	168	4	651
5, 467	Tulloch, J., Jamestown, Cal. Ore-stamp feeder	Nov. 18, 1873	472	160	4	539
134, 712	Tully, A. K., Harlem, N. Y. Wagon-top (Reissue.)	June 24, 1873	842	267	3	709
	Tully, F., assignor to self and C. H. Banes, Philadelphia, Pa. Restoring ring-traveler spinning-rings	Jan. 7, 1873	199	64	3	22
145, 603	Tunbridge, J., Newark, N. J. Process of amalgamating gold and silver	Dec. 16, 1873	513	168	4	651
134, 825	Tunis, W. W., Easton, Md. Friction driving-gear	Jan. 14, 1873	311	99	3	45
142, 596	Tunison, I. C., Roodhouse, and A. Reeve, Pike County, Ill. Railway cattle-guard	Sept. 9, 1873	252	82	4	274
145, 699	Tunnichiff, J. R., Van Hornesville, and J. L. Thomson, Syracuse, N. Y. Tobacco-stripping machine	Dec. 16, 1873	596	195	4	658
	Tunstall, W. (See Dixon & Tunstill.)					
135, 867	Tunstall, W., Brooklyn, N. Y. Saw-set	Feb. 11, 1873	439	143	3	173
140, 659	Same. Clothes-clamp	July 8, 1873	284	96	4	43
142, 597	Turbayne, D., assignor to Globe Nail Company, Boston, Mass. Manufacture of horse-shoe-nails	Sept. 9, 1873	253	83	4	274
134, 948	Turbayne, D., and G. M. Wyman, assignors to Globe Nail Company, Boston, Mass. Manufacture of horse-shoe-nails	Jan. 14, 1873	415	133	3	53
135, 299	Turley, J., Mitchell, Ind. Tug-fastening	Jan. 28, 1873	752	242	3	108
	Turnbull, A., New Britain, Conn. Scales (Extension)	Sept. 13, 1873			4	270
5, 591	Same. Bed-bottom (Reissue.)	Oct. 7, 1873	146	48	4	392
137, 511	Turnbull, A., assignor to The National Wire-Mattress Company, New Britain, Conn. Bed-bottom	Apr. 1, 1873	214	65	3	374
5, 312	Turnbull, A., and R. L. Webb, assignors to The National Wire-Mattress Company, New Britain, Conn. Bed-bottom (Reissue.)	Mar. 4, 1873	213	70, 71	3	262
139, 837	Turnbull, A., and R. L. Webb, assignors to Landers, Frary & Clark, New Britain, Conn. Fruit-parer	June 10, 1873	370	115	3	654
140, 972	Turnbull, C. B., Washington, D. C. Street-car awning	July 15, 1873	572	192	4	74
145, 259	Turneaur, R., assignor to self and B. Williams, Rockford, Ill. Machine for heading hair	Dec. 2, 1873	198	68	4	601
141, 965	Turner, B. G., Fremont, Nebr. Wheel and axle for harvesters	Aug. 19, 1873	510	168	4	194
143, 733	Turner, C., Lenton, England. Machinery for removing dirt from skins	Oct. 14, 1873	313	104	4	414
137, 512	Turner, D. C., Clifton, W. Va. Apparatus for the manufacture of bromine	Apr. 1, 1873	215	65	3	374
137, 513	Turner, E., Greensburgh, Pa. Nut-lock	Apr. 8, 1873	216	66	3	374
137, 579	Turner, E. M., Fort Worth, Tex. Tent	Apr. 8, 1873	280	86	3	391
146, 110	Turner, E. M., Allegheny City, Pa. Frame for holding work on sewing-machines	Dec. 30, 1873	959	319	4	712
139, 215	Turner, E. S., Palmyra, Mo. Hedge-hook	May 20, 1873	685	215	3	576
141, 524	Turner, G. B., Cuyahoga Falls, Ohio. Separators for cleaning grain	Aug. 5, 1873	99	31	4	143

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 391	Turner, J., Chicago, Ill. Treating offal and manufacturing gas.	July 1, 1873	47	16	4	19
137, 114	Turner, J. & S., Toronto, Canada. Machines for cutting biscuit.	Mar. 25, 1873	694	231	3	331
144, 487	Turner, J. R., and J. Jacobs, Fredericktown, Mo. Subsoil-plow.	Nov. 11, 1873	274	92	4	512
	Turner, L., et al. (See Eames, J. N., assignor.)					
	Turner, Parks & Co. (See Vaughn, Camp & Merrill, assignors.)					
156, 470	Turner, R. D., New York, N. Y. Apparatus for treating alcoholic liquids in spray with ozone, for ageing and the production of vinegar.	Mar. 4, 1873	102	34	3	254
	Turner, S. (See Turner, J. & S.)					
138, 106	Turner, S. B., Adams County, Ill. Hedge-trimmer.	Apr. 22, 1873	764	243	3	353
	Turner, Seymour & Judds. (See Seymour, F. J., assignor.)					
134, 713	Turner, W. E., Neosho Falls, Kans. Compound for use in tobacco-pipes.	Jan. 7, 1873	199	65	3	22
139, 633	Turner, W. E., Fort Snelling, Minn. Instruments for cleaning gun-barrels.	June 3, 1873	161	54	3	622
141, 676	Turner, W. E., Neosho Falls, Kans. Grain-separator.	Aug. 12, 1873	249	79	4	163
139, 981	Turpie, J., assignor to E. H. Faulkner, New York, N. Y. Loom for weaving hair-cloth.	June 17, 1873	497	157	3	672
145, 318	Turtelot, W. W., Rome, N. Y. Wash-boiler.	Dec. 9, 1873	258	26	4	618
5, 354	Tustin, W. I., San Francisco, Cal. Windmill.	Apr. 15, 1873	654	205	3	435
135, 300	Tuthill, D. S., Newburgh, N. Y. Railway-track.	Jan. 28, 1873	752	243	3	108
6, 620	Tuttle, E. A., Morristown, N. J. Hot-air register.	Apr. 29, 1873				3 471
6, 621	Same same	(Design) Apr. 29, 1873				3 471
6, 622	Same same	(Design) Apr. 29, 1873				3 471
6, 645	Same same	(Design) May 6, 1873				3 497
6, 646	Same same	(Design) May 6, 1873				3 497
135, 738	Tuttle, E. A., Williamsburgh, N. Y. Swing.	Feb. 11, 1873	324	104	3	165
136, 682	Tuttle, E. A., Brooklyn, N. Y. Hot-air register.	Mar. 11, 1873	304	101	3	279
141, 677	Same Nursery-gate.	Aug. 12, 1873	250	79	4	163
138, 544	Tuttle, E. N., Fitchburgh, Mass. Tilting chair.	May 6, 1873	67	23	3	503
	Tuttle, G. W., et al. (See Utley, R. G., assignor.)					
	Tuttle, H. B. (See Chickering & Tuttle.)					
	Tuttle, J. W. (See McGee, B. J., assignor.)					
145, 977	Tuttle, J. W., Watertown, Mass. Combined nubia and veil.	Dec. 30, 1873	872	283	4	702
137, 057	Tuttle, L. A., Berea, Ohio. Sash-holder.	Apr. 22, 1873	726	230	3	450
143, 599	Twamly, J., assignor of two-thirds interest to P. J. Strain, Troy, N. Y. Dice-box.	Oct. 14, 1873	185	63	4	404
135, 301	Tweedy, J., Vernon, Ind. Corn-coverer.	Jan. 28, 1873	753	243	3	108
	Twiddy, W. (See Crandall & Twiddy.)					
141, 836	Tyomby, O., Ashland, N. H. Knitting-machine.	Aug. 12, 1873	388	127	4	174
139, 280	Tylander, H. E., Keokuk, Iowa. Cigar-machine.	May 27, 1873	760	241	3	590
139, 634	Tyler, C. N., Buffalo, N. Y. Steam-condensing and water-heating tank.	June 3, 1873	162	54	3	622
140, 322	Tyler, E. H., Rockville, Mass. Flier for covering bonnet-wires.	June 24, 1873	817	259	3	707
140, 745	Tyler, H. B., assignor to Bradley & Hubbard, West Meriden, Conn. Tape-measure.	July 8, 1873	359	121	4	49
139, 836	Tyler, N. B., Warren, Ohio. Pigeon-trap.	June 10, 1873	370	115	3	654
136, 471	Tyler, R. A., Haverhill, Mass. Ironing-apparatus.	Mar. 4, 1873	103	34	3	254
141, 903	Tyler, S. W., Troy, N. Y. Potato-digger.	Aug. 19, 1873	462	151	4	190
	Tyler, W. W. (See Risdon & Tyler.)					
142, 359	Tyng, L. B., Lowell, Mass. Railway-rail chair.	Sept. 2, 1873	34	12	4	245
	Tyrrell, A. R. (See Filkins, R. A., assignor.)					
140, 323	Tyrrell, W. H., Philadelphia, Pa. Spittoon.	June 24, 1873	818	259	3	707
	Uda, M., et al. (See Porta, P., assignor.)					
	Uda, M. B. S., et al. (See Porta, P., assignor.)					
90, 973	Udell, C. C., Chicago, Ill. Step-ladder.	June 9, 1873				3 608
138, 961	Uebel, F., Cedar Rapids, Iowa. Game-table.	May 13, 1873	442	138	3	544
138, 717	Uhl, C. E., et al. (See Shawk, G. W., assignor.)					
	Uhl, J. E., Reno, Pa. Car-axle box.	May 6, 1873	224	70	3	515
	Ulery, W. G. (See Nesbitt, J., assignor.)					
138, 453	Ulmer, C. J., East Cambridge, Mass. Gage for circular saws.	Apr. 29, 1873	1,100	347	3	488
145, 319	Ultsch, J. B., Cambridge, Mass. Soap-cutting machine.	Dec. 9, 1873	259	86	4	618
	Umboltz, A. (See Umboltz, P., assignor.)					
144, 372	Umboltz, P., assignor of one-half interest to A. Umboltz, Tremont, Pa. Grate-bar.	Nov. 4, 1873	165	55	4	492
140, 746	Underwood, J. B., assignor to E. L. Pemberton, J. W. Hinsdale, and S. C. Underwood, Fayetteville, N. C. Combined cotton chopper and cultivator.	July 8, 1873	360	122	4	40
144, 580	Underwood, O., Milford, Mass. Heel for boots and shoes.	Nov. 11, 1873	352	119	4	518
	Underwood, S. C., et al. (See Underwood, J. B., assignor.)					
143, 477	Unger, D. H., Philadelphia, Pa. Machine for waving or embossing leather straps.	Oct. 7, 1873	66	23	4	386
144, 643	Unger, W., Newark, N. J., and H. E. Towle, New York, N. Y. Telegraphic apparatus for automatic signaling.	Nov. 18, 1873	414	139	4	535
143, 546	Ungerer, A., Pforzheim, Germany. Process of treating fibrous substances for paper-pulp.	Oct. 7, 1873	132	44	4	391
5, 675	Unglish, J. F., assignor of one-half interest to J. E. Thompson, Webster, N. Y. Vegetable-scoop.	Dec. 2, 1873	210	72	4	602
	Union Manufacturing Company. (See Bradley, M., assignor.)					
	Union Paper-Bag Company. (See Benner, L. D., assignor.)					
	Union Stone Company. (See Elliott, J. S., assignor.)					
	Same same	(Reissue.)				
	Union Stove Works. (See Finch, R. R., assignor.)					
	Union Water-Meter Company. (See Ballard, A. J., assignor.)					
	Same (See Fitts, B., assignor.)					
	United Power-Press Company. (See Esmond, R., assignor.)					
	Same same	(Reissue.)				
	United States Chemical Compound Company. (See Lavo, J. J., assignor.)					
	Updegraf, M. E. (See Cooper, A., assignor.)					
141, 405	Upton, G. W. D., Springfield, Mass. Paper-folding machine.	July 29, 1873	1,004	326	4	125
141, 837	Urban, H., Cincinnati, Ohio. Apparatus for tempering steel plates and similar articles.	Aug. 12, 1873	389	127	4	174
144, 715	Urdahl, T., Cross Plains, assignor to S. Mills, Madison, Wis. Binder's attachment for harvesters.	Nov. 18, 1873	472	160	4	539
143, 797	Ure, J., Saginaw, Mich. Corn-husker.	Oct. 21, 1873	386	128	4	430
139, 092	Urie, T., Corning, Iowa. Shaft-coupling for earth-augers.	May 24, 1873	571	179	3	567
139, 281	Urie, T. S., Hubbardston, Mich. Sash and door clamp.	May 27, 1873	762	241	3	590
141, 740	Urso, V. D., and B. Charles, Evansville, Ind. Clothes-pin.	Aug. 12, 1873	300	98	4	167
135, 176	Usher, J., West Albany, N. Y. Dish washing machine.	Jan. 21, 1873	619	202	3	85
136, 472	Ustick, S., Philadelphia, Pa. Car-axle box.	Mar. 4, 1873	104	35	3	254
142, 302	Same same	Aug. 26, 1873	819	271	4	228
142, 303	Same same	Aug. 26, 1873	820	272	4	228
136, 193	Utley, R. G., Boston, Mass., assignor to C. H. Pierce, C. H. Gilman, and G. W. Tuttle. Machine for making extension-table tops.	Feb. 25, 1873	749	241	3	224
143, 734	Utter, J., Central Falls, R. I. Planing-machine.	Oct. 14, 1873	315	105	4	414
6, 745	Utter, S. S., Brooklyn, N. Y. Cooking range.	July 1, 1873				4 8
145, 700	Vacher, E., New York, N. Y. Fire-proof building.	Dec. 16, 1873	597	195	4	658

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
145, 260	Vaders, H. T., Lansdale, Pa. Machine for severing tin cans	Dec. 2, 1873	199	69	4	601
141, 609	Vail, W. A., Clinton, Conn. Life-boat	Aug. 5, 1873	174	55, 56	4	149
140, 660	Vairin, A. L. P., Ripley, Miss. Subsoil-plow	July 8, 1873	285	96	4	43
134, 618	Valade, E., Memphis, Tenn. Mode of utilizing the currents of rivers	Jan. 7, 1873	109	36	3	16
140, 392	Valentin, W., New York, N. Y. Extension-table	July 1, 1873	48	16	4	12
136, 946	Valentine, O. J., Newark, N. J. Box-slide for ornamental chains	Mar. 18, 1873	536	177	3	306
142, 598	Valk, L. B., Brooklyn, N. Y. Ventilating buildings	Sept. 9, 1873	254	83	4	274
137, 639	Vallee, F., Philadelphia, Pa. Composer's stand	Apr. 8, 1873	329	101	3	395
146, 034	Valley, J., Canton, Ohio. Bridge	Dec. 30, 1873	918	297	4	706
141, 838	Van, J., Cincinnati, Ohio. Top-plate for cooking-stoves	Aug. 12, 1873	391	127	4	174
142, 360	Same. Gas-burner for heating	Sept. 2, 1873	35	12	4	245
138, 597	Van Allen, A., Freeport, Ill. Washing-machine	May 6, 1873	113	37	3	507
141, 096	Van Alstine, A. C., New York, N. Y. Dovetail-machine	July 22, 1873	694	233	4	93
137, 395	Van Anden, W., Poughkeepsie, N. Y. Nut	Apr. 1, 1873	104	34	3	365
139, 934	Van Buren, J. S., Troy, N. Y. Stove-grate	June 17, 1873	463	145	3	669
135, 177	Vancleave, T. Y., Cornersville, Tenn. Apparatus for detaching horses from vehicles	Jan. 21, 1873	620	202	3	85
134, 619	Vandegrift, A. J., Covington, Ky. Metallic fabric for scouring and percolating purposes	Jan. 7, 1873	110	36	3	16
135, 608	Same. Metallic fabric for securing grain and percolating purposes	Feb. 4, 1873	205	63	3	143
136, 563	Vandenburg, O., New York, N. Y. Ventilating underground and sub-surface railways	Mar. 4, 1873	190	62, 63	3	260
140, 973	Vanderbilt, W. W., New York, N. Y. Piston-rod packing	July 15, 1873	572	192	4	74
	Vanderburg, E. L., (See Croughwell, Tillman & Vanderburg.)					
	Vanderburg, Wells & Co., (See Blackman, J. F., assignor.)					
	Vanderhoof, O. G., (See Andrews & Godfrey, assignors.)					
146, 111	Vanderpool, F., assignor to self and J. E. Wood, Mayfield, N. Y. Glove-turning machine	Dec. 30, 1873	990	319	4	712
139, 838	Van Dervort, W. V., and R. B. Walker, New Antioch, Ohio. Automatic cradle	June 10, 1873	372	115	3	654
141, 741	Van Derzee, C., assignor of two-thirds interest to D. Doremus and D. H. Mathias, Albany, N. Y. Mechanical power	Aug. 12, 1873	300	98	4	167
140, 602	Van De Water, H., Rochester, N. Y. Turbine water-wheel	July 8, 1873	239	81	4	39
	Van Dorn, T. D., (See Mooney, Van Dorn & Winterberg.)					
137, 039	Vanduzen, B. C., Cincinnati, Ohio. Bed-bottom	Mar. 18, 1873	616	204	3	313
138, 454	Van Eps, H. R., Peoria, Ill. Card-rack	Apr. 29, 1873	1,100	347	3	488
135, 389	Van Est, P. W., Rochester, N. Y. Frame for pillow-spreads	Jan. 28, 1873	834	269	3	115
	Van Fleet, J., et al., (See Kugler, O., assignor.)					
140, 974	Vanfossen, G., Bethesda, Ohio. Pruning shears	July 15, 1873	573	193	4	74
146, 035	Van Gaaebeek, W., Hudson, N. Y. Lid-lifter	Dec. 30, 1873	918	297	4	706
136, 346	Van Gieson, W. H., Whitewater, Wis. Railway snow-plow	Feb. 25, 1873	882	284	3	234
1-9, 635	Same. Railway-switch	June 3, 1873	164	55	3	622
139, 922	Van Gilder, S., Knoxville, Tenn. Butt-hinge	June 17, 1873	499	158	3	672
140, 447	Same. Boot-blackening kit	July 1, 1873	86	30	4	15
136, 564	Van Gordier, G. W., Warren, Ohio. Sulky-harrow	Mar. 4, 1873	199	63	3	260
	Van Haagen, A., (See Van Haagen, C., assignor.)					
136, 794	Van Haagen, C., assignor to self and A. Van Haagen, Philadelphia, Pa. Slide-rest for lathes	Mar. 11, 1873	397	131	3	286
141, 525	Van Herwerden, C., assignor to self and C. Jansen, Williamsburgh, N. Y. Composition for water-proofing wall-paper	Aug. 5, 1873	100		4	143
141, 966	Van Hoevenbergh, H., Brooklyn, N. Y. Telegraph sounder	Aug. 19, 1873	511	168	4	194
139, 983	Van Hoosen, C., New York, N. Y. Button-hole cutter	June 17, 1873	499	158	3	672
138, 545	Van Horn, E. D., and C. N. Farr, Philadelphia, Pa. Brush-machine	May 6, 1873	68	23	3	503
	Van Houten, E. F., et al., (See Van Houten, J. H., assignor.)					
141, 967	Van Houten, E. F., Newark, N. J., assignor of one-half interest to S. T. Tate, Brooklyn, N. Y. Adjustable pulleys for gas-machines, &c.	Aug. 19, 1873	512	169	4	194
141, 968	Same. Apparatus for carbureting air	Aug. 19, 1873	512	169	4	194
135, 020	Van Houten, J. H., Newark, N. J., assignor to S. T. Tate, Brooklyn, N. Y., and E. F. Van Houten, N. J. Machine for carbureting air	Jan. 21, 1873	494	158	3	75
145, 768	Van Kannel, T., and G. Elzenhoefer, said Van Kannel assignor to said Elzenhoefer, Cincinnati, Ohio. Hydrant	Dec. 23, 1873	669	218	4	676
135, 302	Van Name, W., and J. A. Wakefield, Chippewa Falls, Wis. Lumber-chute	Jan. 28, 1873	754	243	3	108
142, 265	Van Ness, J. H., Charlotte, N. C. Mitering-machine	Sept. 30, 1873	828	294	4	358
141, 678	Van Noubuys, L., Albany, N. Y. Machinery for burnishing the heels of boots and shoes	Aug. 12, 1873	251	80	4	163
	Vannuys, H., (See Vannuys, S. and H.)					
135, 178	Vannuys, S. and H., Bethel, Ind. Corn-planter	Jan. 21, 1873	620	202	3	85
137, 739	Vanorman, O., Fond du Lac, Wis. Carpet stretcher	Apr. 8, 1873	424	130	3	403
143, 206	Vanorman, O., assignor of one-half interest to H. Hamilton, Fond du Lac, Wis. Automatic fan	Sept. 23, 1873	771	265	4	337
141, 679	Van Patten, F., assignor by means assignment to self and E. D. Clapp, Auburn, N. Y. Die for making blanks for king-bolts	Aug. 12, 1873	252	80	4	163
141, 680	Same. Die for the manufacture of clip king-bolts	Aug. 12, 1873	253	80	4	163
141, 681	Same. Die for swaging clip king-bolt blanks	Aug. 12, 1873	253	81	4	163
141, 682	Same. Die for the manufacture of fifth-wheel heads	Aug. 12, 1873	254	82	4	164
141, 683	Same. Machine for milling fifth-wheels of vehicles	Aug. 12, 1873	256	82, 83	4	164
136, 565	Van Patten, J. B., Newark, N. J. Gas-illuminator	Mar. 4, 1873	192	63	3	261
139, 892	Vansant, J., San Francisco, Cal. Electrical gas-lighting apparatus	June 10, 1873	233	75	3	644
138, 962	Van Sant, J. W., Le Claire, Iowa. Rudder for vessel	May 13, 1873	442	139	3	544
	Van Sickle, D., (See Hunter & Van Sickle.)					
136, 683	Vanstone, S., North Providence, R. I., assignor to H. Lippitt, C. H. Merriman, and J. T. Rhoda, trustees, Providence, R. I. Fastening for railroad-rail joints	Mar. 11, 1873	305	101	3	279
137, 980	Vanstone, S., Providence, R. I. Combined hanging basket and bird-cage	Apr. 15, 1873	635	200	3	433
140, 801	Van Syckel, S., assignor to self and Gibbs, Sterrett & Co., Titusville, Pa. Refining petroleum	July 15, 1873	409	139	4	61
143, 945	Van Syckel, S., Titusville, Pa. Apparatus and process for treating petroleum	Oct. 21, 1873	510	172	4	440
	Van Valkenburg, E., (See Hill & Van Valkenburg.)					
	Van Valkenburgh, B., (See Schorg & Van Valkenburgh.)					
141, 969	Van Vleck, C., Sidney, Mich. Log-turner	Aug. 19, 1873	513	169	4	194
137, 262	Van Vleck, G. H., Buffalo, N. Y. Counting-register	Mar. 25, 1873	830	273	3	341
139, 282	Van Voorhis, W. B., New York, N. Y. Securing pulleys to shafts	May 27, 1873	762	241	3	590
	Van Wagener, G., et al., (See Goodrich, A. S., assignor.)					
	Van Wagener, G., et al., (See Bud, J., assignor.)					
6, 459	Van Wert, A. E., Binghamton, N. Y. Baptismal font	Feb. 25, 1873			3	218
140, 975	Van Wert, J. A., and A. Crooley, Elmira, N. Y. Bed-bottom spring	July 15, 1873	574	193	4	74
	Van Wyeck, C., (See Lewis, I. B., assignor.)					
136, 684	Van Zandt, W. T., and L. A. Tartiere, New York, N. Y. Fire-proof building-blocks	Mar. 11, 1873	306		3	279
136, 795	Varah, W., New Haven, Ct. Knob-spindle	Mar. 11, 1873	398	132	3	286
138, 435	Varley, F. H., London, England. Portable electrical apparatus	Apr. 29, 1873	1,101	348	3	488

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
139, 746	Varney, T., assignor to Giant Powder Company & Atlantic Giant Powder Company, San Francisco, Cal. Explosive compound	June 10, 1873	291	.....	3	648
137, 158	Vars, W. M., Westerly, R. I. Fire-proof shutter	Mar. 25, 1873	731	243	3	333
137, 981	Varwig, H., Cincinnati, Ohio. Faucet	Apr. 15, 1873	635	200	3	433
	Vasaly, L. (See Thompson, A. S., assignor.)					
137, 740	Vaughan, E. S., Flatbush, N. Y. Basement-floor	Apr. 8, 1873	424	130	3	403
139, 036	Vaughan, G. B., Peoria, Ill. Plow	May 20, 1873	516	163	3	563
7, 047	Vaughan, T., Boston, Mass. Corners of glass show-cases. (Design)	Dec. 9, 1873	.....	.....	4	615
	Vaughn, J. A. (See Chamness & Vaughn.)					
	Vaughn, J. A. (See Haws & Vaughn.)					
143, 266	Vaughn, J. A., Cuyahoga Falls, Ohio. Balanced valve for hydraulic cranes	Sept. 30, 1873	820	294	4	358
145, 373	Vaughn, J. A., and H. B. Camp, Cuyahoga Falls, H. E. Merrill, Akron, Ohio, and C. J. Merrill, Alton, Ill., assignors to Turner, Parks & Company, Cuyahoga Falls, Ohio. Clay-mill	Dec. 9, 1873	298	101	4	622
137, 982	Vaughn, J. J., and C. J. Blaney, Boston, Mass. Sad-iron	Apr. 15, 1873	636	200	3	433
7, 009	Vedder, N. S., Troy, and T. S. Heister, Lansingburgh, N. Y., assignors to N. S. Vedder, Cooking-stove. (Design)	Dec. 2, 1873	.....	.....	4	585
7, 010	Same.....same.....same.....(Design)	Dec. 2, 1873	.....	.....	4	585
7, 011	Same.....same.....same.....(Design)	Dec. 2, 1873	.....	.....	4	585
7, 012	Same.....Box-stove.....(Design)	Dec. 2, 1873	.....	.....	4	585
7, 013	Same.....Base-burning stove.....(Design)	Dec. 2, 1873	.....	.....	4	585
7, 007	Same.....Parlor-stove.....(Design)	Dec. 2, 1873	.....	.....	4	585
7, 014	Vedder, N. S., and F. Ritchie, assignors to N. S. Vedder, Troy, N. Y. Cooking-stove. (Design)	Dec. 2, 1873	.....	.....	4	585
7, 048	Vedder, N. S., and F. Ritchie, Troy, and T. S. Heister, Lansingburgh, N. Y., assignor to N. S. Vedder, Heating-stove. (Design)	Dec. 2, 1873	.....	.....	4	585
137, 263	Vedder, N. S., and F. Ritchie, assignors to N. S. Vedder, Troy, N. Y. Cooking-stove. (Design)	Dec. 2, 1873	.....	.....	4	585
142, 421	Venable, D. G., assignor to W. T. Venable, Christiansburgh, Ky. School-desk	Mar. 25, 1873	831	273	3	341
141, 526	Venable, W. T. (See Venable, D. G., assignor.)					
135, 868	Vennall, J., Boston, Mass. Method of securing letters to stone	Sept. 2, 1873	86	29	4	240
140, 324	Vergnes, E. (See Manico, E., assignor.)					
139, 283	Verill, W., Elwood, N. J. Thrashing-machine	Aug. 5, 1873	100	31	4	143
144, 644	Vermilya, J. H., et al. (See Hunter, G. W., assignor.)					
136, 685	Vernon, C., et al. (See Lonsa, Vernon & Holden.)					
136, 629	Vernone, C. B., Athens, Ga. Sewing-machine fan-attachment	Feb. 11, 1873	439	143	3	173
144, 806	Vetter, J. C., Indianapolis, Ind. Lady's toilet-cabinet	June 24, 1873	819	{ 259 } { 260 }	3	707
139, 283	Victor Sewing-Machine Company. (See Pratt & King, assignors.)					
144, 644	Vieta, E. B., Boston, Mass. Pantaloon-tree	May 27, 1873	763	242	3	590
139, 441	Same.....Steaming and drying apparatus for shaping pantaloons	Nov. 18, 1873	419	140	4	535
143, 600	Vinnedge, J. D. (See Coppock, J. F., assignor.)					
136, 566	Vinnedge, J. D., Indianapolis, Ind. Machine for cutting out pegs	May 27, 1873	898	289	3	601
134, 826	Vinton, J. J., Sharon, Pa. Manufacture of iron from blast-furnace slag	Oct. 14, 1873	186	.....	4	404
136, 947	Vintchger, G., New York, N. Y. Picture-nail	Mar. 4, 1873	193	64	3	261
135, 179	Violet, F. N., Fond du Lac, Wis. Attachment for sewing-machines	Jan. 14, 1873	312	99	3	45
137, 514	Voelckers, T., Boston, Mass. Floor-timber support	Mar. 18, 1873	536	177	3	306
136, 685	Vogel, C., New York, N. Y. Machine for cutting files	Jan. 21, 1873	621	{ 202 } { 203 }	3	85
136, 629	Vogel, K., Chelsea, Mass. Sewing-machine.....(Extension)	Oct. 4, 1873	.....	.....	4	353
144, 806	Vogler, H., Baltimore, Md. Explosive pile-driver	Apr. 1, 1873	216	66	3	374
137, 514	Vogt, J. H., and G. Dietzel, New York, N. Y. Waist-belt	Mar. 11, 1873	306	101	3	279
136, 629	Vogt, P. A., Buffalo, N. Y. Door for refrigerators	Mar. 11, 1873	262	88	3	275
144, 806	Voll, G. (See McGregor & Voll).....(Reissue)					
135, 390	Vollrath, J. J., Sheboygan, Wis. Revolving stool or chair	Nov. 18, 1873	550	186	4	546
143, 735	Volmar, H. (See Sadler & Volmar.)					
145, 701	Von Bolzano, T., Schlan, Austria. Furnace-grate	Jan. 28, 1873	835	269	3	115
136, 823	Von Culin, M., assignor by means assignment to E. Riedel and J. E. Roebbling, Philadel-phia, Pa. Machine for forming seamless cans	Oct. 14, 1873	315	105	4	414
136, 823	Von Dorn, T. L., assignor to self and A. J. Potter, Omaha, Nebr. Screw-plate	Dec. 16, 1873	598	195	4	658
138, 353	Von Ehren, F. A. L., New Orleans, La. Fire-escape	Mar. 18, 1873	481	160	3	302
144, 933	Von Kessler, F. W. C., and A. F. Medenwald, Chicago, Ill. Blacking-brush	Apr. 29, 1873	1,011	318	3	481
5, 492	Von Phul, H., jr., and J. Mallon, Holly Wood, La. Combined stubble shaver and scraper	Nov. 25, 1873	664	225	4	566
137, 264	Von Staden, W. G., Strathroy, Canada. Car-frame.....(Reissue)	July 2, 1873	369	125	4	50
145, 820	Voorhies, L. H., Ypsilanti, Mich. Car-brake	Mar. 25, 1873	832	273	3	341
137, 264	Vorce, O. A., Kentland, Ind. Weather-strip	Dec. 23, 1873	708	233	4	679
141, 476	Vornbrock, J. H. (See Holt, C., assignor.)					
135, 049	Vosburg, A. E. (See Frank, J. H., assignor.)					
137, 265	Vose, J. W. (See Wilson, J. W., assignor.)					
144, 878	Vose, W. T., Newtonville, Mass. Portable pump.....(Extension)	Nov. 15, 1873	.....	.....	4	504
145, 320	Vosa, H., and H. P. Brandt, Davenport, Iowa. Window-mirror	Aug. 5, 1873	60	18	4	140
5, 237	Vosseller, J. S., Plainfield, N. J. Compound for paint	Jan. 21, 1873	521	.....	3	77
136, 567	Voth, H., Saint Louis, Mo. Car-replacer	Mar. 25, 1873	833	273	3	341
141, 406	Votti, C., Newark, N. J. Device for connecting frames of valises, &c	Nov. 25, 1873	623	211	4	562
139, 636	Vreeland, A., Mont Clair, N. J. Cart-loading scoop	Dec. 9, 1873	259	86	4	618
139, 637	Vreeland, S., Pottstown, Pa., assignor by means assignment to Metallic Suspension-Wheel Company. Carriage-wheel.....(Reissue)	Jan. 14, 1873	437	139	3	55
137, 807	Vreeland S., assignor to Metallic Suspension-Wheel Company, Pottstown, Pa. Wheel for vehicles	Mar. 4, 1873	193	64	3	261
142, 304	Vrooman, A. V., Roxbury, N. Y. Welt-parer	July 29, 1873	1,005	326	4	125
144, 041	Vrooman, C., administratrix. (See Vrooman, H. S.)					
139, 636	Vrooman, H. S., deceased, by C. Vrooman, administratrix, Boston, Mass. Heel-burnish- ing machine	June 3, 1873	168	55, 56	3	622
139, 637	Vrooman, H. S., deceased, by C. Vrooman, administratrix. Sole-channeling machine	June 3, 1873	169	56	3	623
142, 304	Waddell, J. L., Annapolis, Md. Collar button or stud	Apr. 15, 1873	490	153	3	421
144, 041	Waddell, L. (See Waddell, W. H. & L., and Lutz.)					
142, 970	Waddell, W. H. & L., and J. A. Lutz, Churchville, Va. Car-coupling	Sept. 16, 1873	576	194	4	311
139, 839	Waddington, J., New Philadelphia, Ohio. Grain-binder	Aug. 26, 1873	821	272	4	229
145, 137	Wade, A. M., Lawrence, Mass. Bobbin-holder for spooling-machines	Oct. 28, 1873	618	204	4	459
143, 736	Wade, E., Elizabeth, N. J. Illuminated clock	June 10, 1873	372	115	3	654
	Wade, F. M., San Francisco, Cal. Egg-carrier	Dec. 2, 1873	95	31	4	594
	Wade, O. H., East Bridgewater, Mass. Belt-shifting apparatus	Oct. 14, 1873	316	105	4	414
	Wadsworth, H. C. (See Forehand & Wadsworth.)					
	Wadsworth, J., et al. (See Eames, J. N., assignor.)					
139, 093	Wagoner, G. W., assignor to A. R. Cushman, Scotland County, Mo. Washing-machine	May 20, 1873	572	179	3	567

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 949	Waggoner, G., New Kingston, Pa. Cultivator.....	Jan. 14, 1873	416	133	3	53
138, 302	Wagner, H. E., Dresden, Germany, assignor to J. F. H. Mattullath, Pittsburgh, Pa. Paper Wagner, J. (See Douglass & Wagner.) Wagner, J., Pittsburgh, Pa. Sausage-stuffer..... (Extension)	Apr. 29, 1873 Mar. 29, 1873	969	3	477
138, 303	Wagner, J. Z., and H. R. Fry, Wabash, Ind. Lathe for turning hubs.....	Apr. 29, 1873	970	304	3	477
136, 288	Wagner, P., New York, N. Y. Paint-brush.....	Feb. 25, 1873	831	268	3	230
137, 515	Same.....Brush-socket.....	Apr. 1, 1873	217	66	3	374
138, 213	Same.....Brush.....	Apr. 22, 1873	858	272	3	460
135, 455	Wainwright, H. H., Philadelphia, Pa. Gas-apparatus.....	Feb. 4, 1873	59	19	3	132
	Wait, J. B. (See Scofield, L., assignor.) Wait, O. E. (See Darrow & Wait.)					
138, 214	Wait, W. B., New York, N. Y. Nut-lock.....	Apr. 22, 1873	858	272	3	460
142, 750	Waite, J., Yarmouth, Me. Car-coupling.....	Sept. 9, 1873	382	128	4	224
145, 769	Waite, G. W., Philadelphia, Pa. Caster.....	Dec. 23, 1873	670	218	4	676
	Wakefield, A. B. (See Berryman & Wakefield.) Wakefield, A. B., and B. A. Berryman, Saint Louis, Mo. Car-wheel.....	Mar. 25, 1873	833	274	3	341
137, 266	Wakefield, C. A., Pittsfield, Mass. Earth-closet.....	June 17, 1873	605	191	3	681
140, 099	Wakefield, J. A. (See Van Name & Wakefield.) Wakefield, S. W., Keokuk, Iowa. Wrench.....	Aug. 5, 1873	61	19	4	140
141, 477	Wakefield, W. O. (See Wheeler & Wakefield.) Wakeman, S. (See Broadbooks, P., assignor.)					
140, 325	Walbridge, H. B., Brooklyn, N. Y. Reflector.....	June 24, 1873	820	260	3	707
5, 238	Walch, B., Frederick, Md. Anger..... (Reissue)	Jan. 14, 1873	438	139	3	55
	Walden, J. (See Platta & Walden.) Walden, J., Newark, N. J., assignor of one-half interest to G. Platta. Machinery for goring gaiters..... (Reissue)	July 15, 1873	591	199	4	76
143, 798	Walden, J., and G. Platta, Newark, N. J. Machine for gumming the edge of elastic shoe-grooves.....	Oct. 21, 1873	387	129	4	430
	Walden, P. (See Anderson, Walden & More.) Walden, W. (See McKinstry & Walden.)					
144, 716	Waldie, S. H., Belmont, Tex. Billiard-table.....	Nov. 18, 1873	473	160	4	540
138, 963	Waldron, A. T., Waterford, N. Y. Combined stop-cock and check-valve.....	May 13, 1873	443	139	3	544
138, 058	Waldron, J., and D. G. Moore, Elizabethport, N. J. Machine for pointing spikes.....	Apr. 23, 1873	727	230	3	450
136, 289	Wale, G., Hoboken, N. J. Shoe-brush.....	Feb. 25, 1873	832	269	3	330
135, 180	Wales, G., Brooklyn, N. Y. Condenser for steam-engines.....	Jan. 21, 1873	623	203	3	85
135, 181	Same.....Feed-water heater.....	Jan. 21, 1873	623	203	3	85
142, 182	Wales, J. H., Marlborough, and H. S. Cushman, Milford, Mass. Railway-rail.....	Aug. 26, 1873	721	238	4	220
135, 677	Wales, S., New York, N. Y. Umbrella-runner.....	Feb. 11, 1873	275	87	3	161
137, 516	Wales, S. E., Oxford, assignor to self and J. H. Williams, Warren, N. H. Extension-table.....	Apr. 1, 1873	217	66	3	374
142, 061	Walker, A. G., and S. Brown, Worcester, Mass. Plowman's boot.....	Aug. 19, 1873	603	199	4	201
	Walker, A. H., et al. (See Howard, A. F., assignor.) Walker, A. W. and J. E., Detroit, Mich. Extension step-ladders.....	Mar. 18, 1873	617	204	3	313
137, 040	Walker, C. I., Charleston, S. C. Case for law blanks.....	May 20, 1873	572	179	3	567
139, 094	Walker, C. W. (See Lewis, G. W., assignor.) Walker, D., Newark, N. J. Combined office table and bed.....	Jan. 21, 1873	495	159	3	75
135, 021	Walker, E. A., Minneapolis, Minn. Scroll-saw.....	May 27, 1873	764	242	3	590
139, 284	Walker, E. A., New Haven, Conn. Joiners' clamp.....	July 8, 1873	361	122	4	49
142, 747	Walker, E. A., Minneapolis, Minn. Scroll-sawing machine.....	Sept. 2, 1873	35	13	4	245
139, 935	Walker, E. C., and W. M. Gooding, Newark, N. J. Machine for turning spools.....	June 17, 1873	463	145	3	669
140, 976	Walker, F., New Orleans, La. Curtain-fixture.....	July 15, 1873	574	193	4	74
	Walker, G. (See Holmes, J., assignor.) Walker, G., Whitley's Point, Ill. Rotary churn.....	May 27, 1873	809	258	3	594
139, 345	Walker, G. A., Boston, Mass., assignor to W. G. Ely, Norwich, Conn. Paper-cutting machine..... (Reissue)	June 24, 1873	837	266	3	708
5, 463	Walker, G. A., Boston, Mass. Machine for cutting paper.....	Dec. 9, 1873	377	125	4	628
145, 464	Walker, G. S., Erie, Pa. Washing-machine.....	Sept. 2, 1873	191	62	4	257
142, 535	Walker, I. F., Central Falls, R. I. Manufacture of dolls.....	Nov. 4, 1873	166	55	4	492
144, 373	Walker, J. A., assignor of two-thirds interest to J. M. Sharpe and W. H. Morrow, Nash- ville, Tenn. Harrow.....	July 22, 1873	629	212	4	88
141, 021	Walker, J. C., Washington, D. C. Oil-painting.....	Jan. 14, 1873	313	.....	3	45
	Walker, J. E. (See Walker, A. W. and J. E.) Walker, J. H., Grand Rapids, Mich. Horse hay-rake.....	Aug. 12, 1873	257	83	4	164
141, 684	Walker, J. H., Worcester, Mass. Fire-proof building.....	Sept. 2, 1873	87	29	4	249
142, 422	Walker, J. T., Albany, N. Y. Ironing-machine.....	Nov. 25, 1873	754	{ 254 255 }	4	574
145, 034	Walker, O. E., assignor to self and C. F. Stites, Cincinnati, Ohio. Can for paint, &c.....	Sept. 16, 1873	576	195	4	311
142, 971	Walker, R., Milford, Mass. Automatic signal for railway-crossings.....	Apr. 15, 1873	490	153	3	421
137, 808	Walker, R., Harrisville, Ohio. Carriage-spring.....	Dec. 9, 1873	289	101	4	622
145, 374	Walker, R. B. (See Van Dervort & Walker.) Walker, R. K., Clarington, Ohio. Miners' pick.....	Nov. 18, 1873	551	187	4	546
144, 808	Walker, T. G., and H. H. Holbrook, New York, N. Y. Paddle-wheel.....	Jan. 7, 1873	111	37	3	16
134, 620	Walker, W., Fort Bridger, Wyo. Railway snow-plow.....	Feb. 4, 1873	96	30	3	135
135, 499	Walker, W., Brooklyn, assignor to G. H. Wooster, New York, N. Y. Plating-attachment for sewing-machines.....	July 29, 1873	1,006	327	4	125
141, 407	Same.....Plating-attachment for sewing-machines.....	Aug. 5, 1873	175	56	4	149
141, 610	Same.....Trimming.....	Nov. 18, 1873	550	187	4	546
144, 807	Walker, W. E., Albion, Iowa. Truck for moving buildings.....	Jan. 14, 1873	417	133	3	53
134, 950	Walker, W. J., Dorset, Ill. Seed-separator..... (Reissue)	Jan. 7, 1873	217	70	3	24
5, 227	Walker, W. L., et al. (See Rogers & Devoe, assignors.) Same..... (See Rogers, T., assignor.)					
138, 964	Walker, W. T., Fontenoy Mills, Ga. Cultivator.....	May 13, 1873	443	129	3	544
141, 611	Walker, W. V., Dressersville, N. Y. Mowing-machine.....	Aug. 3, 1873	176	56	4	149
	Walker, Z. (See Ash & Walker.) Walkington, W., Leeds, England. Cutter-holder for planing-machines.....	Jan. 21, 1873	624	204	3	86
135, 182	Wall, F., assignor to self and J. S. Hall, Allegheny, Pa. Metallic roofing.....	June 17, 1873	606	191	3	681
140, 100	Wall, W. H., assignor of one-half interest to H. W. Garrison, Elbridge, N. Y. Potato- digger.....	Jan. 21, 1873	625	204	3	86
135, 183	Wallace & Sons. (See Doolittle, J. H., assignor.) Wallace, I. C., and J. W. Andrews, Detroit, Mich. Car-starter.....	Dec. 30, 1873	990	320	4	712
146, 112	Wallace, J. F., Pittsburgh, Pa. Balanced slide-valve for steam-engines.....	Sept. 23, 1873	643	220	4	327
143, 043	Wallace, W. (See Luce, S., assignor.) Wallace, W., Syracuse, N. Y. Harvester.....	Aug. 19, 1873	514	169	4	194
141, 970	Wallace, W. V., Boston, Mass. Surface-coating to hard soap.....	Oct. 14, 1873	127	.....	4	404
143, 601	Wallace, W. W. (See Strickler, J., assignor.) Waller, J. C. (See Cohen & Waller.)					
135, 254	Wallis, H., Saint Louis, Mo. School-satchel.....	Jan. 28, 1873	717	229	3	105

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139, 095	Wallis, J. N. and T., Fleming, N. Y. Glass coffin.....	May 20, 1873	573	180	3	567
144, 169	Wallis, T. (See Wallis, J. N. and T.)					
143, 393	Walmer, J., Ludlow, Ky. Oyster and other dredges.....	Oct. 29, 1873	796	242	4	468
141, 239	Walsh, C., Newark, N. J. Capped nail.....	Sept. 30, 1873	943	319	4	367
135, 678	Walsh, J., Philadelphia, Pa. Valve-cock.....	Aug. 12, 1873	391	128	4	174
138, 215	Walsh, J. A., Mount Hope, Wis. Band-cutters' platform for thrashing-machine.....	Feb. 11, 1873	276	87	3	161
136, 568	Walsh, J. E., New York, N. Y. Derrick.....	Apr. 22, 1873	859	272	3	460
138, 965	Walsh, P. J., and W. J. Taylor, Oil City, Pa. Brick-kiln.....	Mar. 4, 1873	194	64	3	261
140, 748	Walter, H. E., Richfield Springs, N. Y. Electrical burglar-alarm.....	May 13, 1873	444	139	3	544
142, 183	Walter, J. F., jr., Brooklyn, N. Y. Sealing paint-cans.....	July 8, 1873	361	122	4	49
135, 456	Walter, W., Arkada, Wash. Hydraulic motor.....	Aug. 26, 1873	721	238	4	220
	Walter, W. G., et al. (See Johnson, G. F., assignor.)					
137, 640	Walters, A. B., assignor to self and C. Saunders, Philadelphia, Pa. Grinding, scouring, and polishing machine.....	Feb. 4, 1873	60	19	3	132
136, 796	Walters, C., et al. (See Gearing, C., assignor.)					
139, 346	Walters, G. C., Philadelphia, Pa. Sewing-machine.....	Apr. 8, 1873	329	102	3	395
136, 395	Walters, S., Dallas City, Ill. Eyelet for harness-traces.....	Mar. 11, 1873	398	132	3	286
142, 536	Walther, J., Brooklyn, N. Y., assignor to C. B. Cotterell, Westerly, R. I. Automatic valve-opener for air-springs.....	May 27, 1873	809	258	3	594
	Walton, B. F., Jersey City, N. J. Head-rest for beds.....	Mar. 4, 1873	38	14	3	248
	Walton Brothers. (See Devlan, P. S., assignor.)					
	Walton, G., assignor to Post & Co., Cincinnati, Ohio. Combined high and low water indicator.....	Sept. 2, 1873	192	62	4	257
	Walton, J. J. (See Barrett, E. A., assignor.)					
	Same..... (See Bell, T. G., assignor.)					
	Walton, J. J., et al. (See Manning, D. R., assignor.)					
140, 448	Walton, J. J. (See Merritt, J. C., assignor.)					
145, 918	Walton, J. J., New York, N. Y. Naval store-room or coach-lamp.....	July 1, 1873	87	30	4	15
145, 919	Same..... Pump.....	Dec. 23, 1873	797	261	4	686
136, 290	Same..... Fair leader for ship's rigging.....	Dec. 23, 1873	798	261	4	686
142, 537	Walton, J. J., and E. A. Barrett, New York, N. Y. Swinging candlestick for ships.....	Feb. 25, 1873	832	269	3	230
138, 966	Walton, N. W., and J. L. Cunningham, said Walton assignor to said Cunningham, Penningborough, W. Va. Bee-hive.....	Sept. 2, 1873	193	62	4	257
	Walton, W., and J. T. Fallows, Denton, England. Rolling wire.....	May 13, 1873	445	140	3	544
	Walton, W. E. (See Knowlton, J. L., assignor.)					
	Walton, W. M., et al. (See Manning, D. R., assignor.)					
141, 022	Walton, W. R., Freeport, Ill. Washing-machine.....	July 22, 1873	629	212	4	88
134, 951	Walts, F., Watertown, N. Y. Rock-drilling machine.....	Jan. 14, 1873	418	133	3	53
138, 456	Walty, M., Buffalo, N. Y. Device for boring and turning gas-fittings.....	Apr. 29, 1873	1,102	348	3	488
141, 612	Same..... Chuck for holding pipe-fittings.....	Aug. 5, 1873	177	56	4	149
141, 299	Walworth, C., Boston, Mass. Screw-cutting machine.....	July 29, 1873	898	294	4	117
144, 374	Same..... Machine for tapping gas and water fittings.....	Nov. 4, 1873	167	56	4	492
135, 022	Wansley, J. N., Galena, Ohio. Harrow.....	Jan. 21, 1873	496	159	3	75
5, 515	Wanda, J. C., Nashville, Tenn. Car-roof..... (Reissue).....	July 29, 1873	1,023	331 332	4	126
136, 569	Same..... same.....	Mar. 4, 1873	195	64, 65	3	261
142, 062	Same..... Railway-car.....	Aug. 19, 1873	603	199	4	201
137, 983	Wauzer, R. M., Hamilton, Canada. Sewing-machine stand.....	Apr. 15, 1873	637	201	3	433
5, 560	Ward, A., Altoona, Pa. Body-bolster for railway-cars..... (Extension).....	June 21, 1873			3	662
136, 111	Same..... same..... (Reissue).....	Sept. 2, 1873	204	66	4	258
139, 936	Ward, G. H., Middletown, Conn. Boot and shoe fastening.....	Feb. 18, 1873	683	216	3	205
	Ward, H. M., and G. E. Dolton, Monee, Ill. Book-mark.....	June 17, 1873	465	146	3	669
	Ward, I. M., et al. (See Buckner, C., assignor.)					
	Ward, J. (See Davenport & Ward.)					
134, 952	Ward, L. F., Marathon, N. Y. Spool-holder.....	Jan. 14, 1873	418	134	3	54
135, 609	Same..... Spool-stand and thread-cutter.....	Feb. 4, 1873	206	64	3	143
140, 478	Ward, R. F., Senatobia, Miss. Wood fence.....	Oct. 7, 1873	67	23	4	386
	Ward, S. (See McGarragh, J. H., assignor.)					
143, 946	Ward, W., New York, N. Y. Construction of houses.....	Oct. 21, 1873	512	172	4	440
134, 777	Ward, W. E., Port Chester, N. Y. Machine for making nuts..... (Extension).....	July 2, 1873			4	270
136, 473	Same..... Screw-cutting die.....	Jan. 14, 1873	264	86	3	41
139, 693	Ward, W. H., Auburn, N. Y. Manufacture of coil-springs.....	Mar. 4, 1873	105	35	3	254
134, 953	Same..... Valve or cut-off for cupola and other furnaces.....	June 10, 1873	240	75	3	644
136, 112	Ward, W. S., New York, N. Y. Ejecting-apparatus for bottles.....	Jan. 14, 1873	419	134	3	54
	Ward, W. S., assignor to H. D. Smith & Co., Plantsville, Conn. Tool for milling carriage-shaft eyes.....	Feb. 18, 1873	664	217	3	205
137, 517	Same..... Machine for forming carriage-clips.....	Apr. 1, 1873	214	67	3	374
145, 604	Ward, Z. A., Pittsfield, Mass. Carpet stretcher and tacker.....	Dec. 16, 1873	514	169	4	651
6, 376	Wardin, R. B., Philadelphia, Pa. Handle of kettle-cover..... (Design).....	Jan. 29, 1873			3	100
144, 934	Wardwell, J. B., Lawrence, Mass. Adjustable bench-vise.....	Nov. 25, 1873	685	226	4	566
141, 245	Wardwell, S. W., jr., assignor of one-half interest to G. W. Shaw, Saint Louis, Mo. Sewing-machine.....	July 29, 1873	850	277 278	4	113
137, 386	Ware, C. F., San Francisco, Cal. Process for removing paper from walls.....	Apr. 1, 1873	105		3	365
139, 096	Ware, E., Norfolk, Mass. Steam-engine governor-valve.....	May 20, 1873	573	180	3	567
142, 305	Ware, J., West Swanzey, N. H. Sash-holder.....	Aug. 26, 1873	821	272	4	229
136, 570	Ware, J. L., Mantorville, Minn., assignor to S. E. Ware, Waupun, Wis. Carriage running-gear.....	Mar. 4, 1873	196	65	3	261
134, 714	Ware, J. W., and M. L., Philadelphia, Pa. Process of bleaching, &c., dried natural flowers.....	Jan. 7, 1873	200		3	22
	Ware, M. L. (See Ware, J. W. and M. L.)					
142, 538	Ware, P., jr., Boston, Mass. Manufacture of boots and shoes.....	Sept. 2, 1873	194	63	4	257
142, 539	Same..... Last for boots and shoes.....	Sept. 2, 1873	195	63	4	257
	Ware, S. E. (See Ware, J. L., assignor.)					
145, 465	Warfield, B. A., Howard County, and W. F. Elmer, Baltimore, Md. Repairing railway-tracks.....	Dec. 9, 1873	378	125	4	628
142, 063	Waring, J. T., Yonkers, N. Y. Removing vegetable-fiber from felted fabrics.....	Aug. 19, 1873	604		4	201
142, 064	Same..... Dyeing felt hats and caps.....	Aug. 19, 1873	604		4	201
142, 658	Warinner, W., Creelsborough, Ky. Car-brake.....	Sept. 9, 1873	304	100	4	278
144, 297	Warinner, W., and W. L. D. Johnson, Creelsborough, Ky. Link-guide for car-couplings.....	Nov. 4, 1873	104	35	4	477
144, 809	Warner, T., New York, N. Y. Apparatus for drawing effervescent liquids.....	Nov. 18, 1873	551	187	4	546
137, 397	Warne, M., Philadelphia, Pa. Strap for street-cars.....	Apr. 1, 1873	105	34	3	365
5, 366	Warner, A., Belvidere, N. J., assignor by meane assignment to E. Hall & Co. Hub for vehicles..... (Reissue).....	Apr. 22, 1873	877	277	3	462
140, 101	Warner, B. W., Rome, assignor to self and A. E. Smith, Utica, N. Y. Stave-machine.....	June 17, 1873	606	191	3	681

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 391	Warner, C. E., Burlington, Kan. Hay-loader	Dec. 9, 1873	260	86	4	619
145, 770	Warner, D., assignor to J. A. Sevey, Boston, Mass. Whalebone-splitting machine	Dec. 23, 1873	670	219	4	676
135, 050	Warner, D. C., Chicago, Ill. Cherry-stoner	Jan. 21, 1873	521	168	3	77
	Warner, F. F., et al. (See Morrison, J. C., assignor.)					
141, 971	Warner, F. K., Paris, France. Advertising-lamp	Aug. 19, 1873	515	170	4	194
145, 391	Warner, H. K., and C. E. Smith, Rochester, Minn. Curtain-fixture	Dec. 23, 1873	709	233	4	679
	Warner, J. H., et al. (See Bushfield, S. B., assignor.)					
	Same..... same..... (Reissue.)					
134, 574	Warner, J. W., Oneida, N. Y. Fire-proof safe	Jan. 7, 1873	69	21	3	12
134, 575	Same..... Fire-proof vault	Jan. 7, 1873	70	22	3	12
144, 935	Warner, M. E., and S. W. Kingsley, Hatfield, Mass. Road-scraper	Nov. 25, 1873	666	236	4	566
136, 686	Warner, N. C., Hopewell Furnace, Mo. Wash-boiler attachment	Mar. 11, 1873	307	101	3	279
144, 239	Warner, P., Gilead, Mich. Dropping-platform for harvesters	Nov. 4, 1873	62	19	4	483
	Warner, W., & Co. (See Williams, T. G., assignor.)					
137, 641	Warner, W. E., Syracuse, N. Y. Press	Apr. 8, 1873	330	102	3	395
136, 291	Warren, A. C., Concord, N. H. Damper for hot-air furnaces	Feb. 25, 1873	833	269	3	230
139, 216	Warren, C. C., Earl, Ill. Railway-scale platform	May 30, 1873	685	216	3	576
138, 967	Warren, E. A., Brooklyn, N. Y. Printer's chase	May 13, 1873	446	140	3	544
134, 715	Warren, E. W., Cambridge, N. Y. Sash-holder	Jan. 7, 1873	200	65	3	22
	Warren, H. H. (See Chapman, N. D., assignor.)					
138, 059	Warren, H. H., Buffalo, N. Y. Lifting-jack	Apr. 22, 1873	758	230	3	450
	Warren, J. B. (See Bullard, I., assignor.)					
143, 861	Warren, J. L., and J. W. Adderley, Detroit, Mich. Picture-frame	Oct. 21, 1873	444	148	4	434
143, 107	Warren, O. H., Baldwinville, N. Y. Oil-can	Sept. 23, 1873	693	238	4	331
136, 194	Warren, O. J., Des Moines, Iowa. Corn-husking implement	Feb. 25, 1873	750	242	3	224
142, 065	Warren, R. E., Raleigh, N. C. Fire-proof cotton-lint room	Aug. 19, 1873	605	199	4	201
140, 175	Warren, W. P., Serena, Ill. Road scraper	June 24, 1873	691	217	3	696
136, 884	Warriner, F., Troy, N. Y. Stove-window	Mar. 18, 1873	482	160	3	309
143, 547	Warriner, F., assignor to S. S. Huntington, Troy, N. Y. Extension for stove-faces	Oct. 7, 1873	134	44, 45	4	391
135, 951	Warriner, R. H., Toledo, Ohio. Trace-carrier	Feb. 18, 1873	524	171	3	194
140, 561	Warsop, G., Nottingham, England, assignor to J. B. Wayne, Detroit, Mich. Pipe-wrench	July 1, 1873	189	63	4	23
5, 228	Warth, A., assignor to E. Faber, Stapleton, N. Y. Machine for cutting lead-pencils. (Reissue.)	Jan. 7, 1873	217	70	3	24
137, 041	Warth, A., Stapleton, N. Y. Machine for piling textile fabrics	Mar. 18, 1873	618	204 } 205 } 206 }	3	313
	Same..... same.....					
137, 518	Same..... same.....	Apr. 1, 1873	219	67	3	374
144, 240	Warwick, W., and H. C. Duggan, Pittsburgh, Pa. Car-brake	Nov. 4, 1873	63	19	4	483
138, 107	Washbourne, F., Brooklyn, N. Y. Button	Apr. 23, 1873	766	243	3	453
5, 546	Washburn, A., Medina, Ohio. Paper-folding machine. (Reissue.)	July 29, 1873	1, 094	332	4	127
141, 742	Same..... same.....	Aug. 12, 1873	301	99	4	168
143, 267	Washburn, A. K., Bridgewater, Mass. Jack for holding shoes	Sept. 30, 1873	830	285	4	358
5, 625	Washburn, B. D., Boston, Mass. Shutter-fastening. (Reissue.)	Oct. 21, 1873	535	176	4	442
	Washburne, G. (See Lamarre, A., assignor.)					
135, 610	Waseell, H. A., Stourbridge, England. Machine for marking designs on glass, &c.	Feb. 4, 1873	206	64, 65	3	143
136, 571	Wasson, C. W., Friendship, N. Y. Mortar-mixer	Mar. 4, 1873	197	65	3	261
135, 500	Wasson, W., P. F. Powers, and G. W. Dungan, Genoa, Nevada. Harvester-cutter	Feb. 4, 1873	97	31	3	135
143, 648	Wate, S. N., jr., assignor to self and P. J. Adams, Danville, Pa. Pitman-rod. (Design.)	Oct. 14, 1873	229	77	4	408
138, 968	Waterbury Button Company. (See Smith, J. R., assignor.)					
144, 488	Waterbury, C. A., New York, N. Y. Railway-car brake-wheel	May 13, 1873	446	140	3	544
	Waterbury, C. G., New York, N. Y. Machine for removing snow and ice from roadways and streets	Nov. 11, 1873	274	93	4	512
145, 892	Same..... Machine for removing snow and ice from roadways	Dec. 23, 1873	709	233	4	679
144, 003	Waterbury, E. D., Mason City Iowa. Extension-rule	Oct. 28, 1873	588	195	4	456
137, 115	Waterhouse, A. G., assignor to Waterhouse Manufacturing Company, Portage, Wis. Mechanical movement	Mar. 25, 1873	695	231	3	331
138, 108	Waterhouse, A. G., assignor of six-tenths interest to J. S. and M. Nichols, San Francisco, Cal. Horse-power	Apr. 22, 1873	766	244	3	453
	Waterhouse Manufacturing Company. (See Waterhouse, A. G.)					
	Waterman and Mayer. (See Waterman, J., assignor.)					
143, 479	Waterman, J., assignor to Waterman & Mayer, New York, N. Y. Corset	Oct. 7, 1873	67	23	4	326
5, 355	Waterman, J. S., Boston, Mass. Corpse-preserving case. (Reissue.)	Apr. 15, 1873	655	206	3	435
134, 954	Waters, B. F., Garrettsville, Ohio, assignor to F. W. Andrews, Titusville, Pa. Pitman-connection for harvesters	Jan. 14, 1873	420	134	3	54
138, 066	Waters, C. H., Groton, Mass. Apparatus for drying painted wire-cloth. (Extension.)	Apr. 23, 1873	728	230	3	450
	Waters, E., executor. (See Littlejohn, H.)					
137, 741	Waters, H., Northbridge, Mass. Machine for rolling scythes	Apr. 8, 1873	425	131	3	403
137, 984	Same..... Die-rolling machine	Apr. 15, 1873	637	201	3	433
138, 216	Waters, H., Boston, Mass. Machine for rolling scythes	Apr. 23, 1873	860	272 } 273 }	3	460
	Waters, J., West Sutton, Mass. Toy-whistle	Sept. 23, 1873	644	231	4	327
143, 044	Waters, J. M., Cincinnati, Ohio. Chair. (Design.)	Sept. 23, 1873			4	328
140, 562	Waters, Z. D., Brookville, Md. Corn-planter	July 1, 1873	189	63, 64	4	23
139, 694	Watkeys, H., Syracuse, N. Y. Throttle valve for locomotive and other engines	June 10, 1873	242	75, 76	3	644
	Watkins, A. H. (See Benson & Watkins.)					
	Watkins, E. T. (See Burtis, P. T., assignor.)					
	Same..... (See Heywood, L., assignor.)					
6, 986	Watkinson, T. (See Howard, B., assignor.)	Nov. 4, 1873			4	478
144, 810	Watkinson, G., assignor to L. Candee & Co., New Haven, Conn. Overshoe. (Design.)	Nov. 18, 1873	552	187	4	546
146, 113	Same..... same.....	Dec. 30, 1873	992	320	4	712
	Watrous, C. R., assignor to self and J. Watrous, jr., Mystic, Conn. Nut-lock	Dec. 23, 1873	798	262	4	666
145, 990	Watrous, J., jr. (See Watrous, C. R., assignor.)					
136, 474	Watson, A., Washington, D. C. Extinguishing fires in high buildings	Mar. 4, 1873	106	35	3	254
	Watson, C., White Cloud, Kans. Washing-machine					
	Watson, C. S. (See Jackson, T. R. and A. C., and Watson.)					
143, 649	Watson, D., Mexico, Mexico. Evaporating-pan	Oct. 14, 1873	220	77	4	408
134, 828	Watson, D. R., Moweaqua, Ill. Clothes-dryer	Jan. 14, 1873	313	99	3	45
141, 190	Watson, F. M., Columbia, Tenn. Carriage	July 22, 1873	787	257	4	100
	Watson, J. (See Bailey & Watson.)					
	Same..... (See Bailey, F. L., assignor.)					
	Watson, J., et al. (See Chapman, J. L., assignor.)					
140, 977	Watson, J., Philadelphia, Pa. Step and step-box	July 15, 1873	575	193	4	74
	Watson, J. H. (See Stevens & Watson.)					
5, 315	Watson, J. M., Sharon, Mass., assignor to self and H. A. Lothrop. Wooden shank for boots and shoes. (Reissue.)	Mar. 4, 1873	218	72	3	363

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 184	Watson, J. R., Allegheny City, Pa. Sash-holder	Jan. 21, 1873	626	204	3	86
138, 969	Watson, P. B., assignor of two-thirds interest to T. West, Belvidere, N. J. Washing-machine	May 13, 1873	447	140	3	544
	Watson, S. (See Orborn, H., assignor.)					
139, 442	Watson, W. A., Beverly, Mass. Machine for staking, glassing, and perching skins	May 27, 1873	898	289	3	601
143, 108	Watson, W. B., Somerville, Tenn. Shirt	Sept. 23, 1873	694	238	4	331
134, 716	Watson, W. M., Tonica, Ill. Plow	Jan. 7, 1873	201	65	3	92
143, 548	Same..... Furnace for tempering castings, &c.	Oct. 7, 1873	136	45	4	391
	Watt, D. M., et al. (See Kinzer, J., assignor.)					
140, 563	Watt, G., Richmond, Va. Harrow	July 1, 1873	191	64	4	24
141, 972	Watteau, J., Antwerp, Belgium. Machinery for pulling wool	Aug. 19, 1873	515	170 171	4	194
139, 443	Wattendorf, K. A., New York, N. Y. Tool for inserting and withdrawing faucets	May 27, 1873	899	290	3	601
138, 718	Wattles, J. H., Battle Creek, Mich. Table	May 6, 1873	236	70	3	516
144, 004	Wattles, J. W., Canton, Mass. Spinning-ring	Oct. 28, 1873	588	195	4	456
144, 042	Same..... Suspenders	Oct. 28, 1873	619	205	4	458
136, 630	Watts, D. S., Canton, Mass. Portable-fence	Mar. 11, 1873	262	88	3	275
135, 391	Way, C. G., Boston, Mass. Funnel	Jan. 28, 1873	836	270	3	115
135, 185	Way, T. R., Springfield, Ohio. Measuring-wheel	Jan. 21, 1873	627	214	3	86
137, 116	Way, T. R., assignor of one-half interest to W. H. Reeves, Springfield, Ohio. Mill-pick	Mar. 25, 1873	696	231	3	331
141, 613	Way, T. R., Springfield, Ohio. Millstone-pick	Aug. 5, 1873	178	57	4	149
	Wayne Agricultural Company. (See Fulghum & Lawrence, assignors.)					
	Same..... (See Fulghum, J. P., assignor.)					
	Wayne, J. B. (See Warsaw, G., assignor.)					
143, 737	Weagant, H. L., assignor of two-thirds interest to S. B. Fell and R. Lyle, Morrisburg, Canada. Splint-plane	Oct. 14, 1873	317	106	4	414
5, 290	Weatherhead, O. E., Ashland, Mass., assignor to A. A., G. L., and S. W. Cooke, Dividers	Feb. 18, 1873	685	221	3	206
	Weaver, A. F. (See Bundy, N. H., assignor.)					
137, 580	Weaver, H. B., Hartford, Conn. Water-wheel	Apr. 8, 1873	281	87	3	391
143, 045	Same..... Governor-valve	Sept. 23, 1873	645	221	4	327
142, 879	Weaver, J., Tipton, Iowa. Stove-pipe joint	Sept. 16, 1873	469	169	4	305
	Weaver, J. S. (See Schooler, J. E., assignor.)					
	Weaver, J. W. (See Ansley & Weaver.)					
141, 904	Weaver, T., assignor to H. C., Deming, Harrisburgh, Pa. Sash-holder	Aug. 19, 1873	464	151	4	190
145, 075	Weaver, T., Harrisburgh, Pa. Spherical-gear or universal-joint	Dec. 2, 1873	31	10	4	588
145, 375	Weaver, W., Burlington, Vt. Shaving-conductor for planing-machines	Dec. 9, 1873	300	101	4	622
142, 824	Weaver, W., Phoenixville, Pa. Rock-drill	Sept. 16, 1873	452	153	4	301
	Webb, B. (See Burch & Webb.)					
	Webb, H., Chicago, Ill. Railway-bar	June 14, 1873			3	640
	Webb, H. H., et al. (See La Grove, W. A. P., assignor.)					
	Webb, J. (See Perry & Webb.)					
143, 480	Webb, L. D., Greenville, Cal. Ore-stamp	Oct. 7, 1873	68	24	4	386
	Webb, R. L. (See Turnbull & Webb.)					
	Same..... same					
137, 159	Webb, R. L., assignor to the Russell and Erwin Manufacturing Company, New Britain, Conn. Reversible knob-latch	Mar. 25, 1873	732	243	3	333
138, 771	Webb, T., Freeport, Ill. Binder's attachment for harvesters	May 13, 1873	222	87	3	530
141, 527	Webb, T., Elyria, Ohio. Straw-cutter	Aug. 5, 1873	101	31	4	143
143, 046	Webber, A., Lynn, Mass. Thread-cutting mechanism for sewing-machines	Sept. 23, 1873	646	221	4	327
143, 268	Webber, D., Houlton, Me. Twine-holder	Sept. 30, 1873	830	285	4	358
141, 840	Webber, W. J., Hollister, Cal. Hay and grain loader	Aug. 12, 1873	392	128	4	174
140, 564	Webber, A., Newark, N. J. Caster-bottle	July 1, 1873	191	64	4	24
145, 138	Same..... same	Dec. 2, 1873	95	31	4	593
137, 985	Weber, A. M., Oakknob, Wis. Corset	Apr. 15, 1873	639	201	3	433
143, 207	Weber, J., New York, N. Y. Blind-stop	Sept. 23, 1873	772	266	4	337
134, 717	Weber, J., and W. C. Siefert, Lancaster, Pa. Machine for cutting up fat meats for lard-rendering	Jan. 7, 1873	201	65	3	22
144, 936	Weber, J. E., and P. Knutson, La Crosse, Wis. Coffee-pot	Nov. 25, 1873	667	226	4	566
	Weber, M. (See Anschutz, Shidel & Weber.)					
45, 823	Weber, T. A., Philadelphia, Pa., assignor to A. L. Bunyon. Sewing-machine	Dec. 23, 1873	710	234	4	679
	Webster, A. (See Jaycox & Webster.)					
6, 339	Webster, A., jr., assignor to C. M. Bailey, New York, N. Y. Carpet	Jan. 7, 1873			3	7
6, 796	Webster, A. T., assignor to New Brunswick Carpet Company, New Brunswick, N. J. Carpet	Aug. 5, 1873			4	135
6, 797	Same..... same	Aug. 5, 1873			4	135
138, 109	Webster, F., Brooklyn, N. Y. Wood-finishing compounds or oils	Apr. 22, 1873	767		3	453
139, 444	Webster, G., jr., and J. F., Hamilton City, Canada. Sewing-machine	May 27, 1873	899	290	3	601
137, 742	Webster, J., Birmingham, England. Apparatus for converting iron into steel	Apr. 8, 1873	426	131 132	3	403
139, 217	Webster, J., Charlestown, Mass. Cake-cutter	May 20, 1873	686	216	3	577
137, 267	Webster, J. and J. H., Boston, Mass., assignors to selves and L. D. Hawkins, Stoneham, Mass. Differential-gearing for hoisting-apparatus, &c.	Mar. 25, 1873	834	274	3	341
	Webster, J. F. (See Webster, G., jr., and J. F.)					
	Webster, J. H. (See Webster, J. and J. H.)					
6, 551	Webster, J. T., assignor to J. and J. Dobson, Philadelphia, Pa. Carpet	Apr. 1, 1873			3	357
6, 552	Same..... same	Apr. 1, 1873			3	357
6, 553	Same..... same	Apr. 1, 1873			3	357
6, 554	Same..... same	Apr. 1, 1873			3	357
6, 738	Same..... same	July 1, 1873			4	7
6, 739	Same..... same	July 1, 1873			4	7
6, 740	Same..... same	July 1, 1873			4	8
6, 824	Same..... same	Aug. 19, 1873			4	185
139, 037	Webster, M. L., Albany, N. Y. Door-spring	May 20, 1873	516	163	3	563
146, 036	Webster, W., East Jaffrey, N. H. Sole-edge trimmer	Dec. 30, 1873	919	298	4	706
135, 303	Wechsler, A., New York, N. Y. Ironing-table	Jan. 28, 1873	754	243	3	108
141, 300	Weed, A., Boston, Mass. File-cutting machine	July 29, 1873	898	295	4	117
136, 797	Weeden, J. B., assignor to self and M. M. Johnson, Stafford, Conn. Wrench	Mar. 11, 1873	399	132	3	286
	Weeden, W. N. (See Hallas & Weeden.)					
136, 113	Weeden, W. N., assignor to Benedict and Burnham Manufacturing Company, Waterbury, Conn. Lamp-burner	Feb. 18, 1873	664	217	3	205
145, 702	Same..... Process of making lamp-shade supports	Dec. 16, 1873	589	196	4	658
141, 301	Weeke, C., Saint Charles, Mo. Current-wheel	July 29, 1873	900	295	4	117
145, 703	Weeks, A., Washington, D. C. Combined secretary, wardrobe, and bedstead	Dec. 16, 1873	600	196	4	658

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Weeks, H. T. (See Cook, G. W., assignor.)					
139, 218	Wehler, H., Hampton, Pa. Thrashing-machine.	May 20, 1873	687	216	3	577
135, 457	Wehrle, E. R., Pittsburgh, Pa. Top-plate for cooking-stove.	Feb. 4, 1873	61	19	3	132
144, 425	Weibel, J. H., Geneva, Switzerland. Railway-car heater.	Nov. 11, 1873	224	75	4	508
136, 475	Weich, J., New York, N. Y. Propelling-mechanism for vessels.	Mar. 4, 1873	106	35	3	254
142, 133	Weicke, E., Philadelphia, Pa. Cutter-head for drilling-machines.	Aug. 26, 1873	682	224	4	217
	Weideman, J. (See Kopping & Weideman.)					
143, 947	Weil, E., assignor to Stern & Co., New York, N. Y. Overalls.	Oct. 21, 1873	512	172	4	440
146, 037	Weil, L., New York, N. Y. Cotton-bale tie.	Dec. 30, 1873	919	298	4	706
146, 114	Weimer, P. L., Lebanon, Pa. Roof-truss.	Dec. 30, 1873	993	320	4	712
138, 354	Weinberger, K., Milwaukee, Wis. Machine for gumming saws.	Apr. 29, 1873	1,011	318	3	421
137, 986	Weinman, G. M., Columbus, Ohio. Piston-valve for steam-engines.	Apr. 15, 1873	639	201	3	433
				202		
139, 240	Weirick, S., and H. Lathrop, Warsaw, Ind. Pump and fire-engine.	June 10, 1873	373	116	3	654
146, 038	Weiss, W., Saint Paul, Minn. Egg-carrier.	Dec. 30, 1873	920	298	4	706
139, 638	Weisker, B., New York, N. Y. Berth for vessels.	June 3, 1873	170	56	3	623
140, 978	Same..... Oscillating cabin for vessels.	July 15, 1873	576	194	4	74
141, 614	Same..... Oscillating berth for vessels.	Aug. 5, 1873	179	57	4	150
138, 225	Weiss, A. R., Brooklyn, N. Y. Machine for milling pipe-tips.	May 13, 1873	329	101	3	534
136, 114	Weiss, R., Brooklyn, N. Y. Hook.	Feb. 18, 1873	665	217	3	205
144, 170	Weiss, A. R., Brooklyn, N. Y. Scarf-clasp.	Oct. 28, 1873	726	243	4	468
142, 880	Welbourn, J. M., Caledonia, Ohio. Explosive engine.	Sept. 16, 1873	496	169	4	305
	Welch, A. T., et al. (See Clough, T., assignor.)					
	Welch, E. B. (See Anders, G. L., assignor.)					
5, 346	Welch, E. P., assignor to self, J. H. R. W., & H. P. Welch and J. A. Maloney, Georgetown, D. C. Middlings-purifier.	Apr. 1, 1873	229	70	3	375
135, 952	Same..... same.	Feb. 18, 1873	524	171	3	194
135, 953	Same..... same.	Feb. 18, 1873	525	172	3	194
134, 955	Welch, G. W., Fort Wayne, Ind. Bushing for piston-rods, &c.	Jan. 14, 1873	420	134	3	54
	Welch, H. H. (See Sheldon, N. P., assignor.)					
	Welch, H. P., et al. (See Welch, E. P., assignor.)					
	Same..... (Reissue.)					
	Welch, J. C., et al. (See Moloney, J., assignor.)					
	Welch, J. H., et al. (See Welch, E. P., assignor.)					
	Same..... (Reissue.)					
138, 719	Welch, L. S., Canaan, N. H. Fly-switch.	May 6, 1873	227	71	3	516
141, 246	Welch, P., assignor by mesne assignment to D. T. Welch, Saint Louis, Mo. Hoop-cutting machine.	July 29, 1873	852	278	4	113
	Welch, R. W., et al. (See Welch, E. P., assignor.)					
	Same..... (Reissue.)					
138, 720	Welch, T., Philadelphia, Pa. Automatic fan.	May 6, 1873	228	71	3	516
139, 964	Welch, W. H., Bloomington, Ill. Coffee-roaster.	June 17, 1873	499	156	3	672
	Welch, W. P., et al. (See Pettee, F. W., assignor.)					
141, 302	Weld, C. J., Brattleborough, Vt. Water-regulator for boilers.	July 29, 1873	901	295	4	117
141, 241	Weld, M. C., Closter, N. J. Window-blind.	Aug. 12, 1873	393	126	4	174
137, 743	Welding, C., New York, N. Y. Metallic lathing.	Apr. 8, 1873	428	132	3	403
141, 247	Weldon, A., Chicago, Ill. Apparatus for hardening copper balls.	July 29, 1873	854	278	4	113
137, 160	Weldon, F., Kilmorony, Ireland. Apparatus for compressing cotton, hay, &c.	Mar. 25, 1873	732	243	3	333
	Weldon, W. E. (See Porin, E. W., assignor.)					
	Welker, L. (See Steinhilper & Welker.)					
136, 013	Wellby, J., Frederickton, Canada. Railway dust-preventer.	Feb. 18, 1873	577	190	3	199
141, 905	Weller, E. D., Lima, N. Y. Vehicle.	Aug. 19, 1873	465	152	4	190
143, 650	Weller, M. E., Fort Plain, N. Y. Jig-saw.	Oct. 14, 1873	230	77	4	408
	Welling, W. M. (See Colburn, G. F. J., assignor.)					
139, 695	Wellings, S. H., and S. Soules, assignors to selves and E. Y. Kelley, Bridgeville, Mich. Harvester-cutter.	June 10, 1873	243	76	3	644
	Wellington, D., Boston, Mass. Cock for water-closets.					
	Wellington, W., Rockford, Ill. Clothes-pin.					
135, 501	Wellington, D., Virginia City, Nev. Break-beam for cars.	Nov. 15, 1873			4	504
145, 605	Wellman, M. J., New York, N. Y. Lamp-chimney.	Feb. 4, 1873	98	31	3	135
6, 555	Same..... (Design).	Dec. 16, 1873	514	169	4	651
6, 556	Same..... (Design).	Apr. 1, 1873			3	357
134, 718	Same..... Lamp-burner.	Jan. 7, 1873	203	66	3	21
5, 376	Welpton, J. B., Tabor, Iowa. Hame-tug clip.	Apr. 23, 1873	888	280	3	463
137, 519	Welpton, J. B., assignor to J. B. Welpton and J. M. Barbour, Tabor, Iowa. Buckle-attachment to harness-saddles.	Apr. 1, 1873	220	67	3	375
137, 398	Wells, A. S., New Britain, Conn. Bed-bottom.	Apr. 1, 1873	106	34	3	365
	Wells, A. W. & Co. (See Wilcox, W. R., assignor.)					
	Wells, D. H. (See Cooley, W. T., assignor.)					
	Wells, D. W. (See Wells, P. F., assignor.)					
145, 978	Wells, H., Woburn, assignor of one-half interest to D. Forbes, Cambridge, Mass. Needle-threading hook.	Dec. 30, 1873	873	283	4	702
143, 549	Wells, J. A., Waterbury, Conn. Machine for heading rivets.	Oct. 7, 1873	137	45	4	391
144, 298	Wells, J. M., Painesville, Ohio. Car-coupling.	Nov. 4, 1873	105	35	4	427
	Wells, K. (See Spears and K. & R. Wells.)					
136, 347	Wells, M. M., Hartwick, N. Y. Fork and grain-rake.	Feb. 25, 1873	883	284	3	234
139, 985	Wells, P. F., assignor to self and D. W. Wells, Milford, Mich. Cultivator.	June 17, 1873	500	158	3	672
	Wells, R. (See Spears and K. & R. Wells.)					
	Wells, T. F. (See Ott, A., assignor.)					
137, 967	Wells, W., assignor of one-half interest to E. P. Fuller, Salem, Mass. Revolving horse-rake.	Apr. 15, 1873	641	202	3	433
139, 445	Wells, W., Salem, Mass. Vapor-generator.	May 27, 1873	900	290	3	601
144, 581	Wells, W., assignor of one-half interest to D. Buffum, Salem, Mass. Vapor-generator.	Nov. 11, 1873	353	119	4	518
145, 466	Wells, W., Salem, Mass. Vapor-engine.	Dec. 9, 1873	379	125	4	628
135, 854	Wells, W. T., and G. E. Morehouse, Decatur, Ill. Shovel and spade.	Feb. 18, 1873	525	172	3	194
145, 261	Welsh, C. P., and E. J. Orr, Mahanoy City, Pa. Balanced valve.	Dec. 2, 1873	200	69	4	601
135, 186	Welsh, J. D., Farmland, Ind. Grain-drill teeth.	Jan. 21, 1873	627	205	3	76
	Welsh, J. H. (See Welsh, P. J. & J. H.)					
136, 826	Welsh, P. J. & J. H., Philadelphia, Pa. Attachable rocker for chairs.	May 13, 1873	330	101	3	535
	Welter, J. K., et al. (See Fordeu, J. M., assignor.)					
	Same..... (See Gross, E. L., assignor.)					
134, 829	Wempe, G., San Francisco, Cal. Needle-case.	Jan. 14, 1873	313	100	3	45
137, 909	Wemple, A., Chicago, Ill. Thrashing-machine.	Apr. 15, 1873	492	154	3	421
138, 467	Wendel, C., New York, N. Y. Lounge and bath-tub combined.	Apr. 29, 1873	1,103	348	3	488
	Wendell, I. P. (See Conner, J., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 520	Wendover, H., Norway, N. Y. Harrow	Apr. 1, 1873	221	68	3	375
138, 217	Wendt, L., Philadelphia, Pa. Pocket-book	Apr. 22, 1873	863	273	3	460
140, 228	Wenthoff, W. (See Kneisly & Wenthoff.)					
	Wentworth, F. W., assignor of one-half interest to G. W. Stackpole, Boston, Mass. Marking-brush	June 24, 1873	732	231	3	699
142, 066	Wentz, G., Cincinnati, Ohio. Game-board	Aug. 19, 1873	606	199	4	201
140, 661	Wenzel, H. J., San Francisco, Cal. Transmitting time-movement to distant dials	July 8, 1873	286	97	4	43
136, 885	Werden, C. A., Waukegan, Ill. Reel-rake for harvesters	Mar. 18, 1873	453	160	3	302
145, 704	Werner, C. E., Brookfield, Mo. Still for alcoholic spirits	Dec. 16, 1873	602	197	4	658
135, 023	Werner, H., Louisville, Ky. Self-acting dam	Jan. 21, 1873	496	159	3	75
139, 986	Werner, J., jr., Prairie du Sac, Wis. Harvester	June 17, 1873	501	159	3	672
142, 881	Same. Reel for harvesters	Sept. 16, 1873	497	170	4	305
134, 621	Werner, R., Hoboken, N. J. Crimping and fluting machine	Jan. 7, 1873	112	37	3	16
140, 326	Same. Crimping or fluting machine	June 24, 1873	821	261	3	707
141, 973	Werni, P., Newark, N. J. Air gas-machine	Aug. 19, 1873	517	171	4	194
139, 747	Wertheimer, L., New York, N. Y. Box for packing and preserving tobacco	June 10, 1873	292	90	3	648
140, 327	Westcott, B. S., assignor of one-half interest to L. Dodge, Corning, N. Y. Whiffletree	June 24, 1873	821	261	3	707
142, 825	Wessmann, M. F., Brooklyn, N. Y. Telegraph receiving-register	Sept. 16, 1873	453	153	4	301
142, 826	Same. Telegraph transmitting-key	Sept. 16, 1873	454	153	4	301
	Wesson, D. B. (See Smith & Wesson) (Reissue.)					
136, 348	Wesson, D. B., Springfield, Mass. Revolving fire-arm	Feb. 25, 1873	883	284	3	224
	Wesson, M., Springfield, Mass. Channeling soles of boots and shoes (Extension.)	May 24, 1873			3	558
5, 561	Wesson, M., Springfield, Mass., assignor to G. McKay, trustee. Machine for channeling soles of boots and shoes	Sept. 2, 1873	205	66	4	258
	West, C. (See Glosenkamp, I., assignor.)					
142, 972	West, C., Pittsburgh, Pa. Piles-supporter	Sept. 16, 1873	577	195	4	311
	West, D., et al. (See Sloan, D. S., assignor.)					
134, 778	West, E. P., Jersey City, N. J. Band-pulley	Jan. 14, 1873	265	86	3	41
138, 772	Same. Binding-folder	May 13, 1873	263	88	3	530
	West, F. M. (See Thurston & West.)					
	West, H. B. (See Brown & West.)					
137, 744	West, I. M., Summit, assignor of one-half interest to H. A. Iddings, Crete, Nebr. Earth-anger	Apr. 8, 1873	428	132	3	403
134, 719	West, J., and O. M. Parker, said Parker assignor to said West, Quincy, Ill. Steam bell-ringer	Jan. 7, 1873	204	66	3	23
145, 376	West, J. B., and J. C. Fish, assignors of one-half interest to W. H. Kelsey, Genesee, N. Y., and J. C. McKibbin, Washington, D. C. Machine for cutting and dressing stone	Dec. 9, 1873	301	101	4	622
	West, P. (See Lee, G. S., assignor.)					
135, 051	West, P., Worcester, Mass. Rivet for boots and shoes	Jan. 21, 1873	522	169	3	77
5, 670	West, P., and G. S. Lee, Worcester, Mass. Boot (Reissue.)	Nov. 25, 1873	763	257	4	575
142, 423	Same. Cards for social games	Sept. 2, 1873	88	29	4	249
142, 424	Same. Boot	Sept. 2, 1873	89	29	4	249
143, 047	Same. Game apparatus	Sept. 23, 1873	647	221	4	327
143, 789	Same. same	Oct. 21, 1873	328	129	4	430
	West, S. C. (See Bartlett, N., assignor.)					
	West, T. (See Watson, P. B., assignor.)					
142, 589	West, W. F., Haverstraw, N. Y. Seed drill and planter	Sept. 9, 1873	255	83, 84	4	274
139, 219	Westbrooks, J. W., and A. J. Clemmons, Aberdeen, Miss. Farm-gate	May 20, 1873	088	216	3	577
136, 349	Westcott, J. H., Oneida, N. Y. Chuck	Feb. 25, 1873	885	284	3	234
144, 811	Westcott, N., Nelson, assignor of one-half interest to D. Cross, Morrisville, N. Y. Draft-attachment for plows	Nov. 18, 1873	553	188	4	546
136, 942	Westerman, J., Sharon, Pa. Furnace for steam-boilers, &c	Mar. 18, 1873	537	177	3	306
	Western Union Telegraph Company. (See Stearns, J. B., assignor.) (Reissue.)					
	Westervelt, C. J. (See Wygant, Preston & Westervelt.)					
5, 504	Westinghouse, G., jr., Pittsburgh, Pa. Steam-power brake device (Reissue.)	July 29, 1873	1, 012	329	4	125
5, 505	Same. Steam-power air-brake device (Reissue.)	July 29, 1873	1, 014	329	4	126
5, 506	Same. Steam-power car-brake apparatus (Reissue.)	July 29, 1873	1, 016	329	4	126
136, 396	Same. Steam-power brake-coupling	Mar. 4, 1873	39	14	3	248
136, 397	Same. Hose-coupling	Mar. 4, 1873	40	14	3	249
136, 631	Same. Steam-power brake-coupling	Mar. 11, 1873	262	88	3	275
138, 927	Same. Valve device for steam and air brakes	May 13, 1873	330	102	3	535
138, 928	Same. Rotary-valve for steam-engine	May 13, 1873	332	102	3	535
141, 685	Same. Valve device for fluid-brakes	Aug. 12, 1873	257	83	4	164
142, 600	Same. Railway car-brake	Sept. 9, 1873	256	84	4	274
144, 005	Same. Locomotive air-brake	Oct. 28, 1873	589	195	4	456
144, 006	Same. Steam and air brake	Oct. 28, 1873	590	196	4	457
144, 582	Same. Slack-taking-up apparatus for steam and air brakes	Nov. 11, 1873	354	120	4	518
	Westlake, W., administrator. (See Schemioth, C.)					
138, 218	Westlake, W., Chicago, Ill. Slate-washer	Apr. 22, 1873	863	273	3	461
140, 393	Same. Platform for stoves	July 1, 1873	48	16	4	12
142, 134	Same. Lantern	Aug. 26, 1873	683	224	4	217
143, 550	Same. Locomotive head-light	Oct. 7, 1873	138	46	4	391
	Westmoreland, E. (See Westmoreland, W. and E.)					
137, 042	Westmoreland, J. M., assignor of one-half interest to A. J. Thompson, Willis, Tex. Sawing-machine	Mar. 18, 1873	620	205	3	313
140, 603	Westmoreland, W. and E., Nottingham, England, assignors of one-half interest to J. Kent, New York, N. Y. Feeding mechanism for sewing-machines	July 8, 1873	241	81	4	39
	Weston, C. H. (See Dennis & Weston.)					
134, 956	Same. (See Green, H. S., assignor.)					
141, 642	Weston, C. H., Lowell, Mass. Cloth-steaming machine	Jan. 14, 1873	421	135	3	54
5, 281	Weston, C. W., San Francisco, Cal. Fruit-box	Aug. 12, 1873	394	128	4	175
	Weston, E. R., Corinth, Me., assignor of one-half interest to T. McDonald, Burnisher for photographs, &c (Reissue.)	Feb. 11, 1873	454	147	3	175
145, 979	Weston, J., Duxbury, Mass. Cranberry-picker	Dec. 30, 1873	873	283	4	702
139, 841	Weston, J. H., Cincinnati, Ohio. Coupling tubular lightning-rods	June 10, 1873	374	116	3	655
	Weston, J. W. (See Tull & Weston.)					
144, 717	Weston, J. W., assignor to T. M. Jackson, Windsor, Ill. Road-scraper	Nov. 18, 1873	473	160	4	540
	Weston, T. A. (See Terhume, W. S., assignor.)					
134, 957	Weston, T. A., Ridgewood, N. J. Brake-clutch for hoisting-apparatus	Jan. 14, 1873	422	135	3	54
134, 958	Same. Brake-clutch for hoisting-machines	Jan. 14, 1873	423	135	3	54
146, 115	Westover, G. C., assignor of one-third interest to J. A. McClelland, Vernon, Ind. Suction-tube for planing-machines, &c	Dec. 30, 1873	994	321	4	712
135, 052	Wetmore, J., Salem, Ohio. Nut-locking device	Jan. 21, 1873	523	169	3	77
137, 268	Wetmore, J. W., Erie, Pa. Rain-water cut-off	Mar. 25, 1873	835	274	3	341
142, 540	Same. Air-cushion for doors	Sept. 2, 1873	185	63	4	257

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 097	Wetzel, D., Morris, Pa. Brake for coal-cars.....	May 20, 1873	574	180	3	567
143, 377	Wette, P. C. (See Rockwell, J. G., assignor.)					
144, 426	Wever, W. L., and A. W. Johnson, Plattsburgh, N. Y. Liquid measure.....	Dec. 9, 1873	303	102	4	622
136, 252	Weyand, P., and P. Hill, Morrisania, N. Y. Spring-seat for wagons and carts.....	Nov. 11, 1873	226	75	4	508
144, 645	Weyburn, A. W., Minneapolis, Minn. Coffee-roaster.....	Feb. 25, 1873	534	269	3	230
144, 171	Wharry, J. R., Moundsville, W. Va. Vegetable-cutter.....	Nov. 18, 1873	419	140	4	535
145, 921	Wharton, E. C., Philadelphia, Pa. Pump.....	Oct. 28, 1873	727	243	4	408
145, 262	Same.....	Dec. 23, 1873	800	282	4	684
142, 425	Wharton, J., Newark, N. J. Forming hat-bodies.....	Dec. 2, 1873	201	69	4	601
	Wharton, J. C., Nashville, Tenn. Lamp.....	Sept. 2, 1873	90	30	4	249
	Wharton, W., jr., Philadelphia, Pa. Dispensing with switches for railways..... (Extension)	Dec. 13, 1873			4	614
135, 304	Same..... Turn-table.....	Jan. 28, 1873	755	244	3	108
144, 172	Whealen, C., Dayton, Ohio, assignor to self and C. L. Hawes. Paper-machine.....	Oct. 28, 1873	728	243	4	468
140, 662	Wheat, A., Canaan, N. H. Split.....	July 8, 1873	287	97	4	43
135, 679	Wheat, G. W., Philipsburgh, Pa. Mop-head.....	Feb. 11, 1873	276	87	3	161
136, 792	Wheat, J. J., Wheeling, W. Va. Sewing-machine table.....	Mar. 11, 1873	399	132	3	286
145, 263	Wheatcroft, H. B., assignor to J. Austin & Co., New York, N. Y. Pipe-wrench.....	Dec. 2, 1873	202	69	4	601
	Wheatley, J. H., et al. (See Morrill, J. A., assignor.)					
136, 195	Wheeldon, W. A., assignor of one-half interest to D. Bean, Chicago, Ill. Curtain-fix-ture.....	Feb. 25, 1873	750	242	3	224
	Wheeler, A., trustee. (See Woodward, E., assignor.)					
	Wheeler & Wilson Manufacturing Company. (See House, J. A., assignor.)					
136, 572	Wheeler, C., jr., Auburn, N. Y. Wood pavement.....	Mar. 4, 1873	198	66	3	261
138, 773	Wheeler, C. E., Boston, Mass. Painting striped awnings.....	May 13, 1873	283	88	3	530
140, 102	Wheeler, C. H., Saint Louis, Mo. Table-leaf support.....	June 17, 1873	607	191	3	681
	Wheeler, E., Elmira, N. Y. Railway car-seat..... (Extension)	Sept. 20, 1873			4	285
144, 242	Wheeler, E. E., South Norwalk, Conn. Comb-holder.....	Nov. 4, 1873	65	20	4	483
134, 779	Wheeler, E. L., Scytheville, N. H. Scythe.....	Jan. 14, 1873	265	87	3	42
143, 048	Wheeler, E. P., Corinth, Miss. Fire-kindler.....	Sept. 23, 1873	648	222	4	327
143, 551	Same..... Automatic gate.....	Oct. 7, 1873	139	46	4	391
143, 651	Same..... Register and indicator.....	Oct. 14, 1873	231	78	4	408
144, 007	Same..... Railway switch.....	Oct. 28, 1873	593	196	4	457
141, 743	Wheeler, E. S., assignor to self and J. E. Wheeler, Westport, Conn. Button-fastening.....	Aug. 12, 1873	302	99	4	164
143, 800	Wheeler, E. T., Cannelton, Ind. Reciprocating-churn.....	Oct. 21, 1873	393	129	4	430
145, 540	Wheeler, H., Racine, Wis. Device for converting motion.....	Dec. 16, 1873	463	151	4	647
145, 705	Wheeler, H., Burlington, Vt. Cement for slate-roofing.....	Dec. 16, 1873	603	197	4	658
	Wheeler, H. F. (See Traak & Wheeler.)					
138, 546	Wheeler, H. F., Boston, Mass. Organ lever coupling for hydraulic motors.....	May 6, 1873	70	23	3	503
141, 843	Same..... Machinery for finishing the sole-edges of boots and shoes.....	Aug. 12, 1873	393	129	4	175
143, 552	Wheeler, H. F., and W. O. Wakefield, assignors to selves and G. Allen, Boston, Mass. Stop-mechanism for looms.....	Oct. 7, 1873	139	46	4	391
	Wheeler, H. W., executrix. (See Wheeler, L. H.)..... (Reissue)					
145, 541	Wheeler, J. A., Chippewa Falls, Minn. Windmill.....	Dec. 16, 1873	464	152	4	647
	Wheeler, J. E. (See Kirchrofer, L. F., assignor.)					
	Same..... (See Wheeler, E. S., assignor.)					
6, 947	Wheeler, J. E., Westport, Conn. Buttons for wearing apparel..... (Design)	Oct. 7, 1873			4	380
142, 306	Wheeler, J. H., Saint Louis, Mo. Folding table.....	Aug. 28, 1873	822	272	4	229
135, 187	Wheeler, J. J., Grinnell, Iowa. Car-starter.....	Jan. 21, 1873	628	205	3	86
	Wheeler, J. L. (See Halsted & Wheeler.)					
5, 531	Wheeler, L. H., deceased, by H. W. Wheeler, executrix, assignor of one-third interest to W. H. Wheeler, Beloit, Wis. Windmill..... (Reissue)	Aug. 12, 1873	399	130	4	175
139, 285	Wheeler, M. A., San Francisco, Cal. Paper-clip.....	May 27, 1873	765	242	3	590
136, 293	Wheeler, M. M., Galena, Ill., assignor of one-half interest to J. Jones, Dodgeville, Wis. Construction of boots and shoes.....	Feb. 25, 1873	834	270	3	230
	Same..... Gaiter.....	Oct. 28, 1873	729	243	4	468
144, 173	Wheeler, R. B., Dowagiac, Mich., assignor of one-half interest to H. Lardner. Basket..... (Reissue)	Mar. 18, 1873	630	208	3	314
5, 332	Wheeler, R. W., Bushnell, Ill. Cylinder for lining wooden pumps.....	July 15, 1873	410	139	4	61
140, 802	Wheeler, S., Albany, N. Y. Sawing-machine.....	Apr. 8, 1873	282	87	3	391
137, 581	Same..... Ore-washer.....	Dec. 23, 1873	671	219	4	676
145, 771	Wheeler, S. H., Niles, Mich. Basket.....	July 22, 1873	630	212	4	88
141, 023	Wheeler, W. H. (See Wheeler, L. H., assignor.)..... (Reissue)					
	Wheellock, A. (See Converse, G. C., assignor.)					
140, 328	Wheellock, J., Worcester, Mass. Nut for securing piston-heads to piston-rods.....	June 24, 1873	822	261	3	707
144, 174	Same..... Steam-engine valve-gear.....	Oct. 28, 1873	730	244	4	468
144, 583	Same..... Tool-holder and cutter-head for boring bars.....	Nov. 11, 1873	355	120	4	518
140, 663	Wheellock, W., assignor of one-half interest to W. T. Baker, Decorah, Iowa. Railway snow-plow.....	July 8, 1873	287	97	4	43
	Wheelwright, S., executor. (See Boyd, J. C.)..... (Extension)					
144, 718	Whelpley, J. A., Dartmouth, Nova Scotia. Skate.....	Nov. 18, 1873	474	161	4	540
137, 269	Whinnyates, J. W., Liverpool, England. Endless-chain propellers.....	Mar. 25, 1873	835	274	3	341
	Whipple, G. M., et al. (See Taylor, T. A., assignor.)					
143, 738	Whipple, H. E., Providence, R. I. Washer-cutter.....	Oct. 14, 1873	318	106	4	414
141, 408	Whipple, H. J. B., Meriden, Conn. Attaching knobs to spindles.....	July 29, 1873	1,001	327	4	125
137, 988	Whipple, I. B., Gloversville, N. Y. Gauntlet glove.....	Apr. 15, 1873	641	202	3	434
137, 642	Whipple, J. P., Whitewater, Wis. Car-coupling.....	Apr. 8, 1873	331	102	3	395
136, 632	Whipple, J. R., Boston, Mass. Cooler for wine.....	Mar. 11, 1873	264	89	3	275
137, 270	Whipple, M. K., Warren, Mass. Pulley.....	Mar. 25, 1873	837	275	3	341
	Whipple, R. M. (See Dickerson & Whipple)..... (Reissue)					
	Same..... (See Dickerson, T. S., assignor.)..... (Reissue)					
137, 521	Whipple, R. M., Chicago, Ill., and J. G. Blunt, Leavenworth, Kans. Manufacture of gas for illuminating, heating, &c.....	Apr. 1, 1873	221	68	3	375
134, 959	Whisenant, G. F., Chapel Hill, Tex. Compound for destroying caterpillars.....	Jan. 14, 1873	424		3	54
136, 115	Whitaker, E. V., Gloversville, N. Y. Glove.....	Feb. 18, 1873	665	217	3	205
	Whitaker, G. (See Jamieson, H. A., assignor.)					
145, 035	Whitaker, J., assignor to S. S. Cook, Woonsocket, R. I. Car-axle journal.....	Nov. 25, 1873	755	255	4	574
145, 264	Same..... Journal or shaft hanger.....	Dec. 2, 1873	203	70	4	601
145, 407	Same..... Journal and bearings.....	Dec. 9, 1873	380	126	4	628
146, 116	Whitaker, J., and S. S. Cook, said Whitaker assignor to said Cook, Woonsocket, R. I. Car-axle box.....	Dec. 30, 1873	995	321	4	719
142, 751	Whitaker, W. W., Gloversville, N. Y. Changeable gage car-truck.....	Sept. 9, 1873	383	128	4	284
142, 752	Same..... Car-axle box.....	Sept. 9, 1873	384	129	4	284
	Whitall, H. (See Burson, J., assignor.)					
141, 246	Whitcomb, I., Hingham, Mass. Method of blasting rock.....	July 29, 1873	854	279	4	113

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136, 116	Whitcomb, J. B., assignor of two-thirds interest to J. and A. Brittan, Beloit, Wis. Carriage-spring.	Feb. 18, 1873	666	219	3	205
	Whitcomb, W. W. (See Brackett & Whitcomb) (Reissue.)					
138, 774	Whitcomb, W. W., Boston, Mass. Tent-frame.	May 13, 1873	284	88	3	531
136, 799	White, A. M., Bridgeport, Conn., assignor to the Fairchild Water-Meter Company, New York, N. Y. Liquid meter.	Mar. 11, 1873	400	133	3	287
138, 304	White, C. H., White's Station, Mich. Fire-escape ladder.	Apr. 29, 1873	970	305	3	477
139, 220	Same. Railway-switch.	May 20, 1873	688	217	3	577
137, 522	White, D., Normal, Ill. Carpet-stretcher.	Apr. 1, 1873	224	69	3	375
	White, D. P. (See Berthet & Laberie, assignors.)					
	White, E. B., deceased, by L. C. White, administrator, Nashua, N. H. Alarm attachment for tills (Extension).	July 5, 1873			4	7
	White, F. (See Silber & White.)					
138, 219	White, G. R., Boston, Mass. Nursing-bottle.	Apr. 22, 1873	664	274	3	461
6, 623	White, G. W., New York, N. Y., assignor to P. and F. Corbin, New Britain, Conn. Door-knob (Design).	Apr. 29, 1873			3	471
6, 624	Same. Plates of door-bolts (Design).	Apr. 29, 1873			3	471
140, 664	White, G. W., Brooklyn, N. Y. Music-leaf turner.	July 8, 1873	228	97	4	43
140, 394	White, H., Chicago, Ill. Joiner's work-bench.	July 1, 1873	49	17	4	12
132, 307	White, H., La Fayette, Ind. Boot-lining.	Aug. 26, 1873	823	273	4	229
	White, H. F., et al. (See Beach & Hanson, assignors.)					
	White, H. G. (See Ryder, C., assignor.)					
141, 844	White, H. J., assignor to self and A. B. Hill, Boston, Mass. Cap and spoon for mustard-bottles.	Aug. 12, 1873	396	129	4	175
139, 639	White, H. K., Chelsea, assignor to Parker, White & Co., Boston, Mass. Tipping-chair.	June 3, 1873	171	56	3	623
142, 308	White, J., South Amboy, assignor to self and C. S. Worts, Jamesburgh, N. J. Spark-arrester.	Aug. 26, 1873	824	273	4	229
144, 175	White, J., Philadelphia, Pa. Faucet.	Oct. 28, 1873	733	244	4	468
	White, J. C. (See Tinnerholm, C. J., assignor) (Reissue.)					
5, 291	White, J. E., New York, N. Y., assignor to L. A. Corvet. Casting steuch-traps (Reissue).	Feb. 18, 1873	686	221	3	206
	White, J. H. (See Clark & Chaney, assignors.)					
143, 208	White, J. J., Norfolk, Va. Coal-scuttle.	Sept. 23, 1873	772	266	4	337
143, 862	White, J. J., Julinstown, N. J. Lightning-rod.	Oct. 21, 1873	445	148	4	435
137, 582	White, J. M., and A. J. Kee, Hannibal, Mo. Folding-ladder.	Apr. 8, 1873	283	87	3	391
136, 117	White, J. N., assignor of one-fourth interest to G. E. Sears, New Orleans, La. Rice-cleaning machine.	Feb. 18, 1873	667	218	3	205
135, 053	White, J. S., Portland, Me. Brush.	Jan. 21, 1873	524	169	3	77
145, 772	White, J. W., Weymouth, Mass. Guard for doors and windows.	Dec. 23, 1873	672	219	4	676
145, 773	Same. Window-guard.	Dec. 23, 1873	673	219	4	676
143, 739	White, L., Waterbury, Conn. Chimney-furnace.	Oct. 14, 1873	319	109	4	414
140, 749	White, L. B., assignor to self and S. R. White, Norfolk, Va. Plow (Extension).	July 8, 1873	362	122	4	49
	White, L. C., administrator. (See White, E. B.) (Extension.)					
	White, L. S., Waterbury, Conn. Burnishing-machine (Extension).	Apr. 5, 1873			3	325
143, 481	White, M. B., McLean County, Ill. Wheel for vehicles.	Oct. 7, 1873	68	24	4	386
5, 691	White, R., Lowell, Mass. Revolving fire-arm (Reissue).	Dec. 16, 1873	616	202	4	660
143, 394	Same. Same.	Sept. 30, 1873	943	319	4	367
	White, S. R. (See White, L. B., assignor.)					
	White, S. S. (See Edwards, C. E., assignor.)					
	Same. (See Rogers, J. G., assignor.)					
136, 573	White, T. H., and E. Knight, Cleveland, Ohio. Lamp.	Mar. 4, 1873	199	66	3	261
138, 970	White, V., Corry, Pa. Washing-machine.	May 13, 1873	448	141	3	544
140, 329	White, W. H. H., San Francisco, Cal. Medical compound for cure of consumption, &c.	June 24, 1873	823		3	707
135, 054	Whitehead, H. B., Holly Springs, Miss. Universal joint-coupling.	Jan. 21, 1873	524	169	3	77
139, 848	Same. Implement.	June 10, 1873	283	91	3	648
143, 801	Whitehead, J., Manchester, England. Dandy-roller for paper machines.	Oct. 21, 1873	393	130	4	430
134, 980	Whitehead, J. W., Saco, Me. Brake for spinning-mules.	Jan. 14, 1873	424	135	3	54
138, 458	Whitehill, J., Frederick, Md. Fertilizer.	Apr. 29, 1873	1, 104		3	488
	Whitehead, M. (See Lovejoy, A. J., assignor.)					
	Whitin Machine Works. (See Taff, G. E., assignor.)					
137, 271	Whiting, A. F., Crestline, Ohio. Reversible knob-latch.	Mar. 25, 1873	837	275	3	341
137, 272	Same. Same.	Mar. 25, 1873	838	275	3	341
	Whiting, E. B. (See Willett, G., assignor.)					
138, 459	Whiting, H. A., New York, N. Y. Machine for wiring and binding hats.	Apr. 29, 1873	1, 105	348	3	488
143, 312	Whiting, J. E., Harford, Pa. Turbine water-wheel.	Sept. 30, 1873	868	297	4	362
	Whiting, L. E. (See Bishop, G. W., assignor.)					
	Whiting Manufacturing Company. (See Marble & Glidden, assignors.)					
142, 601	Whiting, S. J., Philadelphia, Pa. Composition for pavements.	Sept. 9, 1873	258		4	274
138, 829	Whiting, T., Niles, Mich. Measuring wheels for wagon-tires.	May 13, 1873	333	102	3	535
140, 176	Whiting, T. H., Grand Haven, Mich. Fly-trap.	June 24, 1873	692	217	3	696
141, 303	Whiting, W. M., Brooklyn, assignor to the Plummer Sewing-Machine Company, New York, N. Y. Sewing-machine.	July 29, 1873	901	286	4	117
	Whitlock, A., et al. (See Knight, L., assignor.)					
134, 780	Whitlock, D., Newark, N. J. Mechanism for operating sewing-machines.	Jan. 14, 1873	266	87	3	42
142, 602	Whitman, E. J., Oakland, Cal. Kettle and pan scraper.	Sept. 9, 1873	258	84	4	274
	Whitman, F. H. (See Woodsum, E. H., assignor.)					
	Whitmon, J. M. (See Hawley, S. F., assignor.)					
	Whitmore, C. E. (See Hunter & Whitmore.)					
	Whitney, A., et al. (See Hubbell, N. C., assignor.)					
	Whitney, A. C. (See Hale & Whitney.)					
137, 745	Whitney, A. L., Fitchburgh, Mass. Button-hole cutter and punch.	Apr. 8, 1873	420	132	3	403
	Whitney Arms Company. (See Whitney, E., jr., assignor.)					
137, 583	Whitney, B. D., Winchendon, Mass. Band-sewing machine.	Apr. 8, 1873	283	87	3	391
137, 989	Whitney, E., jr., assignor to the Whitney Arms Company. Swivel-loop for fire-arms.	Apr. 15, 1873	642	202	3	434
	Whitney, E. F., et al. (See Broadbooks, P., assignor.)					
139, 640	Whitney, E. R., Magog, Canada. Type.	June 3, 1873	172	57	3	623
	Whitney, H. W. (See Whitney, J. and H. W.)					
137, 643	Whitney, J. and H. W., Boston, Mass. Musical-instrument.	Apr. 8, 1873	332	132	3	395
6, 362	Whitney, J. B., New York, N. Y. Hinge (Design).	Jan. 21, 1873			3	71
6, 363	Same. Door-knobs (Design).	Jan. 21, 1873			3	71
6, 364	Same. same (Design).	Jan. 21, 1873			3	71
6, 365	Same. Key-hole escutcheon (Design).	Jan. 21, 1873			3	71
6, 357	Same. Bell-pull (Design).	Apr. 1, 1873			3	357
	Whitney, J. H. (See Livingston, W., assignor.)					
134, 961	Whitney, J. H., Rochester, Minn. Sewing-machine.	Jan. 14, 1873	424	136	3	54
	Whitney, M. L., et al. (See Scott & Hiltz, assignors.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 962	Whittemore, A., Cambridgeport, Mass. Coin-counting implement	Jan. 14, 1873	426	136	3	54
138, 061	Same. Scissors	Apr. 22, 1873	729	231	3	450
140, 229	Same. Car-starter	June 24, 1873	732	231	3	699
140, 803	Same. Machine for cutting off pegs in boots and shoes	July 15, 1873	411	139	4	61
142, 135	Same. Car-replacer	Aug. 26, 1873	683	225	4	217
143, 948	Same. Car-starter	Oct. 21, 1873	513	173	4	440
145, 468	Same. Same	Dec. 9, 1873	381	126	4	623
145, 469	Same. Peg-cutter	Dec. 9, 1873	382	126	4	623
142, 309	Whittemore, C. B., Arlington, Mass. Bundling kindling-wood	Aug. 26, 1873	684	272	4	229
	Whittemore, D. (See Herron, A. C., assignor.)					
142, 753	Whittemore, J. R., Chicopee Falls, Mass. Tobacco-ridger	Sept. 9, 1873	385	129	4	285
	Whitten, J. O., et al. (See Enos, J. A., assignor.)					
136, 633	Whitten, S. M., Alganssee, Mich. Combined carpet-rag looper, button-hole cutter, and press-board	Mar. 11, 1873	265	89	3	276
143, 482	Whittier, C., assignor to W. L. Bradley, Boston, Mass. Process of treating refuse matter	Oct. 7, 1873	69	24	4	386
141, 906	Whittier, R., assignor of one-half interest to R. Hackett, Oshkosh, Wis. Cant-hook	Aug. 19, 1873	467	152	4	190
142, 827	Whittlesey, J. E., and J. W. C. Peters, Chicago, Ill. Elastic-fabric mattress-frame	Sept. 16, 1873	455	154	4	301
138, 062	Whorf, C. F., Saint Louis, Mo. Railway car-beater and ventilator	Apr. 22, 1873	730	231	3	450
	Whritnoeur, E. (See Ball, C. A., assignor.)					
136, 574	Ward, E., assignor to B. F. Avery, Louisville, Ky. Cultivator	Mar. 4, 1873	200	66	3	261
142, 136	Same. Plow	Aug. 26, 1873	684	225	4	217
142, 310	Same. Plow-coltter	Aug. 26, 1873	685	274	4	229
144, 584	Same. Plow	Nov. 11, 1873	356	120	4	518
137, 334	Wickers, G. O., North Andover, Mass. Self-acting spinning-mule	Apr. 1, 1873	55	16	3	361
135, 188	Wickersham, J. B., Philadelphia, Pa. Iron fence	Jan. 21, 1873	629	205	3	86
136, 014	Wickersham, W., Boston, Mass. Nail for attaching soles to boots and shoes	Feb. 18, 1873	578	190	3	199
143, 483	Same. Railway-signal	Oct. 7, 1873	70	24	4	386
141, 845	Wickes, S. W., assignor to H. C. Silaby, Seneca Falls, N. Y. Mode of lubricating pistons in rotary steam-engines	Aug. 12, 1873	397	129	4	175
138, 305	Wickham, C. L., Utica, N. Y. Lathe-dog	Apr. 29, 1873	972	305	3	477
135, 502	Wickham, H., Jr., Chicago, Ill. Glass-mold	Feb. 4, 1873	99	31	3	135
143, 209	Wideman, F. M., Calverton, Md. Washing-machine	Sept. 23, 1873	773	266	4	338
	Widmann, J. G., Yonkers, N. Y. Stove (Extension)	May 10, 1873			3	497
5, 605	Same. same (Reissue)	Oct. 14, 1873	330	109	4	415
139, 641	Same. Drip-conductor	June 3, 1873	172	57	3	623
6, 724	Widmayer, L., assignor to P. and F. Corbin, New Britain, Conn. Drawer-pull (Design)	June 24, 1873			3	691
7, 076	Same. Lock-case (Design)	Dec. 23, 1873			4	671
135, 094	Widmer, J., Bristol, Conn. Hydro-steam-engine	Jan. 21, 1873	497	160	3	75
	Wiebe, E., Brooklyn, N. Y. Mode of advertising (Extension)	Nov. 15, 1873			4	504
145, 265	Wiegand, C., Virginia City, Nev. Process of separating silver from other metals	Dec. 2, 1873	204		4	601
	Wiegand, S. L. (See Moorhouse & Wiegand) (Reissue)					
145, 542	Wielinga, C. M., San Francisco, Cal. Paper-feeding machine	Dec. 16, 1873	465	152	4	647
	Wienhold, J. (See Lee, E. F., assignor) (Reissue)					
144, 719	Wiesebruck, F. W., New York, N. Y. Carbonic-acid-gas generator	Nov. 18, 1873	475	161	4	540
145, 139	Same. Fountain for soda-water, &c	Dec. 2, 1873	96	31	4	593
139, 937	Wieser, J., Williamsport, Pa. Shirt	June 17, 1873	466	146	3	669
	Wieting, W. H., et al. (See Dayton, M. E., assignor.)					
	Wiggin, J., jr. (See Bandon & Wiggin.)					
139, 525	Wiggin, J. E., assignor to H. H. Mawhinney, Stoneham, Mass. Cutting attachments for sewing-machines	June 3, 1873	69	23, 24	3	614
145, 470	Wiggin, J. G., Moultonville, N. H. Car-brake	Dec. 9, 1873	383	127	4	628
	Wiggin, W. H. (See Cozens & Wiggin.)					
145, 922	Wight, D. R., Southbridge, Mass. Carriage-jack	Dec. 23, 1873	801	262	4	626
	Wight, G. H. (See Wight, W. H., assignor.)					
135, 025	Wight, W. H., Princess Anne County, Va., assignor to self and G. H. Wight, Lowell, Mass. Soldering-tool	Jan. 21, 1873	408	160	3	75
140, 859	Wightman, D. A., East Greenwich, assignor to S. Scholfield, Providence, R. I. Roll for cigar-machines	July 15, 1873	458	156	4	65
140, 860	Same. Machine for making cigar-bunches	July 15, 1873	459	156	4	65
140, 861	Same. same	July 15, 1873	461	156	4	65
134, 576	Wightman, J. B., Brooklyn, N. Y. Child's carriage	Jan. 7, 1873	71	22	3	12
136, 476	Wightman, J. C., Boston, Mass. Lasting boots and shoes	Mar. 4, 1873	107	36	3	214
138, 547	Wightman, J. C., Newton, and J. H. Mills, Boston, Mass., said Wightman assignor by mesne assignment to said Mills. Apparatus for automatic control of combustion in hot water and hot air heating-apparatus	May 6, 1873	71	24	3	503
141, 249	Wightman, J. C., Newton, assignor by mesne assignment to C. Houghton, Boston, Mass. Steam and vacuum water-elevator	July 29, 1873	855	279	4	113
145, 140	Wightman, J. C., Newton, Mass. Filling for beds, mattresses, &c	Dec. 2, 1873	96		4	533
	Wigton, H. W. (See Legg, C., assignor.)					
	Wikidal, W. A., et al. (See Gibbs, L., assignor) (Reissue)					
142, 541	Wilbaux, A., Paris, France. Apparatus for printing on solid or inflexible surfaces	Sept. 2, 1873	196	63	4	257
140, 979	Wilber, F. A., Wabash, Ind. School-desk	July 15, 1873	576	194	4	74
144, 176	Wilber, I. L., Taunton, Mass. Loom-shedding mechanism	Oct. 28, 1873	733	244, 245, 246	4	428
138, 830	Wilber, J. D., Poughkeepsie, N. Y. Harvester	May 13, 1873	333	102, 103	3	515
142, 828	Same. same	Sept. 16, 1873	455	154, 155	4	311
	Wilber, W. H. (See Smith, S. H., assignor.)					
137, 273	Wilbraham, J., et al. (See Wilbraham, J. W., assignor.)					
	Wilbraham, J. W., assignor to self, T. and J. Wilbraham, Philadelphia, Pa. Reciprocating steam-engine	Mar. 25, 1873	839	275	3	341
	Wilbraham, T., et al. (See Wilbraham, J. W., assignor.)					
144, 720	Wilbur, A., Cedar City, Mo. Ice-house	Nov. 18, 1873	476	161	4	540
135, 955	Wilbur, J., Chesterton, Ind. Washing-machine	Feb. 18, 1873	528	172	3	194
139, 696	Wilbur, W. R., Cleveland, Ohio. Nut and washer machine	June 10, 1873	244	77	3	644
140, 750	Wilcox, A. W., New Haven, Conn. Reed-board for organs	July 8, 1873	363	123	4	47
137, 274	Wilcox, D., Derby, Conn. Manufacture of fifth wheels for carriages, &c	Mar. 25, 1873	839	276	3	342
144, 375	Wilcox, D., Birmingham, Conn. Die for forging offsets or stay-ends for carriages	Nov. 4, 1873	169	56, 57	4	492
143, 652	Wilcox, G., Norwich, Conn. Feed-gage for printing presses	Oct. 14, 1873	232	78	4	408
7, 067	Wilcox, H. C., assignor to The Meriden Britannia Company, West Meriden, Conn. Handle for table casters (Design)	Dec. 16, 1873			4	641
141, 409	Wilcox, H. E., Ilion, N. Y. Work-box	July 29, 1873	1,007	327	4	125
142, 311	Wilcox, H. S., Nevada, Ohio. Flue casing for forge-chimneys	Aug. 26, 1873	826	274	4	229
141, 846	Wilcox, J., Canton, Pa. Car-coupling	Aug. 12, 1873	397	130	4	175

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145, 036	Wilcox, J. H. (See Elam, W. P., assignor.)					
138, 110	Wilcox, M., and C. Depledge, Cassadaga, N. Y. Chair-rocker	Nov. 25, 1873	756	955	4	574
138, 971	Wilcox, N. O., Omaha, Neb. Washing-compound	Apr. 22, 1873	768	244	3	453
	Same..... Bed-bottom	May 13, 1873	448	141	3	545
134, 577	Wilcox, S. (See Babcock & Wilcox.)					
144, 376	Wilcox, W., Middletown, Conn. Manufacture of keys for locks	Jan. 7, 1873	72	92	3	12
139, 098	Wilcox, W. R., assignor to self and A. W. Wells & Co., Saint Joseph, Mich. Fruit basket	Nov. 4, 1873	170	57	4	492
5, 626	Wilcoxen, J., Russellville, Ill. Mechanism for operating screw-propellers	May 20, 1873	575	180	3	567
141, 410	Wilde, H., Newark, N. J., assignor to E. and B. Holmes, Buffalo, N. Y. Machine for croz- ing and chamfering staves (Reissue.)	Oct. 21, 1873	536	177	4	442
136, 886	Wildenthaler, F. J., Philadelphia, Pa. Apparatus for emptying sinks and cess-pools	July 29, 1873	1,008	327	4	125
135, 680	Wilder, A. A., Detroit, Mich., assignor of one-half interest to A. Rankin, Windsor, Onta- rio. Dummy or traction engine	Mar. 18, 1873	485	161	3	302
137, 275	Wilder, E. F., Lowell, Mass. Apparatus for filling oil-can	Feb. 12, 1873	277	87	3	161
136, 827	Wilder, E. F., West Roxbury, assignor to J. W. Tufts, Medford, Mass. Chest-pro- tector	Mar. 25, 1873	840	276	3	342
142, 426	Wilder, R. A., Cressona, Pa. Machine for breaking coal and other substances	Mar. 18, 1873	486	161	3	303
144, 721	Same..... Coal-breaker	Sept. 2, 1873	91	30	4	250
138, 972	Wilders, J. M., Croxton Keyrial, England, assignor of one-half interest to W. Silverwood, Baltimore, Md. Thrashing-machine	Nov. 18, 1873	476	161	4	540
137, 117	Wilen, G. C., Philadelphia, Pa. Row-lock	May 13, 1873	449	141	3	545
144, 812	Wiley, C. J., New York, N. Y. Printing-telegraph	Mar. 25, 1873	697	231	3	331
139, 221	Same..... Unison stop for printing telegraphs	Nov. 18, 1873	553	188	4	546
	Wiley, E., assignor of two-thirds interest to C. D. Alexander and E. R. Winship, Philadel- phia, Pa. Car-coupling	May 20, 1873	690	217	3	577
	Wiley, J. A., et al. (See Davis, H. D., assignor.)					
	Same..... (See McGovern, P., assignor.)					
	Same..... (See Stone, J. M., assignor.)					
143, 395	Wiley, S. D., et al. (See Grant, J. J., assignor.)					
135, 739	Wilford, J. B., assignor to H. Bradford, Reading, Pa. Coal-separator	Sept. 30, 1873	945	319	4	367
	Wilhelm, A. C. (See Wilhelm, C. and A. C.)..... (Extension.)					
145, 706	Wilhelm, A. C., Philadelphia, Pa. Button for garments	Feb. 11, 1873	325	104	3	165
145, 378	Wilhelm, C. and A. C., Philadelphia, Pa. Lamp-shade	May 3, 1873	325	104	3	470
146, 117	Wilhelm, J. C., Shaver's Creek, Pa. Game-apparatus	Dec. 16, 1873	603	197	4	658
	Wilkins, J. A., Indianapolis, Ind. Combined drawing-table and desk	Dec. 9, 1873	303	102	4	622
	Wilkerson, S., jr., Bassingbourn, England. Apparatus for raising, emptying, and filling sacks	Dec. 30, 1873	995	321	4	712
	Wilkins, J. L. (See Fewkes, J. T., assignor.)					
	Wilkins, P. P. (See Loggins & Wilkins.)					
140, 103	Wilkins, S. B., and A. Marcellus, Rockford, Ill. Bolt-machine	June 17, 1873	608	19, 20	3	681
140, 104	Wilkinson, A. W., New York, N. Y. Manufacturing illuminating-gas	June 17, 1873	609	.....	3	681
145, 707	Same..... Carbureter	June 17, 1873	610	192	3	681
6, 969	Same..... Distilling petroleum	Dec. 16, 1873	605	.....	4	658
137, 746	Wilkinson, G., assignor to Gorham Manufacturing Company, Providence, R. I. Spoons and forks..... (Design)	Oct. 22, 1873	.....	.....	4	452
142, 362	Wilkinson, G., A. L. Possez, J. P. Lafargue, and A. E. Dutreih, Paris, France. Process and apparatus for extracting the juice of sugar-cane, &c..... (Reissue.)	Apr. 8, 1873	430	133	3	403
136, 398	Wilkinson, J. B. (See Hermance, R. M., assignor)..... (Reissue.)					
6, 384	Wilkinson, J. M., Bloomington, Tenn. Animal-trap	Sept. 2, 1873	36	13	4	245
	Wilkinson, N. J., Kalamazoo, Mich. Car-starter	Mar. 4, 1873	41	14, 15	3	249
	Wilkinson, W. H. (See Moore & Wilkinson)..... (Design.)					
147, 644	Wilkinson, W. H., assignor to North American Iron Works, New York, N. Y. Vase. (Design)	Feb. 4, 1873	.....	.....	3	127
137, 523	Willard, C., Bartonsville, Vt. Saw-sharpening device	Apr. 8, 1873	332	103	3	305
136, 196	Willard, G., New York, N. Y. Apparatus for making ice	Apr. 1, 1873	224	69	3	375
140, 882	Willard, H., Grand Rapids, Mich. Barrel	Feb. 25, 1873	751	242	3	224
134, 792	Same..... Barrel-hoop	July 15, 1873	463	156	4	65
139, 222	Willard, Z. A., Boston, Mass. Furnace for roasting and treating ores	Jan. 14, 1873	267	87, 88	3	42
136, 477	Willby, S. P., Philadelphia, Pa. Combination of center and bilge keels for vessels	May 20, 1873	691	217	3	577
143, 427	Willerton, W., Jacksonville, Ill. Cultivator	Mar. 4, 1873	107	36	3	254
139, 468	Willott, G., Burlington, assignor to E. B. Whiting, Saint Albans, Vt. Apparatus for combing and mixing lampico and bristles	Sept. 2, 1873	92	30	4	250
140, 565	Willgohe, H., New York, N. Y. Step-ladder chair	June 3, 1873	41	13	3	612
134, 781	Williams, N. W., assignor to W. C. Baker, Philadelphia, Pa. Drop-light for chandeliers	July 1, 1873	192	64	4	24
137, 113	Williams, A., Burrell, Pa. Nut-lock	Jan. 14, 1873	267	87	3	42
144, 813	Williams, A. J., Seneca Falls, N. Y. Carpet-fastener	Mar. 25, 1873	700	232	3	331
	Williams, A. M., assignor of one-half interest to C. H. Duncan, Oil City, Pa. Sucker-rod joint for pumps	Nov. 18, 1873	554	188	4	546
	Williams, B. (See Turneaure, R., assignor.)					
137, 161	Williams, B. A., Berea, Ohio. Washing-machine	Mar. 25, 1873	734	244	3	334
5, 527	Williams, B. J., Philadelphia, Pa. Window screen and shutter	Aug. 5, 1873	195	61	4	151
5, 528	Same..... Blind-slat operator	Aug. 5, 1873	195	61	4	151
135, 869	Williams, C. D., Saint Paul, Minn. Boiler-furnace	Feb. 11, 1873	440	143	3	173
140, 980	Williams, C. H., Cleveland, Ohio. Die for making car-coupling pins	July 15, 1873	577	194	4	74
	Same..... Die for manufacturing car-coupling pins	July 15, 1873	578	195	4	74
143, 484	Williams, C. H., Syracuse, N. Y. Dish-washing machine	Oct. 7, 1873	73	25	4	386
145, 322	Williams Continuous-Spinner Company. (See Williams, C. S. M. and H. M., assignors.)					
23, 635	Williams, C. S. M. and H. M., assignors to The Williams Continuous-Spinner Company, Coldwater, Mich. Spinning-machine	Dec. 9, 1873	261	87, 88	4	619
114, 177	Williams, C. W., Port Jervis, N. Y. Gate for canal-locks	Apr. 12, 1873	.....	.....	3	386
	Same..... same (Disclaimer filed)	Apr. 11, 1873	.....	.....	3	386
	Williams, C. W., New York, N. Y. Cap for scissors-points	Oct. 28, 1873	734	245	4	468
	Williams, D., et al. (See Pitrat, M. J., assignor.)					
	Williams, D. F. (See Brown & Williams.)					
140, 982	Williams, D. G., York, Pa. Balance-wheel for sewing-machines	July 15, 1873	581	196	4	75
138, 460	Williams, E. R., et al. (See Burt, J., assignor)..... (Reissue.)					
144, 937	Williams, F. B., Sterling, Ill. Boring-attachment to lathes	Apr. 29, 1873	1,105	349	3	488
142, 829	Williams, F. J. (See Truxell & Williams.)					
141, 411	Williams, G. C., Catekill, N. Y. Heater and feeder for boilers	Nov. 25, 1873	667	226	4	566
143, 109	Williams, G. R., Ithaca, N. Y. Clock-calendar movement	Sept. 16, 1873	457	155	4	301
	Williams, H., Apple River, Ill. Wheels for vehicles	July 29, 1873	1,009	329	4	125
	Williams, H. A., Mansfield, Mass. Bracelet	Sept. 23, 1873	695	238	4	331

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138, 973	Williams, H. B., assignor to self, A. G. Corre, L. L. Benson, and J. B. Schroder, Cincinnati, Ohio. Stock for drill or other bits	May 13, 1873	449	141	3	545
138, 974	Williams, H. M. (See Williams, C. S. M., and H. M.)					
138, 775	Williams, H. W., Grinnell, Iowa. Wash-boiler attachment	May 13, 1873	451	142	3	545
139, 446	Williams, J., Philadelphia, Pa., assignor to E. and C. Chambers, jr. Process in casting in metallic molds	May 13, 1873	286		3	531
140, 330	Williams, J., Hemmingford, Canada. Carrier for excavators	May 27, 1873	901		3	601
143, 949	Williams, J., Topeka, Kans. Combined baker's oven and range	June 24, 1873	824	262	3	707
	Williams, J., South Haven, Mich. Fruit-dryer	Oct. 21, 1873	514	173	4	440
	Williams, J. D. (See Du Chateau & Williams.)					
	Williams, J. H. (See Wales, S. E., assignor.)					
	Williams, J. Q. (See Harrison, R. J., assignor.)					
	Williams, J. T. (See Williams, M. A. and J. T.)					
136, 575	Williams, J. T., Philadelphia, Pa. Can for oil and paint	Mar. 4, 1873	200	67	3	261
136, 888	Williams, L., and W. S. McKinnie, Stonelick Township, Ohio. Single-tree	Mar. 18, 1873	487	161	3	303
	Williams, L. P., et al. (See Morrill, J. A., assignor.)					
142, 312	Williams, L. U., La Fayette, Ind. Half-boot	Aug. 26, 1873	827	274	4	229
140, 983	Williams, M. A. and J. T., Chicago, Ill. Needle-threader for sewing-machines	July 15, 1873	582	196	4	75
142, 882	Williams, P. and R. A., Winona, Miss. Cotton-press	Sept. 16, 1873	498	170	4	305
	Williams, R., jr., et al. (See Langham, T., assignor.)					
	Same (See Wink, F., assignor.) (Design.)					
145, 708	Williams, R., Philadelphia, Pa. Harness-trace	Dec. 16, 1873	605	197	4	658
	Williams, R. A. (See Williams, P. and R. A.)					
142, 184	Williams, R. J., Ottumwa, Iowa. Grain-drier	Aug. 26, 1873	722	239	4	220
	Williams, R. N., et al. (See Cooper, S. L., assignor.)					
135, 026	Williams, R. S., Norristown, Pa. Earth-closet	Jan. 21, 1873	498	160	3	75
137, 747	Williams, R. S., New York, N. Y. Preparing gold for dentists	Apr. 8, 1873	432	133	3	403
140, 984	Same. Manufacture of dental gold	July 15, 1873	582	196	4	75
	Williams, S. M. (See Williams, C. S. M., and H. M.)					
136, 350	Williams, T., Providence, R. I. Pipe-wrench	Feb. 25, 1873	885	265	3	234
136, 351	Same. Self-adjusting pipe-wrench	Feb. 25, 1873	886	265	3	234
138, 548	Same. Combination-tool	May 6, 1873	73	24	3	503
144, 299	Williams, T. G., assignor to W. Warner & Co., Akron, Ohio. Eaves-trough hanger	Nov. 4, 1873	106	35	4	487
144, 499	Williams, W., New Berlin, Ill. Land-roller	Nov. 11, 1873	275	93	4	512
144, 938	Williams, W. H., Brooklyn, assignor to J. R. Graham, New York, N. Y. Machine for cutting veneers	Nov. 25, 1873	668	227	4	567
139, 938	Williams, W. R., Indiana Township, Pa. Vault-cover	June 17, 1873	466	146	3	669
136, 800	Williamson, C. H., and J. H. Allyn, Whitestown, N. Y. Machine for molding panels	Mar. 11, 1873	401	133	3	2-7
137, 043	Williamson, D., Greenville, N. J. Revolving fire-arm	Mar. 18, 1873	621	205	3	313
144, 814	Same. Revolving fire-arm	Nov. 18, 1873	555	188	4	546
144, 815	Same. Revolving fire-arm	Nov. 18, 1873	556	189	4	546
141, 024	Same. Revolving fire-arm	Nov. 18, 1873	556	189	4	546
	Willis, F. H., Boston, Mass. Shawl-strap	July 22, 1873	631	212	4	88
	Willis, J. W. (See Pierce, D., assignor.)					
140, 395	Willis, S. M., Athol, Mass. Mallet	July 1, 1873	49	17	4	12
145, 037	Willmann, A., Mount Carmel, Ill. Potato-digger	Nov. 25, 1873	756	255	4	574
135, 611	Willoughby, J. D., Washington, D. C. Stove-damper	Feb. 4, 1873	309	65	3	143
3, 249	Wills, H. A., Vergennes, Vt., assignor to J. A. Wills and L. S. Kingsland. Machine for finishing horse-shoe-nails	Jan. 21, 1873	615	209	3	87
137, 990	Wills, J., Rock Island, Ill. Single-tree for horse-cars	Apr. 15, 1873	643	203	3	434
	Wills, J. A. (See Wills, H. A., assignor.) (Reissue)					
139, 842	Willson, W. N. C., Summit Point, W. Va. Driving-rein support and protector	June 10, 1873	374	116	3	655
135, 670	Willmington, W., Toledo, Ohio. Car-wheel	Feb. 11, 1873	441	144	3	173
136, 399	Wilmot, S., Detroit, Mich. Clamp for cigar-molds	Mar. 4, 1873	42	15	3	249
137, 991	Wilmot, S. R., Bridgeport, Conn. Sheet-metal tubing	Apr. 15, 1873	643	203	3	434
137, 992	Same. Manufacture of sheet-metal tubing	Apr. 15, 1873	644	203	3	434
	Wilson, A., deceased, by J. H. Wilson, administratrix, New Britain, Conn. Mode of lighting gas by electricity	Aug. 16, 1873			4	159
136, 197	Wilson, A., Birmingham, England, assignor to J. Conaway and J. Locken, Philadelphia, Pa. Apparatus for tempering umbrella-ribs, steel-strips, &c	Feb. 25, 1873	751	242	3	224
140, 665	Wilson, A., Plainfield, N. J. Driven-well	July 8, 1873	269	98	4	43
143, 210	Wilson, A., Birmingham, England, assignor to J. Conaway and J. Locken, Philadelphia, Pa. Machine for affixing middle-bits to umbrella-ribs	Sept. 23, 1873	774	267	4	338
142, 313	Wilson, A. M., assignor of one-half interest to W. R. Gillett, White Pigeon, Mich. Washing-machine	Aug. 26, 1873	827	274	4	229
141, 191	Wilson, B. F., Salem, Ohio. Connecting-rod	July 22, 1873	787	258	4	100
135, 189	Wilson, C. F., Northbridge, Mass., assignor to self and J. E. Folk, Brooklyn, N. Y. Spindle-step for spinning-machines	Jan. 21, 1873	630	205	3	86
135, 190	Same. Spindle-bolster for spinning-machines	Jan. 21, 1873	630	206	3	86
138, 721	Wilson, C. F., Northbridge, Mass., and S. H. Miller, assignors to selves and J. E. Folk, Brooklyn, N. Y. Die for cutting and cupping sheet-metal	May 6, 1873	229	71	3	516
143, 211	Wilson, C. G., Milledgeville, Ga. Cotton-seed planter and guano-distributor	Sept. 23, 1873	774	267	4	338
136, 478	Wilson, C. O., Columbia, Ohio. Pump-nozzle	Mar. 4, 1873	108	36	3	254
	Wilson, F. C. (See Evenden, J. G., assignor.)					
141, 615	Wilson, F. C., assignor to self and J. G. Evenden, Chicago, Ill. Cans for oils	Aug. 5, 1873	179	57	4	150
	Wilson, G. (See Baisley & Wilson.)					
141, 097	Wilson, G., and G. H. Baisley, said Baisley assignor to I. V. Splawn, Hamilton, Mo. Earth-boring machine	July 22, 1873	695	233	4	93
	Wilson, Glass & Co. (See Glass, J., assignor.)					
	Wilson, G. W. (See Martin & Wilson.)					
135, 740	Wilson, G. W., Chebanse, Ill. Millstone-balance	Feb. 11, 1873	326	104	3	165
	Wilson, H., et al. (See Kirkup, L., assignor.)					
	Wilson, I. A. (See Wilson, L. B., assignor.)					
	Wilson, J., et al. (See Scott, E. E., assignor.)					
145, 471	Wilson, J., Dover, N. J. Furnace for reducing iron ores	Dec. 9, 1873	384	127	4	628
	Wilson, J., C. Green, and W. Wilson, jr., New Castle County, Del. Double-seaming machine	Apr. 19, 1873			3	416
	Same. Machine for corrugating sheet-metal	Apr. 19, 1873			3	416
	Wilson, J., C. Green, and W. Wilson, jr., Wilmington, Del. Powder-keg	July 12, 1873			4	35
143, 213	Wilson, J. B., Townsend's Inlet, N. J., assignor to self and W. A. Barrett, Philadelphia, Pa. Fertilizing soil	Sept. 23, 1873	777		4	338
	Wilson, J. C. (See Crippen, H. M., assignor.)					
136, 400	Wilson, J. C., Buffalo, N. Y. Duplex-telegraph	Mar. 4, 1873	42	15	3	249
	Wilson, J. F. (See Dowling, R. H., assignor.)					
	Wilson, J. H., administratrix. (See Wilson, A.) (Extension.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
137, 584	Wilson, J. K., Brimfield, Ill. Trestle-platform for unloading wagons.....	Apr. 8, 1873	284	88	3	391
	Wilson, J. M. (See Pettit, H., assignor.)					
142, 363	Wilson, J. M., Philadelphia, Pa. Air-heating furnace.....	Sept. 2, 1873	37	13	4	245
138, 722	Wilson, J. P., Yonkers, N. Y., assignor to A. Carr, Paterson, N. J. Steam-radiator.....	May 6, 1873	230	71	3	516
143, 212	Wilson, J. P., New York, N. Y. Attachment for ladies' work-tables.....	Sept. 23, 1873	776	267	4	338
	Wilson, J. W., et al. (See Neil, J. W., assignor.)					
139, 843	Wilson, J. W., assignor of one-half interest to J. W. Vose, Pawtucket, R. I. Middlings-purifier.....	June 10, 1873	375	116	3	655
	Wilson, K. H. (See Groff & Wilson.)					
135, 871	Wilson, L. B., Caldwell, assignor to L. A. Wilson, Zanesville, Ohio. Car-coupling.....	Feb. 11, 1873	442	144	3	174
140, 331	Wilson, M. E., and A. J. Perry, said Perry assignor to said Wilson, Galesburgh, Ill. Fluting and plaiting machine.....	June 24, 1873	825	262	3	707
136, 015	Wilson, M. M., Honey Grove, Tex. Screw-propeller.....	Feb. 18, 1873	579	191	3	199
	Wilson, N. E. (See Marion & Wilson.)					
	Wilson, T. (See Scott & Wilson.)					
139, 223	Wilson, T., and L. B. Kendall, Kalamazoo, Mich. Hose-coupling.....	May 20, 1873	691	217	3	577
	Wilson, W. (See Bowden & Shaw, assignors.)					
	Wilson, W., Jr. (See Green & Wilson.)					
	Same..... (See Wilson, Green & Wilson.) (Extension.)					
135, 392	Wilson, W., Madison, Ind. Sewing-machine table-top.....	Jan. 28, 1873	837	270	3	115
138, 063	Wilson, W., and J. Foster, Chariton, Iowa. Shoemakers' finishing-tools.....	Apr. 22, 1873	731	231	3	450
	Wilson, W. G. (See Carey, D. C., assignor) (Reissue.)					
140, 751	Wilson, W. H., Easton, Md. Mode of changing the speed in machinery.....	July 8, 1873	363	123	4	49
136, 401	Wimpenny, A. B., Hayfield, Great Britain. Smoothing-iron.....	Mar. 4, 1873	44	16	3	249
	Winall, A. W. (See Gault & Winall.)					
135, 393	Winall, A. W., Cincinnati, Ohio. Device for adjusting millstones.....	Jan. 28, 1873	837	270	3	115
137, 748	Same..... same.....	Apr. 8, 1873	433	133	3	403
139, 642	Same..... Hanging millstones.....	June 3, 1873	173	57	3	623
143, 602	Winans, T., Baltimore, Md. Pneumatic action for organs.....	Oct. 14, 1873	187	63, 64	4	404
144, 243	Winans, T. and W. L., Baltimore, Md. Construction of steam-vessels.....	Nov. 4, 1873	66	21	4	483
	Winans, W. L. (See Winans, T. and W. L.)					
144, 244	Winchell, J. B., and H. W. Rugg, Benton Harbor, Mich. Sand-band for vehicle-axles.....	Nov. 4, 1873	67	21	4	483
136, 118	Winchell, J. F., assignor to E. C. Middleton, Springfield, Ohio. Fare-box.....	Feb. 18, 1873	667	218	3	205
140, 985	Winchell, J. F., Springfield, Ohio, assignor by mesne assignment to J. B. Slawson, New York, N. Y. Fare-box.....	July 15, 1873	583	197	4	75
	Winchester, F. M. (See Danforth & Winchester.)					
138, 461	Winchester, G. C., Ashburnham, Mass. Tilting-chair.....	Apr. 29, 1873	1, 106	349	3	488
	Winchester Repeating-Arms Company. (See Smith & Wesson, assignors) (Reissue.)					
136, 294	Windle, G., assignor of one-half interest to N. N. Davis, New Cambria, Mo. Hand-planter.....	Feb. 25, 1873	835	270	3	230
134, 578	Windship, G. B., Boston, Mass. Apparatus for physical culture.....	Jan. 7, 1873	72	23	3	12
138, 598	Winecoff, J., Lavanaville, Pa. Wagon-seat.....	May 6, 1873	114	37	3	507
	Winfield, H. (See Bell & Winfield.)					
142, 314	Wing, A. T., assignor to G. F. Dillingham, Old Town, Me. Lathe for turning spools.....	Aug. 26, 1873	828	275	4	229
143, 863	Wing, J., Boston, assignor to New England Glass Company, East Cambridge, Mass. Process of forming orifices and necks on glass articles.....	Oct. 21, 1873	446	148	4	435
	Same..... Mold for glass-lamp fountains.....	Oct. 21, 1873	446	149	4	435
143, 963	Wingate, E. B., Friendship, N. Y. Nut and bolt fastening.....	Jan. 14, 1873	427	136	3	54
144, 585	Wingate, G., Boston, Mass. Draught-apparatus for metallurgic and other furnaces.....	Nov. 11, 1873	357	120	4	518
144, 586	Same..... Chimney-top.....	Nov. 11, 1873	358	121	4	519
144, 939	Same..... Baking-mold.....	Nov. 25, 1873	669	227	4	507
135, 612	Wingate, J. D., Carbondale, Pa. Depurator for the teeth and gums.....	Feb. 4, 1873	211	65	3	143
145, 038	Wingo, B. W., assignor of one-half interest to J. H. Davis, Chillicothe, Mo. Cultivator.....	Nov. 25, 1873	757	256	4	574
6, 387	Wink, F., assignor to T. Dolan and R. Williams, jr., Philadelphia, Pa. Shawl..... (Design)	Feb. 11, 1873			3	156
6, 388	Same..... same..... (Design)	Feb. 11, 1873			3	156
6, 389	Same..... same..... (Design)	Feb. 11, 1873			3	156
6, 390	Same..... same..... (Design)	Feb. 11, 1873			3	156
6, 391	Same..... same..... (Design)	Feb. 11, 1873			3	156
6, 392	Same..... same..... (Design)	Feb. 11, 1873			3	156
6, 393	Same..... same..... (Design)	Feb. 11, 1873			3	156
6, 394	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 395	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 396	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 397	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 398	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 399	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 400	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 401	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 402	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 403	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 404	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 405	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 406	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 407	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 408	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 409	Same..... same..... (Design)	Feb. 11, 1873			3	157
6, 835	Same..... Shawl-pattern..... (Design)	Sept. 2, 1873			4	241
6, 836	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 837	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 838	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 839	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 840	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 841	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 842	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 843	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 844	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 845	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 846	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 847	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 848	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 849	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 850	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 851	Same..... same..... (Design)	Sept. 2, 1873			4	241
6, 852	Same..... same..... (Design)	Sept. 2, 1873			4	241

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6, 853	Wink, F., assignor to T. Dolan and R. Williams, jr., Philadelphia, Pa. Shawl-pattern. (Design)	Sept. 2, 1873			4	241
6, 854	Same.....Slawl-pattern..... (Design)	Sept. 2, 1873			4	241
6, 855	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 856	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 857	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 858	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 859	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 860	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 861	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 862	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 863	Same.....same..... (Design)	Sept. 2, 1873			4	241
6, 864	Same.....same..... (Design)	Sept. 2, 1873			4	241
143, 553	Winn, S. A. (See Winn, S. M. and S. A.) Winn, S. M. and S. A., San Francisco, Cal. Sofa-bedstead	Oct. 7, 1873	141	47	4	392
	Winningham, H. (See Davidson & Winningham.) Winship, E. R., et al. (See Wiley, E., assignor.)					
144, 245	Winship, G., Atlanta, Ga., assignor to self and R. Winship. Baling-press	Nov. 4, 1873	68	21	4	483
	Winship, R. (See Winship, G., assignor.)					
137, 749	Winship, T. J., Montreal, Canada. Apparatus for molding cigars	Apr. 8, 1873	434	134	3	403
	Winslow, A. P., Cleveland, Ohio. Roof for railway cars..... (Extension)	Aug. 9, 1873			4	135
136, 119	Winslow, C., Boston, Mass. Elastic material for boot and shoe gores	Feb. 18, 1873	669	219	3	205
	Winsor, I. C. (See Dorwart, B. K., assignor.)					
5, 282	Winsor, J. S., Providence, assignor by means assignment to L. A. Cook, Woonsocket, and J. Kendrick, Providence, R. I. Machine for making weaver's harness..... (Reissue)	Feb. 11, 1873	455	148	3	175
	Winston, A. G., et al. (See Conner, W. M., assignor.) Winston, A. V., et al. (See Conner, W. M., assignor.)					
	Winter, J. A. (See Leyer & Winter.)					
110, 863	Winter, J. F., Brooklyn, N. Y. Paper-file	July 15, 1873	463	157	4	65
140, 566	Winter, H. R., Cedar Falls, Iowa. Mop, wringer, and scrubber combined	July 1, 1873	192	65	4	21
	Winter, W. W. (See Lusby & Winter.)					
139, 347	Winterbauer, L., New York, N. Y. Liquid-sealed valve	May 27, 1873	810	259	3	594
	Winterberg, C. C. (See Mooney, Van Dorn, and Winterberg.)					
142, 067	Wireman, F. C., New York, N. Y. Lamp-extinguisher	Aug. 19, 1873	607	200	4	201
145, 076	Wirick, V., Chicago, Ill. Car-starter	Dec. 2, 1873	34	11	4	588
142, 315	Wirth, A., assignor to self and C. Kolb, New York, N. Y. Hinge	Aug. 26, 1873	829	275	4	229
145, 077	Wirtz, H. C., and C. Gebhardt, jr., Northfield, Minn. Reciprocating-winnower	Dec. 2, 1873	35	11	4	588
143, 049	Wise, J., assignor to the Davis Sewing-Machine Company, Watertown, N. Y. Gathering and ruffling attachment for sewing-machines	Sept. 23, 1873	648	222	4	327
142, 830	Wise, S. G., Edgerton, Ohio. Thill-coupling	Sept. 16, 1873	458	155	4	301
137, 210	Wishart, T., assignor of one-half interest to S. G. Garman, Clayton, Del. Connecting-post for electrical apparatus	Apr. 15, 1873	493	154	3	421
	Wiswell, R. A. (See Wiswell, T. L., assignor.)					
140, 752	Wiswell, T. L., assignor to R. A. Wiswell, Olathe, Kans. Portable-fence	July 8, 1873	364	123	4	49
144, 008	Wiswell, W. M., Portland, Me. Car-coupling	Oct. 28, 1873	594	197	4	457
137, 119	Withers, W. R., Newark, N. J. Toy	Mar. 25, 1873	700	232	3	331
142, 831	Withey, J. B., Chicago, Ill. Wheel for vehicles	Sept. 16, 1873	458	155	4	301
	Withington, G. (See Taylor & Withington.)					
136, 889	Withington, G., Ione City, and F. F. Taylor, San Francisco, Cal. Car-coupling	Mar. 12, 1873	487	162	3	303
142, 068	Withington, J., Blossburgh, Pa. Furnace-grate	Aug. 19, 1873	608	200	4	201
	Witmer, B. R. (See Brubacker & Witmer.)					
138, 549	Witovec, F. J., assignor to self and J. G. Butler, Saint Louis, Mo. Tobacco-press	May 6, 1873	73	24	3	504
140, 753	Witsell, G. L., Beverly, N. J., assignor of one-half interest to T. L. Bates, Philadelphia, Pa. Washing-machine	July 8, 1873	365	123	4	49
	Witteck, C. (See Beiderhase & Witteck.)					
135, 872	Witter, B., Sherrill's Mount, Iowa. Cultivator	Feb. 11, 1873	443	144	3	174
140, 754	Witter, G., Sherrill's Mount, Iowa. Tenoning and boring machine	July 8, 1873	366	124	4	49
	Witzenmann, H. (See Levassieur, E. I., assignor.)					
144, 879	Witzigman, E., Buffalo, N. Y. Seeding-machine	Nov. 25, 1873	624	212	4	562
	Wock, J. (See Leaver & Wock.)					
144, 178	Woerd, C. V., Waltham, Mass. Watchmaker's lathe	Oct. 28, 1873	735	245	4	468
142, 317	Woiceski, W., Bloomington, Ill. Punching-machine	Aug. 26, 1873	831	276	4	229
140, 177	Wolcott, G. T., assignor to self and H. P. Graves, Detroit, Mich. Bill and paper file	June 24, 1873	693	217	3	696
141, 616	Wolf, A. N., Allentown, Pa. Water-wheel	Aug. 5, 1873	180	57	4	150
139, 844	Wolf, C., Rochester, N. Y. Bedstead-fastening	June 10, 1873	375	117	3	655
142, 973	Same.....same.....	Sept. 16, 1873	578	195	4	312
145, 266	Same.....same.....	Dec. 2, 1873	205	70	4	601
	Wolf, D., et al. (See Liebrich, C., assignor.)..... (Reissue)					
132, 831	Wolf, L. M. N., Avon, Conn. Stamp-bracket for sewing-machines	May 13, 1873	336	103	3	535
	Wolf, M. W. (See Dewey, H. S., assignor.)					
	Wolfe, D. J. (See Mills & Wolfe.)					
5, 442	Wolfe, G. G., Troy, N. Y. Reservoir cooking-stove..... (Reissue)	June 10, 1873	380	118	3	655
142, 974	Wolff, A. D. B., Paris, France. Transposing key-board	Sept. 10, 1873	579	196	4	312
145, 472	Wolff, O. P., assignor to Strobridge & Co., Cincinnati, Ohio. Process of transferring lithographic prints on to glass, &c	Dec. 9, 1873	386		4	628
	Same.....Lithographic transferred print	Dec. 16, 1873	515		4	651
145, 606	Wolf, W., New York, N. Y. Steam-bathing apparatus	Aug. 26, 1873	723	239	4	220
142, 185	Wolfram, A. G., Apex, N. C. Caisson	Nov. 25, 1873	757	256	4	574
145, 039	Wolffinger, F. R., Chicago, Ill. Sewing-machine table	July 29, 1873	857	279	4	113
141, 250	Wolford, J., and R. Conner, Knightsville, Ind. Superheater for steam-boilers	May 6, 1873	230	72	3	516
138, 723	Same.....Pump	Aug. 5, 1873	92	28	4	142
141, 514	Wollston, P. N. (See Hothkiss & Wollston.)					
136, 801	Wollensack, J. F., Chicago, Ill. Transom-lifter and lock	Mar. 11, 1873	403	133	3	287
145, 040	Same.....Curtain-fixture	Nov. 25, 1873	759	256	4	574
	Wolohan, J. (See Jaquith & Wolohan.)					
132, 776	Wolters, C., and I. Rudigier, Pittsburgh, Pennsylvania. Apparatus for improving liquors	May 13, 1873	286	88	3	531
142, 316	Wood, A., jr., Conshohocken, Pa. Rolling-mill	Aug. 26, 1873	830	275	4	229
	Wood, A. J., trustee. (See Chicken, W., assignor.)					
140, 986	Wood, A. W., assignor to J. B. Slawson, Saint Louis, Mo. Change-gate	July 15, 1873	585	197	4	75
144, 816	Wood, B. L., Taunton, Mass. Belt-hole scupper	Nov. 18, 1873	557	189	4	546
	Wood, C., et al. (See Jackson, L. G., assignor.)					
143, 485	Wood, C., Middlesborough-on-Tees, England. Apparatus for granulating slag-iron, &c	Oct. 7, 1873	74	25	4	386
144, 009	Same.....Manufacture of iron and steel from granulated iron	Oct. 28, 1873	585		4	457
142, 542	Wood, C. A., Kentland, Ind. Weather-guard for doors	Sept. 2, 1873	157	64	4	258

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 377	Wood, C. J. (See Henry & Wood.)					
	Wood, C. L., Calais, Me. Snow-plow for railways	Nov. 4, 1873	171	57	4	492
145, 824	Wood, D. (See Robinson & Wood)					
138, 777	Wood, D., Hoboken, N. J. Rock-drilling machine	May 13, 1873	287	80	3	531
	Wood, E. (See Wood, J. & E.)					
136, 890	Wood, E. M., Needham, Mass. Metallic can, for meats, paints, &c.	Mar. 18, 1873	488	162	3	303
145, 824	Wood, E. O., Nashua, N. H. Till-alarm	Dec. 23, 1873	711	234	4	679
6, 377	Wood, H. A., Bangor, Me. Cooking-stove	Jan. 28, 1873			3	100
	Wood, J. (See Hanford & Wood.)					
	Wood, J., et al. (See Powell, A. H., assignor.)					
138, 724	Wood, J., New York, N. Y. Vault-light	May 6, 1873	231	72	3	516
5, 473	Wood, J., Red Bank, N. J., assignor of one-half interest to E. R. Bennett. Railway-frog.					
	(Reissue)					
138, 643	Wood, J., Red Bank, N. J. Railway-crossing	July 1, 1873	201	67	4	24
140, 332	Same..... Railway-frog	June 3, 1873	174	57	3	623
140, 604	Wood, J., New York, N. Y. Can-opener	June 24, 1873	825	262	3	707
144, 880	Wood, J., Red Bank, N. J. Means for operating railway-switches	July 8, 1873	242	82	4	39
145, 041	Same..... Railway-frog	Nov. 25, 1873	625	212	4	562
	Wood, J. E. (See Vanderpool, F., assignor.)					
145, 141	Wood, J. E., Huntington, W. Va. Fire-place grate	Nov. 25, 1873	760	257	4	574
114, 587	Wood, J. F., Wilmington, Del. False bottom for water-coolers	Dec. 2, 1873	97	32	4	583
138, 778	Wood, J. S., Brooklyn, N. Y., assignor of one-half interest to J. J. Carberry, Philadelphia, Pa. Gas-generator	Nov. 11, 1873	358	121	4	519
140, 449	Wood, J. W., Conshohocken, Pa. Hinge	May 13, 1873	289	89	3	531
140, 864	Wood, L. S., Marion, Iowa. Floor	July 1, 1873	88	31	4	15
144, 490	Wood, M. R., Chicago, Ill. Car-coupling	July 15, 1873	464	157	4	65
	Wood, O. (See Collins & Morrison, assignors.)					
	Wood, R. (See Harwood & Wood)					
	Wood, R. O. (See McCall & Wood.)					
141, 528	Wood, S. B., and W. S., R. Y. H., and A. W. Terry, Hamburg, Ark. Flooring-clamp	Nov. 11, 1873	276	83	4	512
	Wood, S. D. (See Nelson, D. A., assignor.)					
136, 352	Wood, S. W., Cornwall, N. Y. Machine for patching bullets	Aug. 5, 1873	102	32	4	143
	Wood, S. W., Cornwall, N. Y. Machine for patching bullets	Feb. 25, 1873	886	285	3	234
	Same..... Folding-guide for sewing-machines			286		
138, 306	Same..... Forming metallic cases for cartridges, caps, &c	Apr. 29, 1873	972	305	3	477
144, 010	Same..... Cartridge for fire-arm	Oct. 28, 1873	595	197	4	457
144, 011	Same..... Metallic cartridge-case	Oct. 28, 1873	596	197	4	457
144, 012	Same..... Metallic cartridge-case	Oct. 28, 1873	597	197	4	457
	Wood, T. (See Atkinson & Klein, assignors.)					
	Same..... (See Atkinson, W., assignor.)					
139, 348	Wood, T. H., assignor to J. B. Brewster & Co., New York, N. Y. Carriage-spring	May 27, 1873	811	259	3	594
	Wood, W. A. (See Locke, S. D., assignor.)					
136, 295	Wood, W. A., Hoosick Falls, New York, N. Y. Harvester	Feb. 25, 1873	836	270	3	230
5, 474	Wood, W. D., McKeesport, Pa. Manufacture of sheet-iron	July 1, 1873	202		4	25
137, 585	Same..... Manufacturing sheet-iron	Apr. 8, 1873	284		3	391
140, 865	Wood, W. D., assignor to self and J. Clarridge, Mount Sterling, Ohio. Treadle of sewing-machines	July 15, 1873	464	157	4	65
142, 754	Wood, W. D., McKeesport, Pa. Hammer for planishing sheet-iron	Sept. 9, 1873	385	129	4	285
	Wood, W. J. (See Chapman, L., assignor.)					
	Wood, W. W. W. (See Brear, A., assignor.)					
140, 333	Woodbridge, W. E., Little Falls, N. Y. Process of separating vegetable fiber	June 24, 1873	826	263	3	708
139, 697	Woodburn, J., Saint Louis, Mo., assignor to Woodburn-Sarven Wheel Company, Indianapolis, Ind. Wheel for vehicles	June 10, 1873	244	77	3	644
	Woodburn-Sarven Wheel Company. (See Woodburn, J., assignor.)					
145, 473	Woodbury, D., Rochester, N. Y. Horse-power	Dec. 9, 1873	387	128	4	628
	Woodbury, J. A. (See Thayer, H. H., assignor)					
138, 462	Woodbury, J. P., Boston, Mass. Planing-machine	Apr. 29, 1873	1, 107	349	3	488
	Woodcock, J. M., Bridgeport, Ohio. Fire-place grate			350		
137, 993	Woodfine, J. J., Hoboken, N. J. Life-preserving mattress	Apr. 15, 1873	646	204	3	434
143, 313	Woodhouse, J. (See Barnes, J., assignor.)					
139, 489	Woodhouse, J. V., assignor to self, R. B. Lockwood, and W. A. Scott, Mine La Motte, Mo. Blast-furnace	Sept. 30, 1873	869	297	4	362
	Woodley, J. (See St. Amant, O., assignor.)					
	Woodman, A. (See Brown, C. B., assignor.)					
136, 687	Woodman, H., Boston, Mass. Hose port-hole for partition walls	June 3, 1873	42	13	3	612
145, 543	Woodmansee, L. D., Hamilton, Ohio. Leather-perforating machinery for harness-makers	Mar. 11, 1873	307	102	3	279
136, 576	Woodruff, C. D., Toledo, Ohio. Tea-kettle	Dec. 16, 1873	466	152	4	647
	Woodruff, T. T., Philadelphia, Pa. Seat and couch for railway-cars	Mar. 4, 1873	201	67	3	261
	Woods, E. P., et al. (See Dudley, G. D., assignor.)					
	Woods, E. S. (See Hunter & Woods.)					
	Woods, E. P., et al. (See Sherwood, D., assignor.)					
5, 269	Woods, E. P., and D. Sherwood, Lowell, Mass., assignors to selves and C. H. Latham. Egg stand and boiler	May 31, 1873			3	585
	Same..... same	Feb. 4, 1873	218	68	3	144
5, 270	Same..... same	Feb. 4, 1873	219	68	3	144
5, 483	Same..... same	July 8, 1873	370	125	4	50
134, 830	Woods, G., Cambridgeport, Mass. Reed-organ	Jan. 14, 1873	314	100	3	45
138, 725	Same..... Sounding-board bridge for musical instruments	May 6, 1873	232	72	3	516
145, 078	Same..... Reed-organ	Dec. 2, 1873	36	11, 12	4	588
144, 940	Woods, J. and E., Warrington, Great Britain. Machine for drawing wire	Nov. 25, 1873	670	227	4	567
144, 941	Woods, L. H., Syracuse, N. Y. Rotary-engine	Nov. 25, 1873	671	227	4	567
	Woods, S. A. (See Gray, W. H., assignor.)					
144, 588	Woods, S. A., Boston, Mass. Planing-machine	Nov. 11, 1873	359	121	4	519
	Woods, W. H. (See Randall, G. H., assignor.)					
137, 645	Woodside, R. H., Coulterville, Ill. Bee-hive	Apr. 8, 1873	333	103	3	395
134, 579	Woodside, G. W., assignor of half-interest to S. L. King, Philadelphia, Pa. Chromatic printing-press	Jan. 7, 1873	74	23	3	13
134, 720	Woodson, F. A., Selma, Ala. Steam-boiler	Jan. 7, 1873	205	66	3	23
144, 427	Woodsum, E. H., South Boston, Mass., assignor to F. H. Whitman, Harrison, Me. Block-fitting machine	Nov. 11, 1873	226	76	4	508
140, 230	Woodville, J., Washington, Ind. Railway-frog	June 24, 1873	734	232	3	700
135, 661	Woodward, E., assignor to A. Wheeler, trustee, Charlestown, Mass. Pegging-machine for boots and shoes	Feb. 11, 1873	278	88	3	161
	Woodward, J. O. (See Elliott & Woodward.)					
145, 079	Woodward, L., Nottingham, England, assignor to G. Fox. Knitting-machine	Dec. 2, 1873	38	12	4	588

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 355	Woodward, S. W., Buffalo, N. Y. Coal-screen	Apr. 29, 1873	1, 012	318	3	481
145, 923	Woodworth, A., Cambridge Village, N. Y. Metal-drilling machine	Dec. 23, 1873	801	262 263	4	686
139, 987	Woodworth, J. R. (See Brace, W. H., assignor.) Woodworth, P. N., Stony Point, Cal. Harrow Woodworth, R. N. (See Short, J., assignor.)	June 17, 1873	502	159	3	672
139, 845	Woodrudge, J., et al. (See Rogers, I. R., assignor.)	June 10, 1873	376	117	3	655
135, 956	Woollever, L. B., Mechanicsville, Ohio. Staff-gage for dressing millstones	Feb. 18, 1873	526	172	3	195
136, 891	Woolf, A. E., New York, N. Y. Made feathers	Mar. 18, 1873	430	162	3	303
135, 741	Woolford, T. T., Romney, W. Va. Harvester	Feb. 11, 1873	326	105	3	165
139, 749	Woolner, A., Louisville, Ky. Apparatus for treating grain for distillation	June 10, 1873	294	91	3	648
135, 191	Woolridge, J., Dean's Corners, Ill. Land-roller	Jan. 21, 1873	631	206	3	86
141, 192	Woolson, A., Springfield, Vt. Tray for cloth-finishing machines	July 22, 1873	787	258	4	100
142, 543	Woolworth, C. M., Ottumwa, Iowa. Ruffler for sewing-machines Woonsocket Machine Company. (See Chapman, G. A., assignor.) Wooster, G. C., et al. (See Rider, A. K., assignor.) Wooster, G. H. (See Walker, W., assignor.)	Sept. 2, 1873	198	64	4	258
5, 489	Wooster, W. L., Harvard, Ill. Automatic gate	July 15, 1873	592	199	4	76
136, 892	Same	Mar. 18, 1873	491	162	3	303
5, 567	Wooten, J. E., Reading, Pa. Rivet	Sept. 9, 1873	392	131	4	285
138, 550	Wootton, H. and J., Rochester, N. Y. Culinary steamer Wootton, J. (See Wootton, H. and J.)	May 6, 1873	75	24	3	504
135, 613	Worcester, E. J., Worcester, Mass. Drilling-machine	Feb. 4, 1873	211	66	3	143
138, 975	Same	May 13, 1873	451	142	3	545
5, 568	Worcester, L., Brattleborough, Vt. Machine for boring or mortising blind-stiles. (Extension)	July 5, 1873			4	7
5, 568	Worcester, L., Lebanon, N. H. Machine for boring and mortising blind-stiles. (Reissue)	Sept. 9, 1873	393	131 132	4	285
141, 304	Worden, A., Ypsilanti, Mich. Oiler for steam-engines	July 29, 1873	902	296	4	117
140, 605	Work, H. C., Brooklyn, N. Y. Doll	July 8, 1873	242	82	4	39
144, 722	Worrall, P., Sugartown, Pa. Rotary engine	Nov. 18, 1873	477	162	4	540
145, 709	Worrell, E., and B. C. Moore, Philadelphia, Pa. Device for suspending and exhibiting placards, &c.	Dec. 16, 1873	606	198	4	658
137, 044	Worrell, J., Belleville, Ind. Wheel-plow	Mar. 18, 1873	622	205	3	314
134, 622	Worrell, M. E., Monmouth, Ill. Pavement	Jan. 7, 1873	113	37	3	16
135, 957	Worrell, T. B., Philadelphia, Pa. Permutation-lock	Feb. 18, 1873	527	173 174	3	195
137, 871	Worsham, A. S. (See Lester, J. S., assignor.)	Apr. 15, 1873	542	169	3	425
140, 178	Worsley, W., Little Falls, N. J. Convertible freight-car	June 24, 1873	693	218	3	696
138, 551	Worstell, F. W., Saint Louis, Mo. Potato-planter	May 6, 1873	76	25	3	504
144, 043	Worster, G. H., Athol, Mass. Door-check and retainer	Oct. 22, 1873	620	205	4	459
136, 577	Worster, R., assignor of one-half interest to N. N. Knight, Central Falls, R. I. Stove-damper	Mar. 4, 1873	202	67	3	261
144, 378	Worswick, J. R., and E. Lewis, Cleveland, Ohio. Swing-joint for pipes Same	Nov. 4, 1873	171	57, 58	4	492
145, 379	Worth, H. S. (See Johnson, W. A. and F. V., and Worth.) Worth, W. E., San Francisco, Cal. Machine for printing oil-cloth Wortham, J. (See Young & Wortham.)	Dec. 9, 1873	304	102	4	622
145, 267	Worthen, W. E., and H. B. Kenwick, New York, N. Y. Corrugating sheet-metal. (Extension)	July 5, 1873			4	7
142, 975	Wotherspoon, J., and W. Foulis, Glasgow, North Britain. Gas-retort Worthington, H. R., Irvington, N. Y. Pumping-engine. (Extension)	Dec. 2, 1873	206	70	4	601
142, 975	Worthington, H. R., Irvington, N. Y. Pumping-engine. (Extension)	July 19, 1873			4	57
135, 503	Worthington, N. T., Branawick, Me. Clock-calendar Worze, C. S. (See White, J., assignor.) Wotkyns, T. S. (See Roberts, E. W., assignor.)	Sept. 16, 1873	580	196	4	312
138, 307	Wreath, A., assignor of two-thirds interest to E. Gwyn and W. Burns, Springfield, Ohio. Turbine water-wheel	Feb. 4, 1873	100	31, 32	3	135
137, 750	Wren, T., Hamilton, Nev. Ore-washer	Apr. 29, 1873	974	306	3	478
137, 811	Wren, W. C., Brooklyn, N. Y. Manufacturing illuminating-gas Same	Apr. 8, 1873	435	134	3	403
140, 606	Same	Apr. 15, 1873	493	154	3	421
138, 599	Same	July 8, 1873	243	82	4	39
135, 027	Same	May 6, 1873	115	38	3	507
142, 318	Wright, A., and A. F. Tew, Westfield, N. Y. Crow and tamping-bars Wright, A. D., and A. Roys, Belleville, Mich., assignors to A. D. Wright. Barn-door fastening	Jan. 21, 1873	499	161	3	75
145, 142	Wright, A. T., Oskaloosa, Iowa. Bee-hive	Aug. 26, 1873	831	276	4	229
144, 723	Wright, C. A. (See Wright, D. B., assignor.) Wright, C. W. (See Randol & Wright.)	Dec. 2, 1873	97	32	4	593
138, 726	Wright, D. B., assignor to C. A. Wright, Amesbury, Mass. Hub-boring machine	Nov. 18, 1873	478	162	4	540
142, 544	Wright, D. H., Terre Haute, Ind. Process of retouching photographic negatives	May 6, 1873	232	72	3	516
138, 976	Wright, E., Philadelphia, Pa. Walking-cane umbrella	Sept. 2, 1873	198	64	4	258
145, 924	Wright, E., Chicago, Ill. Mode of operating sewing-machines	May 13, 1873	452	142	3	545
140, 106	Wright, G., Savannah, Mo. Sieve Wright, G., Saint Joseph, Mo. Sieve Wright, G., M. Y. Holley, and H. R. Miles, Washington, D. C., assignors by mesne assignment to Gamewell & Co., New York, N. Y. Fire-alarm signal-box Wright, G. F. (See Sawyer & Wright.)	Dec. 23, 1873	802	263	4	686
139, 698	Wright, H., assignor of two-thirds interest to H. H. and B. F. Collins, Pittsburgh, Pa. Molasses-pitcher	June 10, 1873	245	77	3	644
141, 974	Wright, H. P., Bonaparte, Iowa. Steam-generator	Aug. 19, 1873	517	171	4	194
141, 530	Wright, H. W., assignor to A. Chapman, Glastenbury, Conn. Alloys Same	Aug. 5, 1873	103		4	143
145, 825	Same	Aug. 5, 1873	104		4	143
140, 118	Wright, J., New York, N. Y. Adjustable hanger for mirrors	Dec. 23, 1873	713	234	4	679
140, 987	Wright, J. B., Jersey City, N. J. Scroll-saw	Dec. 30, 1873	998	322	4	712
138, 220	Wright, J. C., and J. W. Sursa, Moline, Ill. Flat-iron heater	July 15, 1873	526	197	4	75
135, 458	Wright, J. F., and B. B. Jones, Columbus, Ind. Wheel for vehicles	Apr. 22, 1873	865	274	3	461
137, 994	Wright, J. S., and I. Benedict, Palmyra, N. Y. Potato-digger	Feb. 4, 1873	62	20	3	132
136, 949	Wright, J. S. R., Nichols, N. Y. Bolt for doors, &c.	Apr. 15, 1873	647	204	3	434
139, 099	Wright, J. W., assignor to W. H. I. Howe, New York, N. Y. Air-tight tin can Wright, L. (See Miller & Wright.)	Mar. 18, 1873	538	178	3	307
5, 532	Wright, L. P., Chicago, Ill. Road-scraper	May 20, 1873	576	181	3	568
142, 603	Wright, L. R., Schenectady, N. Y. Cultivator and plow combined. (Reissue)	Aug. 12, 1873	401	130	4	175
142, 604	Wright, L. S., Groton, N. Y. Last-block fastener	Sept. 9, 1873	258	85	4	275
136, 396	Same	Sept. 9, 1873	259	85	4	275
	Same	Feb. 25, 1873	838	271	3	231

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 477	Wright, P. J., and J. Thompson, Holyoke, Mass. Stop motions for drawing-frames.	May 27, 1873	902	291	3	601
141, 478	Wright, R., and J. H. Race, Brooklyn, N. Y. Chimney or globe holders.	Aug. 5, 1873	61	19	4	140
138, 977	Wright, S., Hillsborough, Mo. Step-ladder.	May 13, 1873	452	142	3	545
145, 710	Wright, S. J., Ellsworth, N. Y. Wrench.	Dec. 16, 1873	607	192	4	658
138, 463	Wright, T. T., Fayetteville, N. C. Plasterers' head-support.	Apr. 29, 1873	1,108	350	3	488
140, 866	Wright, T. T., Memphis, Tenn. Medical compound.	July 15, 1873	465	.....	4	85
139, 224	Wright, W., Newburgh, N. Y. Pump. (Extension).	Nov. 15, 1873	.....	.....	4	504
144, 817	Wright, W., New York, N. Y. Variable cut-off for steam-engines.	May 20, 1873	692	218	3	577
144, 818	Wright, W., Newburgh, N. Y. Compound-engine.	Nov. 18, 1873	557	189	4	546
138, 727	Wright, W. A., East Haven, Conn., assignor to American Coal-Barge Company, Bristol, Conn. Unloading coal-barges.	May 6, 1873	233	73	3	516
143, 802	Wright, W. G. (See Henderson & Wright.)	.....	.....	.....	.....	.....
142, 832	Wrightson, T., Stockton-on-Tees, England. Apparatus for lowering weights.	Oct. 21, 1873	394	130	4	430
6, 537	Wuerz, C., Kimmawick, Mo. Cut-off for cisterns, &c.	Sept. 16, 1873	459	156	4	301
139, 988	Wunder, A., assignor to Sargent & Co., New Haven, Conn. Door latch and handle. (Design)	Mar. 25, 1873	.....	.....	3	325
137, 276	Wurtele, A. C., New York, N. Y. Gyroscopic toy.	June 17, 1873	502	159	3	672
143, 050	Wyatt, J. N., Baltimore, Md. Lamp-burner.	Mar. 25, 1873	840	276	3	342
143, 430	Wyckoff, A., Elmira, N. Y. Hollow auger. (Extension)	July 12, 1873	.....	.....	4	36
143, 430	Wygant, J. H., C. Preston, and C. J. Westervelt, Hackensack, N. J. Disengaging towing-apparatus for boats.	Sept. 23, 1873	650	222	4	327
136, 120	Wylie, J. H., assignor of one-half interest to A. Edwards, Philadelphia, Pa. Putting up alkalis for making soap.	Oct. 7, 1873	31	.....	4	383
145, 544	Wyman, G. D., Oshkosh, Wis. Plow.	Feb. 18, 1873	669	219	3	205
135, 742	Wyman, G. M. (See Turbayne & Wyman.)	.....	.....	.....	.....	.....
145, 544	Wyman, M. L. (See Moore & Wyman.)	.....	.....	.....	.....	.....
135, 742	Wymau, S. T., Lynn, Mass. Backing-box holder.	Dec. 16, 1873	467	152	4	647
136, 802	Wynn, U., assignor of three-fourths interest to W. L. Patterson and J. G. Manahan, Sterling, Ill. Wagon-coupling.	Feb. 11, 1873	328	105	3	165
141, 975	Wyttbach, F., Evansville, Ind. Kitchen-sink.	Mar. 11, 1873	403	{ 133 } { 134 }	3	287
139, 490	Xander, A., Slatington, Pa. Sawing-machine.	Aug. 19, 1873	518	171	4	194
137, 162	Yager, C. E., Hudson, N. Y. Flux for solder.	June 3, 1873	43	.....	3	612
135, 459	Yale, H. M., Coldwater, Mich. Harvester.	Mar. 25, 1873	735	244	3	334
142, 605	Yarrell, P. W., Garysburgh, N. C. Turbine water-wheel.	Feb. 4, 1873	63	20	3	132
144, 589	Yates, H. G., Kalamazoo, Mich. Pneumatic railway-car.	Sept. 9, 1873	280	85	4	275
143, 214	Yates, J. M., Princeton, Ill. Hoisting-machine.	Nov. 11, 1873	360	{ 121 } { 122 }	4	519
137, 277	Yates, T., Milwaukee, Wis. Hot-air furnace.	Sept. 23, 1873	777	268	4	338
143, 110	Same. Harvester.	Mar. 25, 1873	841	276	3	342
142, 833	Yeager, A. H. (See Yeager, J. L. and A. H.)	.....	.....	.....	.....	.....
142, 069	Yeager, J. L. and A. H., Lampeter Square, Pa. Machine for upsetting tires.	Sept. 16, 1873	460	156	4	301
138, 064	Yeiser, D. H., Danville, Ky. Portable stock-shed.	Aug. 19, 1873	609	200	4	201
142, 319	Yentzer, E. S., Ottawa, Ill. Hemmer.	Apr. 22, 1873	732	231	3	450
140, 334	Yerkes, S. H., Stone Mills, N. Y. Rock-drill.	Aug. 26, 1873	833	276	4	229
136, 479	Yerkes & Plumb. (See Yerkes, J., assignor.)	.....	.....	.....	.....	.....
142, 070	Yerkes, E. A., Philadelphia, Pa. Manufacture of shovels.	June 24, 1873	828	263	3	708
135, 682	Yerkes, J., assignor to Yerkes & Plumb, Philadelphia, Pa. Die for shaping hatchet-blanks.	Mar. 4, 1873	109	36	3	254
137, 813	Same. Die for forming hammers.	Aug. 19, 1873	610	200	4	201
137, 814	Yinger, G., Harrisburgh, Pa. Portable cooking-apparatus.	Feb. 11, 1873	282	88	3	102
137, 278	Yingling, J. A. (See Harrington & Yingling.)	.....	.....	.....	.....	.....
137, 586	Yore, P. (See Hill, S. G., assignor.)	.....	.....	.....	.....	.....
140, 567	York, J. S., assignor to self and J. H. Serene, Brooklyn, N. Y. Broiler-attachment for stoves and ranges.	Mar. 25, 1873	842	277	3	342
138, 308	York, J. W., assignor of one-half interest to G. W. Morton, J. H. Murray, and T. B. Taylor, Nolensville, Tenn. Fertilizer.	Apr. 8, 1873	225	88	3	391
137, 812	York, N., Boston, Mass. Die for making sheet-lead.	July 1, 1873	193	65	4	24
137, 812	Yorks, R. M., Schoolcraft, Mich. Railway cattle-guard.	Apr. 29, 1873	974	306	3	478
137, 813	Yost, G. W. N., Corry, Pa., assignor to Acme Mower and Reaper Company, New York, N. Y. Harvester.	Apr. 15, 1873	494	154	3	421
137, 814	Same. same.	Apr. 15, 1873	495	155	3	421
137, 815	Same. same.	Apr. 15, 1873	496	155	3	421
137, 816	Same. same.	Apr. 15, 1873	497	155	3	421
135, 614	Same. Seats for harvester.	Apr. 15, 1873	497	155	3	422
135, 615	Same. Mowing-machine.	Apr. 15, 1873	498	156	3	422
139, 644	Youmans, W., Lansingburgh, N. Y. Railway car-truck.	Feb. 4, 1873	212	66	3	144
139, 644	Young, A. K. (See De Forest & Gilbert, assignors.) (Reissue.)	.....	.....	.....	.....	.....
143, 051	Young, B. C., Boston, Mass. Modes of treating leather remnants.	Feb. 4, 1873	214	.....	3	144
135, 394	Young, C. A., Providence, assignor of one-half interest to P. F. Brown, Manton, R. I. Band-saw machine.	June 3, 1873	174	58	3	623
136, 121	Young, C. H., assignor to J. S. Crane and B. F. Peaslee, Lake Village, N. H. Knitting-machine.	Sept. 23, 1873	650	{ 222 } { 223 }	4	327
135, 394	Young, C. K. (See Blaisdell & Young.)	.....	.....	.....	.....	.....
136, 121	Young, C. M., Meadville, Pa. Harvester.	Jan. 28, 1873	838	{ 270 } { 271 }	3	115
5, 529	Young, D. W., J. Hewitt, and L. Mooney, said Young and Mooney assignors to said Hewitt, Pittsburgh, Pa. Sad and fitting iron.	Feb. 18, 1873	670	212	3	205
135, 743	Young, F. W., Holden, Mo. Seed-dropper. (Reissue.)	Aug. 5, 1873	196	64	4	151
142, 320	Same. same.	Feb. 11, 1873	329	105	3	165
139, 225	Same. same.	Aug. 26, 1873	853	277	4	229
135, 055	Young, G. H., New York, N. Y. Carriage-top.	May 20, 1873	693	218	3	577
139, 989	Young, H. (See Gibson, S., assignor.)	.....	.....	.....	.....	.....
135, 504	Young, J. G., jr., Boston, Mass. Sail-bank.	Jan. 21, 1873	525	170	3	77
146, 119	Young, J. H., Newburgh, N. Y. Whip-socket.	June 17, 1873	503	159	3	674
145, 711	Young, J. L., New York, N. Y. Earth-closet.	Feb. 4, 1873	101	32	3	135
24, 598	Same. same.	Dec. 30, 1873	998	322	4	712
144, 044	Young, L. T., Philadelphia, Pa. Guide for cutting photographic pictures.	Dec. 16, 1873	607	198	4	659
142, 321	Young, M., jr., Frederick City, Md. Harvester-rake. (Extension.)	June 28, 1873	.....	.....	4	6
144, 044	Young, M., jr., Frederick, Md., assignor to C. H. and L. J. McCormick, Chicago, Ill. Harvesting-machine. (Disclaimer filed.)	June 27, 1873	.....	.....	4	7
142, 321	Young, M. K., Glen Haven, Wis. Harrow.	Oct. 28, 1873	620	205	4	459
142, 321	Young, M. N., Kelseyville, Cal. Mill-pick.	Aug. 26, 1873	834	277	4	230

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
136, 353	Young, R., San Francisco, Cal. Securing lock-spindles in safe-doors	Feb. 25, 1873	888	286	3	235
142, 186	Young, S. D., Elizabethtown, Ill. Flux for smelting ores	Aug. 26, 1873	724	239	4	220
136, 297	Young, S. L., Scottville, Ill. Cultivator	Feb. 25, 1873	839	271	3	231
138, 221	Young, S. W., Providence, R. I. Eyelet	Apr. 22, 1873	865	274	3	461
	Young, W. (See Olbert & Young.)					
136, 950	Young, W., Easton, Pa. Apparatus for tapping water-mains	Mar. 18, 1873	538	178	3	307
137, 399	Same..... Stop for water-main attachments	Apr. 1, 1873	106	34	3	365
140, 607	Young, W., Baltimore, Md. Motor for sewing-machines	July 8, 1873	244	82	4	39
142, 755	Young, W., and J. Wortham, Shelbyville, Tenn. Clod-crusher and harrow combined	Sept. 9, 1873	387	130	4	245
139, 100	Young, W. S., Park's Corners, Ill. Washing-machine	May 20, 1873	576	181	3	563
	Youngblood, R. (See Youngblood, W., assignor.)					
135, 873	Youngblood, W., assignor to R. Youngblood, Brooklyn, N. Y. Eccentric fastening for boxes &c	Feb. 11, 1873	444	144	3	174
5, 548	Zaisa, F., Philadelphia, Pa. Machine for making match-sticks	Aug. 19, 1873	626	206	4	203
136, 893	Same..... same	Mar. 18, 1873	491	163	3	303
141, 531	Zech, M., Pittsburg, Pa. Spark-arrester	Aug. 5, 1873	104	32	4	143
143, 554	Zeh, A., G. P. Livingston, and P. V. W. Cullings, Gallupville, N. Y. Slide for extension-tables	Oct. 7, 1873	142	47	4	392
143, 215	Zeigler, A., Cumberland, Md. Car-coupling	Sept. 23, 1873	778	268	4	338
136, 894	Zeller, G., Brussels, Belgium. Breech-loading fire-arm	Mar. 18, 1873	492	163	3	303
137, 995	Zellers, T. A., East Birmingham, Pa., assignor to T. B. Atterbury and W. Doyle. Jelly-glass	Apr. 15, 1873	647	204	3	434
145, 545	Zellwager, J., Louisville, Ky. Bridge-column	Dec. 16, 1873	468	153	4	647
	Zerbe, J. (See Epler, P., assignor.)					
135, 028	Zimmer, J., assignor of two-thirds interest to R. Sanderson and S. Curtis, Cleveland, Ohio. Metallic compounds for coating cutlery, &c.	Jan. 21, 1873	500	.....	3	75
141, 976	Zimmer, S. B., Elkhart, Ind. Wood-grinding machine for making pulp	Aug. 19, 1873	518	172	4	194
138, 464	Zimmerman, H. J., Hudson, Mich. Railway-car spittoon	Apr. 29, 1873	1,109	350	3	468
135, 255	Zink, S. H., Knobnoster, Mo. Car-coupling	Jan. 28, 1873	718	229	3	105
	Zippert, B. B. (See Gross & Zippert.) (Design.)					
139, 750	Zocher, C., Augusta, Ga. Cotton-cultivator	June 10, 1873	295	91	3	648
145, 712	Zschech, G., Indianapolis, Ind. Head-block for saw-mills	Dec. 16, 1873	608	{ 198 199 }	4	659
	Zuberbuhler, E. (See Mureset & Zuberbuhler.)					
141, 907	Zürcher, J., Lancaster, Pa. Loom	Aug. 19, 1873	467	153	4	110
144, 819	Zwicker, O., assignor to self and H. O. Hermann, Philadelphia, Pa. Milk-boiler	Nov. 18, 1873	559	190	4	547
144, 646	Zwietusch, O., Milwaukee, Wis. Soda-water draft-tube	Nov. 18, 1873	420	141	4	535
145, 774	Same..... Carbonic-acid-gas generator	Dec. 23, 1873	673	220	4	676

LIST OF PATENTS EXTENDED DURING THE YEAR 1873.

Number.	Name of inventor, invention, or discovery.	Date.
Original No. 24, 915	Adams, F. Casting copper-cylinders.....	Aug. 2, 1859
Original No. 25, 862	Adams, J. M. Weeding-hoe.....	Oct. 18, 1859
Original No. 23, 996	Ahl, D. Surgical-instrument.....	May 17, 1859
Original No. 23, 886	Alden, M. Cultivator.....	May 10, 1859
Original No. 26, 006	Allen, E. C. Corn-planter.....	Nov. 8, 1859
Reissue No. 1, 934	Allender, J. Wringing-machine. (Reissued June 28, 1864; again reissued Nov. 8, 1864; and again reissued April 18, 1865).....	Jan. 11, 1859
Reissue No. 2, 057	Amory, J. Steam-boiler furnace..... (Reissued Aug. 29, 1865).....	Apr. 19, 1859
Original No. 25, 936	Arnold, E. R. Cut-off valve of steam-engines.....	Nov. 1, 1859
Original No. 25, 796	Babbett, A. Jacquard-machine.....	Oct. 18, 1859
Original No. 25, 874	Babcock, G. H. Bronzing-machine..... (Reissued June 28, 1864; reissued May 14, 1867).....	Oct. 25, 1859
Reissue No. 2, 609	Bailey, S. A. Machine for wringing clothes..... (Reissued June 28, 1864; reissued May 14, 1867).....	Apr. 5, 1859
Original No. 25, 797	Ball, E. Harvester.....	Oct. 18, 1859
Original No. 24, 531	Beaumont, W. Gas-retort.....	June 28, 1859
Reissue No. 2, 326	Bellinger, E. Composition for kindling fires..... (Reissued Aug. 7, 1866).....	Dec. 13, 1859
Original No. 24, 923	Betteley, A. Elevator for warehouses, factories, mines, &c.....	Aug. 2, 1859
Original No. 24, 987	Billinghurst, W. Fishing-reel.....	Aug. 9, 1859
Original No. 23, 152	Blair, J. B. Attachment to rulling-machine.....	Mar. 8, 1859
Original No. 23, 750	Blake, A. S. Animal-trap.....	Apr. 26, 1859
Original No. 26, 410	Blossing, W. Seed-planter.....	Dec. 13, 1859
Original No. 26, 243	Boch, W. sr. Water-closet basin.....	Nov. 29, 1859
Reissue No. 1, 826	Booth, J. L. Grain-separator..... (Reissued Sept. 25, 1860; reissued Nov. 29, 1864).....	Sept. 20, 1859
Original No. 23, 820	Boss, J. L. Manufacture of watch-cases.....	May 3, 1859
Original No. 24, 367	Bourne, W. O. Ore-separator.....	June 14, 1859
Original No. 25, 239	Boyd, J. C. Elastic-hose tubing.....	Aug. 30, 1859
Original No. 26, 321	Broadmeadow, J. P. Molding for metal-casting.....	Nov. 29, 1859
Reissue No. 3, 405	Brodie, G. Metallic band for balling..... (Reissued April 27, 1869).....	Mar. 22, 1859
Reissue No. 1, 530	Burnham, N. F. Water-wheel..... (Reissued Sept. 1, 1863).....	Feb. 22, 1859
Reissue No. 3, 770	Burton, B. Breech-loading fire-arm..... (Reissued Dec. 21, 1869).....	Dec. 20, 1859
Original No. 23, 525	Buxton, L. W. Bolt-head-fastening.....	Apr. 5, 1859
Original No. 23, 445	Chambers, C., jr. Paper-folding machine.....	Apr. 5, 1859
Reissue No. 5, 533	Same..... same..... (Reissued Aug. 12, 1873).....	Nov. 15, 1859
Original No. 25, 807	Clark, L. Hem-folder.....	Oct. 18, 1859
Reissue No. 3, 333	Coe, J. H., and W. B. Sniffin. Skate-fastening..... (Reissued Mar. 23, 1869).....	May 3, 1859
Reissue No. 5, 407	Collins, J. P. Water-wheel..... (Reissued June 12, 1860; reissued May 13, 1873).....	Dec. 6, 1859
Original No. 26, 415	Conant, H. Machine for winding thread on spools..... (Antedated June 22, 1859).....	Dec. 13, 1859
Original No. 26, 564	Cook, J., and H. I. Kimball. Top-prop for carriages.....	Dec. 27, 1859
Original No. 25, 544	Cook, J. F. Try-cock.....	Sept. 20, 1859
Original No. 23, 536	Coston, B. F. Pyrotechnic night-signal.....	Apr. 5, 1859
Original No. 24, 199	Covel, E. H. Gas-regulator.....	May 31, 1859
Original No. 24, 200	Same..... Hydro-carbon vapor apparatus.....	May 31, 1859
Original No. 24, 009	Crowell, C. L., and R. Smith. Machine for upsetting tire.....	May 17, 1859
Original No. 24, 446	Daniels, R. Straw-cutter.....	June 21, 1859
Original No. 25, 814	Danner, J. Sleeping-car.....	Oct. 18, 1859
Reissue No. 1, 431	Davis, A. B. Car spring..... (Reissued Jan. 6, 1863; again reissued March 17, 1863).....	Feb. 15, 1859
Original No. 25, 726	Davis, B. C. Hand-machine for wiring blind-rods.....	Oct. 11, 1859
Original No. 25, 183	Dodge, D. Nail-machine.....	Aug. 23, 1859
Original No. 25, 309	Same..... same.....	Aug. 30, 1859
Original No. 22, 787	Same..... Stove.....	Feb. 1, 1859
Original No. 25, 395	Dodge, S., jr., and B. Potter, jr. Heel for boots and shoes.....	Sept. 13, 1859
Reissue No. 2, 046	Draper, J. Skeleton-skirt..... (Reissued Dec. 27, 1859; reissued Aug. 1, 1865).....	Oct. 4, 1859
Original No. 23, 665	Dunklee, B. W. Cooking-range.....	Apr. 19, 1859
Original No. 23, 882	Dyer, N. A. Cement for roofing.....	May 3, 1859
Reissue No. 3, 063	Evans, T. Metallic ear for attaching handles to pails, &c..... (Reissued Aug. 4, 1868).....	June 21, 1859
Original No. 26, 484	Fairbanks, T. Platform-scales.....	Dec. 20, 1859
Original No. 23, 060	Farmer, M. G. Electro-magnetic fire-alarm apparatus.....	Feb. 22, 1859
Reissue No. 5, 181	Same..... Electro-magnetic telegraph..... (Reissued Dec. 10, 1872).....	Nov. 15, 1859
Original No. 26, 262	Ferry, W. M., jr. Journal-box for saw-mill carriages.....	Nov. 29, 1859
Original No. 22, 792	Field, S. T. Machine for manufacturing wooden troughs.....	Feb. 1, 1859
Reissue No. 1, 463	Firth, J., and J. Ingham. Pipe-molding..... (Reissued April 28, 1863).....	Dec. 20, 1859
Original No. 25, 005	Fitte, B. Governor-valve.....	Aug. 9, 1859
Original No. 22, 947	Foster, D. P. Wrench.....	Feb. 15, 1859
Original No. 26, 487	Foster, W. and R. Screw-tap.....	Dec. 20, 1859
Reissue No. 3, 415	Fox, J. Cracker-machine..... (Reissued May 4, 1869).....	Feb. 1, 1859
Original No. 25, 565	Fitz, J. and G. Rolling-mill.....	Sept. 27, 1859
Reissue No. 3, 872	Gale, L. D. Apparatus for the manufacture of gas..... (Reissued March 8, 1870).....	Nov. 8, 1859
Reissue No. 3, 873	Same..... Manufacture of gas..... (Reissued March 8, 1870).....	Nov. 8, 1859
Original No. 23, 022	Gardner, G. W. Molding covers for cook-stoves.....	Feb. 22, 1859
Original No. 26, 177	Gately, D. C. Making rubber-beltting.....	Nov. 22, 1859
Original No. 26, 178	Same..... Rubber-beltting.....	Nov. 22, 1859
Reissue No. 4, 744	Gold, S. F. Apparatus for heating buildings by steam..... (Reissued Feb. 6, 1872).....	June 21, 1859
Original No. 24, 734	Goodale, W. Machine for making paper-bags.....	July 12, 1859
Original No. 25, 191	Same..... same.....	Aug. 23, 1859
Reissue No. 1, 129	Gore, J. Harvester.....	Dec. 27, 1859
Original No. 24, 022	Gray, J. Sewing-machine.....	May 17, 1859
Original No. 23, 643	Greene, J. F. Machinery for disintegrating waste felt fabrics.....	Apr. 12, 1859
Reissue No. 2, 086	Same..... Obtaining fibers from waste felted fabrics..... (Reissued Oct. 10, 1865).....	Apr. 12, 1859
Original No. 26, 524	Grosvenor, J. B. Machine for planing curved surfaces.....	Dec. 27, 1859
Reissue No. 2, 136	Hale, A. W. Meat-mincer..... (Reissued Dec. 26, 1865).....	Mar. 15, 1859
Original No. 23, 085	Hale, E. J., and C. H. Chandler. Lamp.....	Mar. 1, 1859
Reissue No. 4, 660	Halvorson, H. Lamp..... (Reissued June 6, 1871; reissued Dec. 5, 1871).....	Sept. 20, 1859
Original No. 25, 610	Harrison, J., jr. Steam-boiler.....	Oct. 4, 1859
Original No. 26, 674	Hawes, B. B. Clothes-dryer.....	Jan. 3, 1860
Original No. 25, 014	Hay, G. R. Machine for cutting out wooden-ware.....	Aug. 9, 1859
Reissue No. 3, 996	Hayden, H. W. Brass kettle. (Extended seven years; reissued Feb. 13, 1866; reissued May 24, 1870; extended by act of Congress approved March 3, 1873)..... (Division B).....	Dec. 16, 1851
Reissue No. 3, 995	Hayden, H. W. Machine for making kettles. (Extended seven years; reissued Feb. 13, 1866; reissued May 24, 1870; extended by act of Congress approved March 3, 1873)..... (Division A).....	Dec. 16, 1851
Reissue No. 1, 526	Haynes, J. Wood-saw frame..... (Reissued Aug. 25, 1863).....	Aug. 9, 1859
Original No. 25, 115	Healy, B. S. Self-acting wagon-brake.....	Aug. 16, 1859
Original No. 22, 802	Hodges, I. A. Mills for grinding cane, &c.....	Feb. 1, 1859
Original No. 25, 508	Heinisch, R. Tailors' shears.....	Sept. 20, 1859
Reissue No. 5, 335	Hendy, J. Double friction-coupling..... (Reissued March 25, 1873).....	Oct. 11, 1859
Original No. 24, 304	Hewitt, C. Machine for moving iron at the rolls.....	June 7, 1859

List of patents extended during the year 1873—Continued.

No.	Name of inventor, invention, or discovery.	Date.
Reissue No. 5 365	Hicks, W. C. Sewing-machine	(Reissued March 4, 1873) Apr. 12, 1859
Reissue No. 4 429	Hoe, R. M. Feeding paper to printing-presses	(Reissued June 20, 1871) Aug. 23, 1859
Original No. 23 172	Same. Machine for printing railway and other tickets	Mar. 8, 1859
Original No. 24 428	Hotchkiss, B. Trip-hammer	June 14, 1859
Original No. 25 569	Howe, T. Bedstead-slat	Sept. 27, 1859
Original No. 23 921	Hubbard, M. G. Harvesting-machine	May 10, 1859
Original No. 26 679	Hulbert, L. T. Double seaming-machine	Jan. 3, 1860
Reissue No. 807	Jenkins, H. Ornamental connection of parts of an iron fence.	(Reissued Sept. 6, 1859; extended seven years) Jan. 13, 1852
Reissue No. 4 783	Jennison, G. C. Baker's oven	(Reissued March 5, 1872) Feb. 1, 1859
Original No. 24 563	Knight, E. C. Arranging couches in railway-cars	June 28, 1859
Original No. 25 570	Same. Mode of arranging couches in railway-cars	Sept. 27, 1859
Reissue No. 2 831	La Forme, F. J. Nursing-bottle	(Reissued Jan. 14, 1868) Nov. 29, 1859
Original No. 23 924	Lamden, T. J. Mail-bag	May 10, 1859
Original No. 23 032	Lane, T. W. Steam-pressure gage	Feb. 22, 1859
Original No. 25 235	Lauth, B. Manufacture of iron	Aug. 23, 1859
Original No. 23 983	Leonard, H. G. Cooking-stove	May 10, 1859
Original No. 26 599	Leasig, S. Horse hay-rake	Dec. 27, 1859
Reissue No. 1 602	Lewis, D. D. Railway-frog	(Reissued Jan. 5, 1864) May 17, 1859
Reissue No. 3 354	Lewis, W. W. Machine for rolling horseshoe iron	(Reissued March 30, 1869) Feb. 1, 1859
Original No. 23 097	Littlejohn, H. Machine for crozing and chamfering barrels	Mar. 1, 1859
Reissue No. 1 981	Lockwood, W. E. Lady's collar and cuff	(Reissued June 6, 1865) Apr. 26, 1859
Reissue No. 1 982	Same. same	(Reissued June 6, 1865) Apr. 26, 1859
Reissue No. 5 259	Same. same	(Reissued June 6, 1865; reissued Jan. 28, 1873) Apr. 26, 1859
Original No. 25 572	Lowe, J. A. Molding water-traps	Sept. 27, 1859
Original No. 26 506	Same. Water-trap	Dec. 20, 1859
Reissue No. 5 017	Lowry, J. L. Fire-plug	(Reissued Aug. 14, 1860; reissued July 30, 1872) Feb. 22, 1859
Original No. 26 689	Lowthrop, F. C. Pivot-bearings	Jan. 3, 1860
Original No. 25 867	Maclure, J. Machine for covering saddle trees	Oct. 18, 1859
Original No. 25 343	Manigie, E. M. Stove	Sept. 6, 1859
Original No. 25 344	Mason, A. C. Machine for wiring the joints of clothes-pins	Sept. 6, 1859
Original No. 24 748	Masury, J. W. Paint can	July 12, 1859
Original No. 22 606	Mayall, T. J. Manufacture of emery wheels and sticks	Jan. 11, 1859
Reissue No. 5 111	Same. Manufacture of India-rubber hose	(Reissued Oct. 22, 1872) Nov. 29, 1859
Original No. 25 747	Same. Method of combining emery with emulsioune	Oct. 11, 1859
Original No. 25 662	May, E. Construction of prisons	Oct. 4, 1859
Reissue No. 4 383	McQuiston, T. Cultivator	(Reissued May 16, 1871) Oct. 18, 1859
Reissue No. 4 875	Melton, R. M. Cultivator	May 31, 1859
Original No. 24 478	Merriman, A. T. Machine for sawing stone	June 21, 1859
Original No. 24 700	Miller, L. and J. Harvester	July 5, 1859
Reissue No. 2 266	Miller, W. K. Harvester	(Reissued June 5, 1866) Feb. 8, 1859
Reissue No. 2 267	Same. same	(Reissued June 5, 1866) Feb. 8, 1859
Reissue No. 2 268	Same. same	(Reissued June 5, 1866) Feb. 8, 1859
Reissue No. 2 269	Same. same	(Reissued June 5, 1866) Feb. 8, 1859
Reissue No. 2 270	Same. same	(Reissued June 5, 1866) Feb. 8, 1859
Original No. 25 434	Mitchell, J. H. Cotton-scraper	Sept. 13, 1859
Original No. 22 664	Monson, C. Holder for lamps	Jan. 18, 1859
Original No. 23 105	Montgomery, J. Construction of steam-vessels	Mar. 1, 1859
Original No. 23 598	Same. Screw-propeller	Apr. 12, 1859
Original No. 24 947	Montgomery, J. A. Journal-box	Aug. 2, 1859
Original No. 22 742	Monroe, B. F. S. Bed-bottom	Jan. 25, 1859
Reissue No. 5 029	Murphy, T. H. Machine for rolling fabrics	May 17, 1859
Original No. 24 654	Naramore, J. W. Pin-sticking machine	July 5, 1859
Reissue No. 3 725	Noel, T. Spectacle-frame	(Reissued Nov. 9, 1859) Jan. 11, 1859
Original No. 25 036	Norton, M. P. Postmarking stamp	Aug. 9, 1859
Reissue No. 3 226	Palmer, I. E. Tackle block	(Reissued Sept. 8, 1853; reissued Apr. 11, 1865; reissued Dec. 8, 1868) Nov. 1, 1859
Original No. 24 432	Palmer, J. S. Rolling metal for jewelry	June 14, 1859
Reissue No. 2 730	Palser, J. B., and G. Howland. Apparatus for manufacture of paper-pulp.	(Reissued July 3, 1860; reissued Aug. 13, 1867) June 21, 1859
Reissue No. 2 731	Same. Manufacture of paper-pulp	(Reissued July 3, 1860; reissued Aug. 13, 1867) June 21, 1859
Reissue No. 1 590	Same. Preparation of straw for paper-pulp.	(Reissued July 3, 1860; reissued Dec. 15, 1863) June 21, 1859
Original No. 22 668	Payn, B. Coloring and curing tobacco-stems	Jan. 18, 1859
Original No. 24 953	Perry, J. G. Meat-cutter	Aug. 2, 1859
Original No. 23 309	Pettee, S. E. Envelope	Mar. 22, 1859
Original No. 26 003	Phelps, G. M. Telegraphic-machine	Nov. 1, 1859
Reissue No. 5 304	Phillip, P. Method of operating windlass	(Reissued Mar. 4, 1873) July 12, 1859
Reissue No. 3 413	Pierce, B. S. and M. R. Machine for making drain-pipes.	(Reissued Feb. 28, 1865; reissued Jan. 14, 1868; reissued April 27, 1869) Apr. 19, 1859
Original No. 26 614	Pierce, B. S. and M. R. Manufacture of porous ware	Dec. 27, 1859
Original No. 24 402	Pitkin, A. P. Steam-pressure regulator	June 14, 1859
Original No. 23 491	Pitman, G. W., and W. C. Boone. Machinery for laying rope	Apr. 5, 1859
Original No. 23 001	Porter, L. P. Elastic toys	Feb. 15, 1859
Original No. 22 890	Pratt, N. B. Carpet-sweeper	Feb. 4, 1859
Reissue No. 5 095	Prindle, D. R. Portable furnace, boiler, and steamer.	(Reissued Dec. 13, 1859; reissued Oct. 8, 1872) Sept. 13, 1859
Reissue No. 1 382	Printon, J., jr. Machine for lasting boots and shoes	(Reissued Jan. 6, 1863) Oct. 4, 1859
Reissue No. 1 606	Putnam, H. W. Bottle-stopper fastening	(Reissued Jan. 19, 1864) Mar. 15, 1859
Reissue No. 4 824	Ray, S., and M. R. Shalters. Harvester.	(Reissued April 17, 1866; reissued March 26, 1872.) (Division A.) Apr. 19, 1859
Reissue No. 4 826	Same. Harvester.	(Reissued April 17, 1866; reissued March 26, 1872.) (Division C.) Apr. 19, 1859
Reissue No. 4 589	Riggs, J. W. Truss-springs	(Reissued Oct. 10, 1871) Jan. 18, 1859
Original No. 23 950	Root, S. E. Clock dial	May 10, 1859
Original No. 25 586	Rosa, A. Q. Burglar-alarm	Sept. 27, 1859
Original No. 23 399	Russell, I. S. and H. R. Harvester	Mar. 29, 1859
Original No. 24 493	Sabbaton, P. A. Door-frame for furnaces	June 21, 1859
Original No. 24 664	Sanborn, G. P., and W. Mansfield. Elastic railway-frog	July 5, 1859
Original No. 24 665	Selleck, T. Protecting surfaces of articles of iron	July 5, 1859
Reissue No. 2 476	Sexton, S. B. Heating-stove.	(Reissued Dec. 3, 1861; reissued Feb. 16, 1864; reissued Sept. 27, 1864; reissued Feb. 12, 1867) Apr. 19, 1859
Reissue No. 1 622	Same. Stove	(Reissued Dec. 3, 1861; reissued Feb. 16, 1864) Apr. 19, 1859
Reissue No. 2 480	Sharps, C. Many-barreled fire-arm.	(Reissued June 18, 1861; reissued Feb. 12, 1867.) (Division A.) Jan. 25, 1859
Original No. 25 767	Shrote, J. H. Cutting and panning cakes	Oct. 11, 1859
Original No. 24 635	Shuler, I. C. Construction of sheet-metal coffins	July 5, 1859
Reissue No. 3 070	Silverthorn, N. Boot and shoe tip	(Reissued Sept. 2, 1862; reissued Aug. 4, 1868) Nov. 29, 1859
Original No. 26 060	Simpson, J. Machine for making box-joints	Nov. 8, 1859
Reissue No. 2 576	Spofford, N. Brace for bits	(Reissued April 2, 1867) Nov. 1, 1859
Original No. 23 320	Sprague, A. M. Apparatus for skimming surface of water in steam-boilers	Mar. 22, 1859

List of patents extended during the year 1873—Continued.

Number.	Name of inventor, invention, or discovery.	Date.
Original No. 23, 957	Spring, C. and A. Lathe for turning irregular forms	May 10, 1859
Reissue No. 1, 885	Stacy, C. L. Hydrant (Reissued June 6, 1865)	Oct. 4, 1859
Original No. 23, 792	Stanwood, J. E. Gas-pipe cutter	Apr. 26, 1859
Original No. 24, 668	Stearns, W. Picker-motion for power-looms	July 5, 1859
Reissue No. 2, 915	Stewart, P. P. Cooking-stove (Reissued May 17, 1864; reissued April 7, 1868)	Apr. 12, 1859
Reissue No. 3, 452	Same..... Cooking-stove. (Reissued May 31, 1864; again reissued July 7, 1868; again reissued May 18, 1869)	Jan. 18, 1859
Original No. 23, 795	Stock, F. and J. Pump-box	Apr. 26, 1859
Reissue No. 3, 481	Stoddard, J. C. Hay-spreader (Reissued June 1, 1869)	June 28, 1859
Original No. 24, 161	Strong, F. M., and T. Ross. Platform-scales	May 24, 1859
Original No. 25, 148	Same..... Weighing-scales	Aug. 16, 1859
Original No. 25, 149	Sturtevant, B. F. Blank for shoe-pegs	Aug. 16, 1859
Original No. 26, 627	Same..... Lathe-attachment for cutting veneers	Dec. 27, 1859
Reissue No. 4, 626	Taggart, S. Flour-packer (Reissued Nov. 7, 1871)	Aug. 2, 1859
Reissue No. 3, 682	Taylor, L. Mop-head (Reissued Nov. 10, 1868; reissued Nov. 24, 1868; reissued Oct. 19, 1869)	Feb. 15, 1859
Reissue No. 1, 405	Temple, J. Water-wheel (Reissued Feb. 10, 1863)	Feb. 8, 1859
Reissue No. 3, 985	Terry, S. B. Machine for making paper boxes (Reissued May 17, 1870)	Sept. 6, 1859
Reissue No. 4, 699	Tompkins, S. E., and J. Maclure. Harness-saddle tree (Reissued Jan. 2, 1872)	Feb. 1, 1859
Original No. 25, 061	Tuftis, O. Elevator or hoisting apparatus for hotels, &c	Aug. 9, 1859
Original No. 25, 473	Turnbull, A. Scales	Sept. 13, 1859
Reissue No. 1, 805	Vogel, K. Sewing-machine (Reissued Nov. 1, 1864)	Oct. 4, 1859
Reissue No. 1, 146	Vose, W. T. Portable pump (Reissued Feb. 26, 1861)	Nov. 15, 1859
Original No. 24, 512	Ward, A. Body-bolster for railway-cars	June 21, 1859
Reissue No. 2, 434	Ward, W. E. Machine for making nuts (Reissued Jan. 1, 1867)	Oct. 7, 1856
Original No. 24, 436	Webb, H. Railway-bar	June 14, 1859
Original No. 26, 145	Wellington, D. Cock for water-closet	Nov. 15, 1859
Reissue No. 1, 586	Wesson, M. Channelling soles of boots and shoes (Reissued Dec. 1, 1863)	May 24, 1859
Reissue No. 942	Wharton, W., jr. Dispensing with switches on railways (Reissued April 3, 1860)	Dec. 13, 1859
Original No. 25, 499	Wheeler, E. Railway-car seat	Sept. 20, 1859
Original No. 24, 685	White, E. B. Alarm-attachment for tills	July 5, 1859
Original No. 23, 520	White, L. S. Burnishing-machine	Apr. 5, 1859
Original No. 23, 970	Widmann, J. G. Stove	May 10, 1859
Original No. 26, 136	Wiebé, E. Mode of advertising	Nov. 15, 1859
Reissue No. 1, 025	Wilhelm, C. and A. C. Lamp-shade (Reissued Aug. 14, 1860)	May 3, 1859
Original No. 23, 635	Williams, C. W. Gate for canal-locks	Apr. 12, 1859
Original No. 25, 167	Wilson, A. Mode of lighting gas by electricity	Aug. 16, 1859
Original No. 23, 735	Wilson, J., C. Green, and W. Wilson, jr. Double-seaming machine	Apr. 19, 1859
Original No. 23, 736	Same..... Machine for corrugating sheet-metal	Apr. 19, 1859
Reissue No. 3, 757	Same..... Powder-keg (Reissued Jan. 6, 1863; reissued Dec. 7, 1869)	July 12, 1859
Reissue No. 2, 050	Winslow, A. P. Roof for railway-cars (Reissued Aug. 8, 1865)	Aug. 9, 1859
Original No. 24, 257	Woodruff, T. T. Seat and couch for railway-car	May 31, 1859
Original No. 24, 684	Worcester, L. Machine for boring or mortising blind-stiles	July 5, 1859
Original No. 24, 689	Worthen, W. E., and H. B. Benwick. Corrugating sheet-metal	July 5, 1859
Original No. 24, 838	Worthington, H. R. Pumping engine	July 19, 1859
Original No. 26, 139	Wright, W. Pump	Nov. 15, 1859
Reissue No. 2, 904	Wyckoff, A. Hollow auger (Reissued March 13, 1866)	July 12, 1859
Reissue No. 3, 978	Young, M., jr. Harvester-rake (Reissued May 17, 1870)	June 28, 1859

LIST OF TRADE-MARKS REGISTERED DURING THE YEAR 1873.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1, 537	Abbott & Howard, Boston, Mass., and New York, N. Y. Emery.....	Nov. 12, 1873	Nov. 25, 1873
1, 537	Adams, Hallock & Co., Brooklyn, N. Y. Ice-pitchers.....	July 18, 1873	Nov. 18, 1873
1, 503	Agresta, A. P., and A. Mencci, New York, N. Y. Sauces.....	July 9, 1873	Oct. 21, 1873
1, 137	Allen & Ellis, Cincinnati, Ohio. Chewing-tobacco.....	Feb. 12, 1873	Feb. 18, 1873
1, 138	Same.....same.....	Feb. 12, 1873	Feb. 18, 1873
1, 139	Same.....same.....	Feb. 12, 1873	Feb. 18, 1873
1, 314	Same.....same.....	June 7, 1873	June 17, 1873
1, 315	Same.....same.....	June 7, 1873	June 17, 1873
1, 316	Same.....same.....	June 7, 1873	June 17, 1873
1, 317	Same.....same.....	June 7, 1873	June 17, 1873
1, 318	Same.....same.....	June 7, 1873	June 17, 1873
1, 430	American Lead Pencil Company, New York, N. Y. Pencils.....	Aug. 9, 1873	Sept. 2, 1873
1, 290	American Sardine Company, New York, N. Y. Fish.....	May 15, 1873	May 20, 1873
1, 428	Amison, L., & Co., New York, N. Y. Boot and shoe blacking.....	Sept. 27, 1873	Oct. 14, 1873
1, 429	Same.....Blacking or grease for shoes, &c.....	Sept. 27, 1873	Oct. 14, 1873
1, 361	Arquimbau, D. V., New York, N. Y. Licorice-paste.....	June 28, 1873	July 15, 1873
1, 442	Arquimbau, D. V., Brooklyn, N. Y. Licorice-paste.....	Aug. 30, 1873	Sept. 9, 1873
1, 299	Arnold & McNary, New York, N. Y. Druggist's goods.....	June 2, 1873	June 10, 1873
1, 460	Atlantic Refining Company, Philadelphia, Pa. Petroleum.....	Sept. 8, 1873	Sept. 16, 1873
1, 371	Atkins, E. C., & Co., Indianapolis, Ind. Cross-cut wood-saws.....	June 18, 1873	July 22, 1873
1, 473	Atwood & Bodwell, San Francisco, Cal. Windmill.....	Aug. 16, 1873	Sept. 30, 1873
1, 528	Babbitt, B. T., New York, N. Y. Soap-powders.....	June 25, 1873	Nov. 18, 1873
1, 529	Same.....Baking-powder.....	June 25, 1873	Nov. 18, 1873
1, 130	Bailey Washing and Wringing Machine Company, Woonsocket, R. I. Clothes-wringer.....	Feb. 11, 1873	Feb. 18, 1873
1, 131	Same.....same.....	Feb. 11, 1873	Feb. 18, 1873
1, 474	Barnes, Adams & Co., Baltimore, Md. Packed oysters and fruits.....	Sept. 24, 1873	Sept. 30, 1873
1, 281	Barnett, G. & H., Philadelphia, Pa. Files and rasps.....	Apr. 28, 1873	May 27, 1873
1, 329	Barnum, F. W., & Co., Danbury, Conn. Medicinal preparation.....	June 9, 1873	June 24, 1873
1, 362	Bass, D., Jr., Woonsocket, R. I. Quill-bobbins.....	June 28, 1873	July 15, 1873
1, 278	Batchelor Brothers, Philadelphia, Pa. Cigars, tobacco, and snuff.....	May 5, 1873	May 20, 1873
1, 107	Beach, A., Iowa City, Iowa. Writing-paper.....	Dec. 27, 1872	Jan. 28, 1873
1, 199	Bell, W. G., & Co., Boston, Mass. Hams and cured meats.....	Mar. 27, 1873	Apr. 8, 1873
1, 218	Bell, R. W., & Co., Buffalo, N. Y. Soap.....	Jan. 29, 1873	Apr. 22, 1873
1, 578	Benedict, O., & Co., Bethel, Conn. Hats.....	Dec. 12, 1873	Dec. 23, 1873
1, 579	Same.....same.....	Dec. 12, 1873	Dec. 23, 1873
1, 580	Same.....same.....	Dec. 12, 1873	Dec. 23, 1873
1, 383	Berlin Mineral Water Company, Boston, Mass. Ginger ales, seltzer, champagne, cider, soda-water, &c.....	July 17, 1873	July 29, 1873
1, 461	Bernstein and Mack, New York, N. Y. Woven silk fabric and passementerie goods.....	Sept. 13, 1873	Sept. 23, 1873
1, 439	Beymer, Bauman & Co., Pittsburgh, Pa. White lead.....	June 21, 1873	Sept. 2, 1873
1, 319	Bigelow, H. H., Worcester, Mass. Boots and shoes.....	June 6, 1873	June 17, 1873
1, 352	Bishop, N. H., Manahawken, N. J. Packages containing cranberries.....	June 27, 1873	July 8, 1873
1, 565	Bishop, R. M., & Co., Cincinnati, Ohio. Soap.....	Aug. 26, 1872	Dec. 9, 1873
1, 511	Blakely, L. M., New York, N. Y. Shingles.....	Oct. 6, 1873	Oct. 28, 1873
1, 142	Blow, W. T., Saint Louis, Mo. Eye-salve.....	Nov. 15, 1872	Feb. 25, 1873
1, 504	Boker, H., & Co., New York, N. Y. Razors.....	Oct. 11, 1873	Oct. 21, 1873
1, 451	Bonsall, S., Philadelphia, Pa. Medicine.....	Sept. 9, 1873	Sept. 16, 1873
1, 174	Boston and Fairhaven Iron Works. (See Tripp, J. C. assignor.)		
1, 175	Boston Elastic Fabric Company, Boston, Mass. Rubber hose.....	Mar. 10, 1873	Mar. 18, 1873
1, 187	Same.....same.....	Mar. 10, 1873	Mar. 18, 1873
1, 187	Bourquin Brothers, New York, N. Y. Watches and watch materials.....	Mar. 10, 1873	Apr. 1, 1873
1, 389	Bradley, C. D., Taunton, Mass. Medicinal composition.....	July 23, 1873	July 30, 1873
1, 263	Bredt, F., & Co., New York, N. Y. Colors, dye-stuffs, chemicals, &c.....	Apr. 28, 1873	May 13, 1873
1, 166	Bremer's Sons, L., Philadelphia, Pa. Smoking and chewing tobacco.....	Feb. 15, 1873	Mar. 18, 1873
1, 167	Same.....same.....	Feb. 15, 1873	Mar. 18, 1873
1, 232	Bridgeport Cold-swaged Needle Company, Bridgeport, Conn. Cold-swaged sewing-machine needles.....	Mar. 28, 1873	Apr. 29, 1873
1, 211	Browett, F., & Co., Coventry, England. Frillings, gimps, ribbons, &c.....	Oct. 26, 1872	Apr. 15, 1873
1, 233	Same.....Frillings.....	Apr. 19, 1873	Apr. 29, 1873
1, 286	Brown Brothers, Erie, Pa. Petroleum.....	May 14, 1873	June 3, 1873
1, 570	Brown Cotton-gin Company, New London, Conn. Cotton-gin.....	Nov. 22, 1872	Dec. 9, 1873
1, 372	Brownson Brothers & Co., Chicago, Ill. Scarfs, ties, and bows.....	June 23, 1873	July 22, 1873
1, 525	Buffalo Dental Manufacturing Company, Buffalo, N. Y. Thermometer-tubes.....	Sept. 24, 1873	Nov. 11, 1873
1, 344	Bullard, J. H., Chicopee Falls, Mass. Machine-wound bobbins or spools for sewing-machine shuttles.....	June 20, 1873	July 1, 1873
1, 300	Burngardner, J., & Sons, Staunton, Va. Whisky.....	Apr. 3, 1873	June 10, 1873
1, 282	Burnham, E. R., Chicago, Ill. Medical compound.....	May 19, 1873	May 27, 1873
1, 141	Burt & Mears, New York, N. Y. Boots and shoes.....	Feb. 3, 1873	Feb. 18, 1873
1, 417	Bush, C. G., & Co., Providence, R. I. Kaleidoscope.....	Aug. 6, 1873	Aug. 26, 1873
1, 182	Bussey, McLeod & Co., Troy, N. Y. Cooking-stoves.....	Mar. 14, 1873	Mar. 25, 1873
1, 498	Candee & Company, The L., New Haven, Conn. India-rubber boots.....	Sept. 5, 1873	Oct. 14, 1873
1, 301	Cassard, C. & Son., Baltimore, Md. Hog-products.....	May 27, 1873	June 16, 1873
1, 393	Cassidy, J. E., Boston, Mass. Whisky.....	Apr. 8, 1872	Aug. 5, 1873
1, 505	Cately, M. S., New York, N. Y. Rubber-goods.....	June 10, 1873	Oct. 21, 1873
1, 200	Cazade & Crooka, New York, N. Y. Bottles of brandy.....	Feb. 8, 1873	Apr. 8, 1873
1, 234	Same.....Bottles for brandy.....	Apr. 12, 1873	Apr. 29, 1873
1, 244	Same.....Caps of bottles of cordials, &c.....	Apr. 12, 1873	May 6, 1873
1, 245	Same.....Packages of cordials, &c.....	Apr. 12, 1873	May 6, 1873
1, 246	Same.....Bottles of cordials, &c.....	Apr. 12, 1873	May 6, 1873
1, 247	Same.....same.....	Apr. 12, 1873	May 6, 1873
1, 102	Celluloid Manufacturing Company, Albany, N. Y. Compound of pyroxyline.....	Sept. 14, 1872	Jan. 14, 1873
1, 176	Chandler, J., Pioneer, Pa. Product of petroleum.....	Mar. 6, 1873	Mar. 25, 1873
1, 418	Chase Brothers & Woodward, Rochester, N. Y., and Augusta, Me. Seeds, bulbs, vines, and cuttings.....	July 25, 1873	Aug. 26, 1873
1, 506	Chillingworth, W., & Son, London, England. Champagne.....	Aug. 21, 1873	Oct. 21, 1873
1, 157	Chisholm, J. W., New York, N. Y. Chemical compound.....	Feb. 21, 1873	Mar. 4, 1873
1, 108	Christy & Hughes, Clyde, Ohio. Pruning-shears.....	Dec. 3, 1872	Jan. 28, 1873
1, 431	Clackner, M. T., assignor to M. Kohlerman, Baltimore, Md. Preparation for the hair.....	Aug. 20, 1873	Sept. 2, 1873
1, 204	Cleve, J., Boston, Mass. Bitters.....	Apr. 1, 1873	Apr. 8, 1873
1, 330	Clinton, E., & Co., Philadelphia, Pa. Varnish-brush.....	Feb. 27, 1873	June 24, 1873
1, 143	Clow, J. B., Allegheny City, Pa. Pearl wheat.....	Feb. 18, 1873	Feb. 25, 1873
1, 267	Coffin, Reddington & Co., New York, N. Y. Polishing material.....	May 5, 1873	May 13, 1873
1, 126	Collins Company, Collinsville, Conn. Axes and hatchets.....	Feb. 7, 1873	Feb. 11, 1873
1, 328	Same.....Axes and other tools.....	Dec. 30, 1872	June 17, 1873
1, 307	Consolidated Fruit-Jar Company, New York, N. Y., and New Brunswick, N. J. Fruit-jars.....	May 31, 1873	June 10, 1873
1, 308	Same.....same.....	May 31, 1873	June 10, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,542	Consolidated Tobacco Company, Gilroy, Cal. Cigars and tobacco	Oct. 8, 1873	Nov. 25, 1873
1,201	Cook, T. G., & Co., Philadelphia, Pa. Glass-ware	Mar. 18, 1873	Apr. 8, 1873
1,123	Cornwell, W., Philadelphia, Pa. Charts and patterns for cutting dresses	Feb. 3, 1873	Feb. 11, 1873
1,287	Courvoisier, Wilcox & Co., New York, N. Y. Watches	May 9, 1873	June 3, 1873
1,144	Cox, S. E., & Co., New York, N. Y. Compound for cleaning and dressing harness	Feb. 1, 1873	Feb. 25, 1873
1,413	Coyne, J., Pittsburgh, Pa. Selected nails	Aug. 5, 1873	Aug. 19, 1873
1,145	Crane & Co., New York, N. Y. Pickles and sauces	Feb. 19, 1873	Feb. 25, 1873
1,153	Crawford, W. H., & Co., Baltimore, Md. Coffee, spices, &c	Feb. 25, 1873	Mar. 4, 1873
1,168	Crocker Cutter-Tooth File Company, Norwich, Conn. Files	Feb. 26, 1873	Mar. 18, 1873
1,481	Culbert, J. W., New York, N. Y. Gin	Sept. 27, 1873	Oct. 7, 1873
1,309	Cutler, D. C., Carthage, Ill. Books	May 24, 1873	June 10, 1873
1,462	Cutts, O., & Co., Port au Prince, Hayti. Hard soap	July 12, 1873	Sept. 23, 1873
1,103	Daddow, S. H., Saint Clair, Pa. Blasting squibs and fuses	Oct. 29, 1872	Jan. 21, 1873
1,507	Davis, A. M., & R., New York, N. Y. Umbrellas	Sept. 15, 1873	Oct. 21, 1873
1,566	Davis, W. H., & Co., Cincinnati, Ohio. Cured meats	Nov. 7, 1873	Dec. 9, 1873
1,104	Dawes & Fanning, New York, N. Y. Umbrellas and parasols	Jan. 11, 1873	Jan. 21, 1873
1,099	De Bary, F., & Co., New York, N. Y. Champagne wine	Dec. 31, 1872	Jan. 7, 1873
1,105	Same.....Cigars	Dec. 31, 1872	Jan. 21, 1873
1,109	Same.....same	Jan. 18, 1873	Jan. 28, 1873
1,302	De Grath, S., Jersey City, N. J. Medicine	May 24, 1873	June 10, 1873
1,394	Same.....same	June 30, 1873	Aug. 5, 1873
1,251	Delano, G., New Bedford, Mass. Candles	Apr. 28, 1873	May 6, 1873
1,443	Derby & Day, Saint Louis, Mo. Whisky	Aug. 30, 1873	Sept. 9, 1873
1,490	Same.....Barrels of whisky	Aug. 30, 1873	Oct. 14, 1873
1,463	Devlan, P. S., New York, N. Y. Packing for railway-car journal-boxes	Sept. 20, 1873	Sept. 23, 1873
1,337	Devvo Manufacturing Company, New York, N. Y. Illuminating-oil	June 16, 1873	June 24, 1873
1,338	Same.....same	June 16, 1873	June 24, 1873
1,373	Dick, D., New York, N. Y. Medicine	July 14, 1873	July 22, 1873
1,363	Dilworth Bros., Pittsburgh, Pa. Roasted coffee	June 13, 1873	July 15, 1873
1,452	Diaston, H., & Sons, Philadelphia, Pa. Saws, tools, steel, and files	Aug. 1, 1873	Sept. 16, 1873
1,464	Same.....same	Sept. 11, 1873	Sept. 23, 1873
1,478	Dodd, Tarr & Co., Gloucester, Mass. Prepared and preserved fish	Sept. 24, 1873	Sept. 30, 1873
1,479	Doherty, M., & Co., Boston, Mass. Brandies	Sept. 22, 1873	Sept. 30, 1873
1,384	Dole Bros., Boston, Mass. Bluing-paper	July 17, 1873	July 29, 1873
1,401	Domestic Sewing-Machine Company, New York, N. Y. Patterns of paper, cloth, &c	July 29, 1873	Aug. 12, 1873
1,402	Same.....Dress-patterns	July 29, 1873	Aug. 12, 1873
1,571	Dornan, J., Philadelphia, Pa. Carpets	Oct. 30, 1873	Dec. 9, 1873
1,235	Dovell's Son, R. B., New York, N. Y. Sealing-wax	Feb. 8, 1873	Sept. 29, 1873
1,390	Draper, J. O., & Co., Pawtucket, R. I. Soap	June 14, 1873	July 29, 1873
1,444	Dueber, J. C., Cincinnati, Ohio. Watch-cases	Aug. 27, 1873	Sept. 9, 1873
1,450	Dueber Watch-Case Manufacturing Company, Cincinnati, Ohio. Gold rings	Aug. 27, 1873	Sept. 9, 1873
1,432	Dugdale, G., & Co., Baltimore, Md. Fertilizer	Aug. 21, 1873	Sept. 2, 1873
1,433	Same.....same	Aug. 21, 1873	Sept. 2, 1873
1,440	Same.....same	Aug. 21, 1873	Sept. 2, 1873
1,475	Same.....same	Aug. 21, 1873	Sept. 30, 1873
1,478	Same.....same	Aug. 21, 1873	Sept. 30, 1873
1,374	Dunbar, C. and E. E., Watkesha, Wis. Mineral-water	July 2, 1873	July 22, 1873
1,340	Dunham, W. S., New York, N. Y. Liqueurs, wines, bitters, sirups, and cordials	June 23, 1873	July 1, 1873
1,419	Durkee, E. K., & Co., New York, N. Y. Spices, mustard, soda, and cream of tartar	July 12, 1873	Aug. 26, 1873
1,530	Same.....Compound spice for seasoning	Sept. 7, 1873	Nov. 18, 1873
1,219	Du Vivier & Co., New York, N. Y. Bourbon whisky	Apr. 14, 1873	Apr. 22, 1873
1,220	Same.....Rye whisky	Apr. 14, 1873	Apr. 22, 1873
1,221	Same.....Bourbon whisky	Apr. 14, 1873	Apr. 22, 1873
1,222	Same.....Rye whisky	Apr. 14, 1873	Apr. 22, 1873
1,132	Earlckson & Harris, Saint Louis, Mo. Plug chewing-tobacco	Feb. 8, 1873	Feb. 18, 1873
1,586	Eavenson, J., & Sons, Philadelphia, Pa. Soap	Sept. 10, 1873	Dec. 23, 1873
1,491	Egbert, F. L., New York, N. Y. Corset steel-springs	Aug. 28, 1873	Oct. 14, 1873
1,567	Egbert, F. L., Waterbury, Conn., and New York, N. Y. Steel corset springs	Nov. 26, 1873	Dec. 9, 1873
1,160	Elkinton, J. S. and T., Philadelphia, Pa. Soap	Feb. 26, 1873	Mar. 11, 1873
1,264	Ellis, G. F., Terre Haute, Ind. Woolen goods	May 5, 1873	May 13, 1873
1,188	Emerson's Sons, T., Wakefield, Mass. Boots and shoes	Mar. 7, 1873	Apr. 1, 1873
1,189	Same.....same	Mar. 7, 1873	Apr. 1, 1873
1,545	Emery, Ivey & Lee, New York, N. Y. Dry goods	Oct. 25, 1873	Dec. 2, 1873
1,177	Engelke, B. H., Saint Louis, Mo. Whisky	Feb. 19, 1873	Mar. 25, 1873
1,205	Erskine & Co., New York, N. Y. Trimmings for ladies' wear	Mar. 15, 1873	Apr. 8, 1873
1,115	Evans Bros., Cincinnati, Ohio. Hams, &c	Jan. 24, 1873	Feb. 4, 1873
1,268	Evans, Lippincott & Cunningham, Cincinnati, Ohio. Sugar-cured hams	Apr. 16, 1873	May 13, 1873
1,169	Fairbanks & Gilman, New Orleans, La. Sirup	Mar. 10, 1873	Mar. 18, 1873
1,170	Same.....same	Mar. 10, 1873	Mar. 18, 1873
1,568	Fargo, E. A., & Co., San Francisco, Cal. Bourbon whisky	Nov. 25, 1873	Dec. 9, 1873
1,270	Farmer, H. R., Danville, Va. Flue for draft, ventilation, &c	May 10, 1873	May 20, 1873
1,288	Farr, W. A., & Co., Boston, Mass. Shirts	May 16, 1873	June 3, 1873
1,445	Fayerweather, J. S., & Co., Danbury, Conn. Hat	Aug. 27, 1873	Sept. 9, 1873
1,403	Fellows, T. S., and J. R. Smith, Wells, Minn. Medicine	July 5, 1873	Aug. 12, 1873
1,446	Fenton Manufacturing Company, Cleveland, Ohio. Medicines	Aug. 28, 1873	Sept. 9, 1873
1,447	Ferry, D. M., & Co., Detroit, Mich. Seeds	July 14, 1873	Sept. 9, 1873
1,465	Finlay, Gourlay & Finch, New York, N. Y. Shirts	Sept. 13, 1873	Sept. 23, 1873
1,522	Fisher, C. M., New York, N. Y. Gold pens	Nov. 1, 1873	Nov. 11, 1873
1,434	Fisk, Clark & Flagg, New York, N. Y. Men's furnishing goods	July 28, 1873	Sept. 2, 1873
1,140	Flack Bros., Canton, Md. Whiskies	Feb. 6, 1873	Feb. 18, 1873
1,414	Flaxland, E., & Co., Paris, France. Fancy and other dry goods	Aug. 1, 1873	Aug. 19, 1873
1,415	Same.....same	Aug. 1, 1873	Aug. 19, 1873
1,236	Fletcher & Dwyer, Lynn, Mass. Burnishing-ink	Mar. 17, 1873	Apr. 29, 1873
1,375	Same.....Stove-polish	July 7, 1873	July 22, 1873
1,448	Flies, W. M., & Co., New York, N. Y. Whisky	Aug. 23, 1873	Sept. 9, 1873
1,248	Fox, J., Lansingburgh, N. Y. Sponge or butter crackers	Apr. 17, 1873	May 6, 1873
1,124	Frese, E., San Francisco, Cal. Medicinal compound	Feb. 6, 1873	Feb. 11, 1873
1,367	Friedmann & Lauterjung, New York, N. Y. Razors and cutlery	Apr. 26, 1873	July 15, 1873
1,285	Fuller, H. W., Chicago, Ill. Medicinal compound	May 8, 1873	May 13, 1873
1,320	Gail, G. W. and A., Baltimore, Md. Tobacco and snuff	Apr. 21, 1873	June 17, 1873
1,266	Gallego Mills Manufacturing Company, Richmond, Va. Flour	May 9, 1873	May 13, 1873
1,289	Gardner Manufacturing Company, Glen Gardner, N. J., and New York, N. Y. Seats for chairs, settees, and cars	May 29, 1873	June 3, 1873
1,190	Gein, L. H., New York, N. Y. Printing inks and varnishes	Mar. 22, 1873	Apr. 1, 1873
1,212	Gerdon, Cook & Co., New York, N. Y. Lubricating compound	Sept. 26, 1872	Apr. 15, 1873
1,582	Giant-Powder Company and The Atlantic Giant-Powder Company, San Francisco, Cal. Dynamite explosive compound	Nov. 15, 1873	Dec. 23, 1873
1,583	Same.....Giant-powder explosive compound	Nov. 15, 1873	Dec. 23, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,588	Gilmor & Gibson, Baltimore, Md. Cigars	Dec. 22, 1873	Dec. 30, 1873
1,435	Glanding, J., & Co., Philadelphia, Pa. Steam-packing	July 26, 1873	Sept. 2, 1873
1,436	Same	Aug. 23, 1873	Sept. 2, 1873
1,381	Gold Heating Company, New York, N. Y. Heaters	July 12, 1873	July 22, 1873
1,453	Goldsmith Bros. & Benjamin, Chicago, Ill. Cigars	Sept. 2, 1873	Sept. 18, 1873
1,385	Goodell, D. H., & A. N. H., N. H. Apple-paring machines	July 10, 1873	July 29, 1873
1,237	Goodrich, M. S., & Co., Flint, Mich. Oils for medical purposes	Mar. 29, 1873	Apr. 29, 1873
1,508	Gordon & Dilworth, New York, N. Y. Preserved and canned food	Oct. 11, 1873	Oct. 21, 1873
1,501	Graham, J. L., Pittsburgh, Pa. Medicine	Oct. 9, 1873	Oct. 14, 1873
1,574	Greanelle Manufacturing Company, New York, N. Y. Goods made of a composition substitute for bone, horn, hard rubber, &c.	Dec. 9, 1873	Dec. 16, 1873
1,543	Great Eastern Tea Company, Terre Haute, Ind. Teas and coffees	Nov. 3, 1873	Nov. 25, 1873
1,531	Gregg, W. H., & Co., Elmira, N. Y. Medicine	Dec. 20, 1872	Nov. 18, 1873
1,538	Guanabani Guano Company, Petersburg, Va. Guano	Nov. 17, 1873	Nov. 25, 1873
1,410	Gullett Gin Manufacturing Company, Amite City, La. Cotton-gins	July 5, 1873	Aug. 19, 1873
1,353	Gunnison, A., & Co., Cincinnati, Ohio. Railway-greaser	June 27, 1873	July 8, 1873
1,523	Haley, Morse & Co., Boston, Mass. Clothes-wringing machines	Nov. 6, 1873	Nov. 11, 1873
1,110	Hall, Elton & Co., Wallingford, Conn. Spoons, forks, &c.	Jan. 23, 1873	Jan. 28, 1873
1,202	Harrison Bros. & Co., Philadelphia, Pa. Paints and colors	Mar. 28, 1873	Apr. 8, 1873
1,271	Hartell & Letchworth, Philadelphia, Pa. Medal	Apr. 28, 1873	May 20, 1873
1,272	Harwood, L., & Son, Warren, Mass. Salve	May 10, 1873	May 20, 1873
1,321	Hastings & Berlin, Saint Louis, Mo. Whisky	May 29, 1873	June 17, 1873
1,590	Hawley, Bowen & Co., San Francisco, Cal. Ground coffee	Dec. 22, 1873	Dec. 30, 1873
1,512	Haxall, Crenshaw & Co., Richmond, Va. Flour	Oct. 22, 1873	Oct. 28, 1873
1,513	Same	Oct. 22, 1873	Oct. 28, 1873
1,532	Hegle, F., New York, N. Y. Kid gloves	Nov. 7, 1873	Nov. 18, 1873
1,425	Heinz, Noble & Co., Pittsburgh, Pa. Celery sauce	Aug. 18, 1873	Aug. 26, 1873
1,436	Same	Aug. 18, 1873	Aug. 26, 1873
1,454	Heller, J., Chicago, Ill. Cigars	Sept. 3, 1873	Sept. 16, 1873
1,546	Hessenbruch, T., Philadelphia, Pa. Hardware, cutlery, guns, pistols, and lead-pencils	Nov. 13, 1873	Dec. 2, 1873
1,303	Hicks & Wolfe, Troy, N. Y. Stoves, heaters, and ranges	May 19, 1873	June 10, 1873
1,324	Hodkinson, M. T. D., and S. Marietta, Ohio, and Louisville, Ky. Oils	May 20, 1873	June 17, 1873
1,455	Hoffman, Lee & Co., Baltimore, Md. Moss-licorice	May 8, 1873	Sept. 16, 1873
1,456	Same	May 8, 1873	Sept. 16, 1873
1,238	Hopkins & Co., New York, N. Y. Prepared flour	Mar. 7, 1873	Apr. 29, 1873
1,206	Hopkins, J. H., Providence, R. I. Medical compound	Nov. 22, 1872	Apr. 8, 1873
1,364	Howe & Hubbell, Cincinnati, Ohio. Casks and other packages of whisky	June 28, 1873	July 15, 1873
1,572	Howe, E., New York, N. Y. Whisky	Sept. 8, 1873	Dec. 9, 1873
1,178	Hoyt, R., New York, N. Y. Medical preparation	Mar. 19, 1873	Mar. 25, 1873
1,420	Hughes, J. E., Kidderminster, England. Carpets, drugget, rugs, and mats	July 26, 1873	Aug. 26, 1873
1,427	Hume, T. L., Washington, D. C. Rye whisky	Aug. 22, 1873	Aug. 26, 1873
1,245	Hunt, Rankin & Lamar, Macon, Ga. Fertilizer	June 14, 1873	July 1, 1873
1,539	Hunter & Frost, Fredericksburgh, Va. Plows	Nov. 18, 1873	Nov. 25, 1873
1,376	Imhorst, H., New York, N. Y. Bottles of brandy	June 28, 1873	July 23, 1873
1,161	Irving, T. J. & Co., Baltimore, Md. Linen and muslin shirts	Feb. 28, 1873	Mar. 11, 1873
1,325	Jackson, J. A. & Co., Saint Louis, Mo. Blackberry brandy	May 28, 1873	June 17, 1873
1,111	Jacoby, S. & Co., New York, N. Y. Cigars	Jan. 14, 1873	Jan. 28, 1873
1,356	Jenkins, T. E., Louisville, Ky. Perfumery	July 3, 1873	July 8, 1873
1,100	Jenks, C. W., Somerville, Mass. Shirts	Dec. 30, 1872	Jan. 7, 1873
1,229	Jones, Williams & Faxon, Boston, Mass. Flour	Apr. 18, 1873	Apr. 22, 1873
1,146	Joseph, N., San Francisco, Cal. Cutlery	Dec. 9, 1872	Feb. 25, 1873
1,101	Jowitt, T. & Son, Sheffield, England. Files	Jan. 3, 1873	Jan. 7, 1873
1,466	Kearsarge Peg Company, Andover, N. H. Pegs for boots and shoes	Sept. 8, 1873	Sept. 23, 1873
1,467	Same	Sept. 8, 1873	Sept. 23, 1873
1,457	Keep, W. J., Troy, N. Y. Stoves	Sept. 12, 1873	Sept. 16, 1873
1,249	Kelly, E., New Bedford, Mass. Clock and watch oil	Apr. 14, 1873	May 6, 1873
1,516	Kenry & McPartland, New York, N. Y. Ladies and children's shoes	Oct. 30, 1873	Nov. 4, 1873
1,179	Kerbs & Spiess, New York, N. Y. Cigars	Mar. 15, 1873	Mar. 25, 1873
1,180	Same	Mar. 15, 1873	Mar. 25, 1873
1,468	Kidd, G. W. & Co., New York, N. Y. Spirituous liquors	Aug. 30, 1873	Sept. 23, 1873
1,527	Kidder, W., Goffstown, N. H. Liniment	Dec. 17, 1873	Dec. 23, 1873
1,239	Kimberly, F. H., Springfield, Mass. Salt-rheum ointment	Apr. 4, 1873	Apr. 29, 1873
1,365	Kinney, F. S., New York, N. Y. Cigars, cheroots, and cigarettes	June 21, 1873	July 15, 1873
1,171	Kinsman, F. W., Augusta, Me. Cough-balsam	Mar. 5, 1873	Mar. 12, 1873
1,213	Kipe & Townsend, Chad's Ford, Pa. Kiln-dried corn-meal	Apr. 2, 1873	Apr. 15, 1873
1,524	Knickbocker Ice Company, New York, N. Y. Ice	Nov. 3, 1873	Nov. 11, 1873
1,112	Knoepfel, W. H., New York, N. Y. Bitters	Jan. 24, 1873	Jan. 28, 1873
1,492	Kohlerman, M. (See Clackner, M. T. assignor)		
1,283	Kohn, Leberman & Co., Philadelphia, Pa. Shirt	Sept. 23, 1873	Oct. 14, 1873
1,133	Kohn, T., Hartford, Conn. Braids, gimps, fringes, trimmings, &c.	May 19, 1873	May 27, 1873
1,273	Kowalski, W. A., New Orleans, La. Coal-oil	Dec. 12, 1871	Feb. 18, 1873
1,377	Laurencot, J. B., Hoboken, N. J. Watch glass	May 10, 1873	May 30, 1873
1,482	Leng & Ogden, New York, N. Y. Steel and iron	July 15, 1873	July 22, 1873
1,502	Same	Sept. 24, 1873	Oct. 7, 1873
1,304	Leonard & Ellis, New York and Brooklyn, N. Y. Lubricating-oils	Sept. 26, 1873	Oct. 14, 1873
1,310	Leshar, Whitman & Co., New York, N. Y. Silicias, and goods of like character	May 24, 1873	June 10, 1873
1,428	Lewis, F. C., Trenton, N. J. Raisins	May 31, 1873	June 10, 1873
1,252	Lewis, W. R., New York, N. Y. Alpaca	Aug. 22, 1873	Aug. 26, 1873
1,253	Libby, E. F., Allegheny City, Pa. Medicinal oil	Apr. 3, 1873	May 6, 1873
1,254	Liggett & Myers, Saint Louis, Mo. Plug chewing-tobacco	Apr. 23, 1873	May 6, 1873
1,255	Same	Apr. 23, 1873	May 6, 1873
1,256	Same	Apr. 23, 1873	May 6, 1873
1,311	Same	Apr. 23, 1873	May 6, 1873
1,331	Same	May 13, 1873	June 10, 1873
1,332	Same	June 16, 1873	June 24, 1873
1,421	Same	June 16, 1873	June 24, 1873
1,421	Lilly & Phelan, Evansville, Ind. Pepsin	Aug. 4, 1873	Aug. 26, 1873
1,203	Lippincott, J. H., Pittsburgh, Pa. Baking-powder	Mar. 21, 1873	Apr. 8, 1873
1,536	Liezka, G. C., Williamsburgh, N. Y. Driers, paints, varnishes, &c.	Nov. 8, 1873	Nov. 18, 1873
1,517	Livingston & Co., San Francisco, Cal. Whisky	Oct. 25, 1873	Nov. 4, 1873
1,279	Livingston, H., Albany, N. Y. Bourbon whisky	May 5, 1873	May 20, 1873
1,378	Loewenthal, Kaufman & Co., Chicago, Ill. Smoking-tobacco	June 16, 1873	July 22, 1873
1,147	Long, G., Keytesville, Mo. Salve	Feb. 19, 1873	Feb. 25, 1873
1,581	Lorentz & Rittler, Baltimore, Md. Fertilizer	Dec. 12, 1883	D. C. 23, 1873
1,134	MacGowan, J. K. & Co., Philadelphia, Pa. Table-sauce	Feb. 11, 1873	Feb. 18, 1873
1,158	MacWilliams & Pieper, Baltimore, Md. Bread	Nov. 20, 1872	Mar. 4, 1873
1,368	Mandel, L. L., New York, N. Y. Varnish	June 28, 1873	July 15, 1873
1,274	Marshall Bros. & Co., Philadelphia, Pa. Black and galvanized sheet-iron	Mar. 26, 1873	May 20, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,493	Martin, J. M. C., New York, N. Y. Brushes.	Sept. 23, 1873	Oct. 14, 1873
1,191	Mauger, V. E., New York, N. Y. Playing-cards.	Mar. 15, 1873	Apr. 1, 1873
1,305	Mayo, H. & Co., Boston, Mass. Cured or smoked fish.	May 31, 1873	June 10, 1873
1,509	McCann, J., Beaumont Mills, near Drogheda, Ireland. Oat-meal.	Aug. 11, 1873	Oct. 21, 1873
1,181	McClelland, J. J., Austin, Tex. Whisky.	Nov. 30, 1872	Mar. 25, 1873
1,404	McCloskey Bro. & Co., Philadelphia, Pa. Paints and colors.	July 31, 1873	Aug. 12, 1873
1,416	McCullagh, S., London, England. Wines, liquors, beer, mineral-waters, &c.	Aug. 5, 1873	Aug. 19, 1873
1,117	McCullough Iron Company, Philadelphia, Pa. Galvanized sheet-iron.	Jan. 24, 1873	Feb. 4, 1873
1,118	Same.	Jan. 24, 1873	Feb. 4, 1873
1,357	Meisner, Ackermann & Co., New York, N. Y. Oil cans or packages.	June 25, 1873	July 8, 1873
1,214	Merchant's Gargling Oil Company, Lockport, N. Y. Liniment.	Dec. 23, 1872	Apr. 15, 1873
1,215	Same.	Dec. 23, 1872	Apr. 15, 1873
1,119	Merritt, C., South Weymouth, Mass. Boots and shoes.	Jan. 24, 1873	Feb. 4, 1873
1,322	Merwin, Hulbert & Co., New York, N. Y. Revolving pistols.	May 24, 1873	June 17, 1873
1,323	Same.	May 24, 1873	June 17, 1873
1,116	Metal Company, I. X. L., Saint Louis, Mo., and Sacramento, Cal. Antifriction metal and journal bearings.	Jan. 27, 1873	Feb. 4, 1873
1,923	Meyer, E. A. E., Watertown, N. Y. Hair-dressing.	Apr. 12, 1873	Apr. 22, 1873
1,533	Meyer, I. T. & Co., New York, N. Y. Cutlery.	Sept. 9, 1873	Nov. 18, 1873
1,524	Miller Bros., New York, N. Y. Cosmetic.	Apr. 10, 1873	Apr. 22, 1873
1,216	Miller, J. P., Baltimore, Md. Pile-remedy.	Mar. 25, 1873	Apr. 15, 1873
1,573	Miller, O. W. & Co., Baltimore, Md. Oysters.	Dec. 4, 1873	Dec. 9, 1873
1,290	Mintzer, S. L., Philadelphia, Pa. Tooth-brushes.	May 6, 1873	June 3, 1873
1,148	Moody Bros., Indianapolis, Ind. Baking-powder.	Feb. 17, 1873	Feb. 25, 1873
1,405	Moore, Tingie & Co., New York, N. Y. Alpacas and mohairs.	Mar. 8, 1873	Aug. 12, 1873
1,207	Morehead, Young & Co., Saint Louis, Mo., and Leavenworth, Kan. Whisky.	Apr. 2, 1873	Apr. 8, 1873
1,534	Morrison, A. B., Portland, Me. Gold and silver solutions for electroplating without a battery.	Oct. 9, 1873	Nov. 18, 1873
1,333	Morrow, Chamberlain & Co., New York, N. Y. Wines and liquors.	June 12, 1873	June 24, 1873
1,358	Moss, J. L. jr., and N. F. Moss, Westerly, R. I., and New York, N. Y. Shirtings.	Mar. 20, 1873	July 8, 1873
1,262	Mowing and Reaping Machine Company, W. A. Wood, Hoosick Falls, N. Y. Sections for the cutters of harvesting-machines.	Apr. 24, 1873	May 13, 1873
1,564	Moyer & Co., Philadelphia, Pa. Medical compound for rheumatism.	Nov. 18, 1873	Dec. 2, 1873
1,162	National Rubber Company, Bristol, R. I. Rubber hose and belting.	Dec. 12, 1872	Mar. 11, 1873
1,526	National Watch Company, Elgin, Ill. Watches.	Nov. 6, 1873	Nov. 11, 1873
1,547	Same.	Nov. 22, 1873	Dec. 2, 1873
1,548	Same.	Nov. 22, 1873	Dec. 2, 1873
1,549	Same.	Nov. 22, 1873	Dec. 2, 1873
1,550	Same.	Nov. 22, 1873	Dec. 2, 1873
1,551	Same.	Nov. 22, 1873	Dec. 2, 1873
1,552	Same.	Nov. 22, 1873	Dec. 2, 1873
1,553	Same.	Nov. 22, 1873	Dec. 2, 1873
1,554	Same.	Nov. 22, 1873	Dec. 2, 1873
1,555	Same.	Nov. 22, 1873	Dec. 2, 1873
1,556	Same.	Nov. 22, 1873	Dec. 2, 1873
1,557	Same.	Nov. 22, 1873	Dec. 2, 1873
1,558	Same.	Nov. 22, 1873	Dec. 2, 1873
1,559	Same.	Nov. 22, 1873	Dec. 2, 1873
1,560	Same.	Nov. 22, 1873	Dec. 2, 1873
1,561	Same.	Nov. 22, 1873	Dec. 2, 1873
1,562	Same.	Nov. 22, 1873	Dec. 2, 1873
1,575	Netterfield & Smith, Burr Oak, Mich. Burning fluids and liniments.	Oct. 31, 1873	Dec. 16, 1873
1,469	Newman, M., and B. Liebman, New York, N. Y. Clothing for women and children.	Sept. 2, 1873	Sept. 23, 1873
1,470	Newton Bros. & Co., San Francisco, Cal., Texas.	Aug. 16, 1873	Sept. 23, 1873
1,125	Newton, L. H., Brooklyn, N. Y. Packed fresh salmon.	Jan. 24, 1873	Feb. 11, 1873
1,510	New York Wire-Snap Company, New York, N. Y. Snap-hooks.	Oct. 2, 1873	Oct. 21, 1873
1,386	North, J. G., Brookline, Mass. Composition for softening, polishing, and preserving leather.	July 17, 1873	July 29, 1873
1,346	Oakford & Co., Baltimore, Md. Sugar-cured hams.	June 19, 1873	July 1, 1873
1,291	Oakley, J. & Co., New York and Newburgh, N. Y. Soap.	May 23, 1873	June 3, 1873
1,514	Ocean Trout Company, Port Monmouth, N. J. Preserved fish.	Sept. 10, 1873	Oct. 28, 1873
1,429	Ofeldt, F. W. & Co., Newark, N. J. Gas-machine.	July 19, 1873	Aug. 26, 1873
1,275	Oliver, J., South Bend, Ind. Plow.	Apr. 3, 1873	May 30, 1873
1,297	Orendorf, J. T. M., Baltimore, Md. Whisky.	May 26, 1873	June 3, 1873
1,241	Osborne, D. M., & Co., Auburn, N. Y. Harvesting-machines.	Apr. 23, 1873	Apr. 29, 1873
1,217	Osgood, J. R., & Co., Boston, Mass. Prints.	Mar. 27, 1873	Apr. 15, 1873
1,284	Pacific Balm Company, New York, N. Y. Medicine.	May 17, 1873	May 27, 1873
1,437	Palm-Oil Axle-Grease Company, Charleston, S. C. Axle-grease.	Aug. 12, 1873	Sept. 2, 1873
1,515	Pardessus, S. J., & Co., New York, N. Y. Glass shades, cylinders, and similar glass goods.	Oct. 18, 1873	Oct. 28, 1873
1,347	Parry, T. W., Lehigh Township, Northampton County, Pa. Roofing-slate.	June 11, 1873	July 1, 1873
1,341	Pevey, C. K., Worcester, Mass. Playing-cards.	June 23, 1873	July 1, 1873
1,348	Same.	June 16, 1873	July 1, 1873
1,349	Same.	June 25, 1873	July 1, 1873
1,354	Phipps, G., & Co., Cincinnati, Ohio. Sugar-cured meats and smoked beef.	June 25, 1873	July 8, 1873
1,576	Porter, D., San Francisco, Cal. Whisky.	Dec. 5, 1873	Dec. 16, 1873
1,183	Preston & Merrill, Boston, Mass. Compound of sugar and lemons.	Feb. 3, 1873	Mar. 25, 1873
1,225	Same. Yeast-powder.	Feb. 4, 1873	Apr. 22, 1873
1,135	Prince's Metallic-Paint Company, Wetsport, Pa. Metallic paint.	Feb. 8, 1873	Feb. 18, 1873
1,406	Prince's Metallic-Paint Company, New York, N. Y. Metallic paint.	July 26, 1873	Aug. 12, 1873
1,192	Procter & Gamble, Cincinnati, Ohio. Candles.	Mar. 17, 1873	Apr. 1, 1873
1,226	Same. Starch.	Mar. 31, 1873	Apr. 22, 1873
1,540	Prot, F., & Co., Paris, France. Perfumery and toilet articles.	Nov. 7, 1873	Nov. 25, 1873
1,494	Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringers.	Aug. 7, 1873	Oct. 14, 1873
1,499	Quicksilver Mining Company, New Almaden, Cal. Quicksilver-flasks.	Sept. 29, 1873	Oct. 14, 1873
1,269	Rand, W. J., New York, N. Y. Rice-starch.	Apr. 24, 1873	May 13, 1873
1,422	Rainey, W. H., Brunswick, Ga. Liniment.	Aug. 6, 1873	Aug. 26, 1873
1,257	Ransom, D., Son & Co., Buffalo, N. Y. Medicinal compound.	Apr. 3, 1873	May 13, 1873
1,258	Same.	Apr. 3, 1873	May 13, 1873
1,259	Same. Medical compound.	May 29, 1872	May 13, 1873
1,260	Same. Medical compound.	May 29, 1872	May 13, 1873
1,261	Same.	Apr. 3, 1873	May 13, 1873
1,193	Rattinger, R., Saint Louis, Mo. Medicines.	Feb. 19, 1873	Apr. 1, 1873
1,149	Remington, E., & Sons, Ilion, N. Y. Plows.	Feb. 18, 1873	Feb. 25, 1873
1,326	Reynard, P., Saint Louis, Mo., and Louisville, Ky. Insect-powder.	June 9, 1873	June 17, 1873
1,407	Reynolds, G. A., Utica, N. Y. Shoes.	June 30, 1873	Aug. 12, 1873
1,395	Rhodes, B. M., & Co., Baltimore, Md. Guano.	July 29, 1873	Aug. 5, 1873
1,569	Rhodes, J. M., & Co., Baltimore, Md. Ammoniated superphosphate fertilizer.	Nov. 24, 1873	Dec. 9, 1873
1,408	Rieman, W. J., & Son, Baltimore, Md. Ham, shoulders, bacon, &c.	June 12, 1873	Aug. 12, 1873
1,163	Rives, F. and J., and G. A. Bailey, Washington, D. C. Printed publications.	Mar. 3, 1873	Mar. 11, 1873
1,458	Robertson, J., & Son, Putney, Vt. Medicated Manila paper.	Aug. 23, 1873	Sept. 16, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,173	Robinson Tobacco Manufacturing Company, Louisville, Ky. Fine-cut chewing or smoking tobacco.	Feb. 14, 1873	Mar. 18, 1873
1,172	Same. Smoking tobacco.	Feb. 14, 1873	Mar. 18, 1873
1,194	Rockwell, J. V., New York, N. Y. Ruffles and dress-trimmings.	Mar. 10, 1873	Apr. 1, 1873
1,342	Rogers, C., & Bros., Meriden, Conn. Forks, spoons, and other table-ware.	June 25, 1873	July 1, 1873
1,312	Rogers, H. M., & Co., New York, N. Y. Cod-liver oil.	May 31, 1873	June 10, 1873
1,327	Rommney, T., Williamsburgh, N. Y. Lager-beer.	May 31, 1873	June 17, 1873
1,495	Royal Baking-Powder Company, New York, N. Y. Baking-powder.	Sept. 23, 1873	Oct. 14, 1873
1,208	Rubber-Paint Company, Cleveland, Ohio. Rubber-paint.	Mar. 3, 1873	Apr. 8, 1873
1,209	Same. same.	Mar. 3, 1873	Apr. 8, 1873
1,535	Rumsey, L. M., & Co., Saint Louis, Mo. Agricultural implements.	Oct. 31, 1873	Nov. 18, 1873
1,150	Sanger, W. P., New York, N. Y. Gin.	Feb. 15, 1873	Feb. 25, 1873
1,242	Sawyer, H., Chelsea, Mass. Bluing.	Apr. 23, 1873	Apr. 29, 1873
1,423	Schloemer, O., New York, N. Y. Wines and liquors.	May 23, 1873	Aug. 26, 1873
1,424	Scruton, W., New York, N. Y. Castor-oil pills.	Aug. 9, 1873	Aug. 26, 1873
1,164	Seaverns, T. W., jr., West Roxbury, Mass. Boots and shoes.	Mar. 3, 1873	Mar. 11, 1873
1,227	Seidenberg & Co., New York, N. Y. Cigars.	Apr. 12, 1873	Apr. 22, 1873
1,379	Sellers Brothers, Philadelphia, Pa. Miller's soap-stone packing.	June 7, 1873	July 22, 1873
1,335	Shaw, C. A., Boston, Mass. Stocking supporter, clasps, and suspenders.	June 13, 1873	June 24, 1873
1,350	Sheffield File Works, Albany, N. Y. Files, rasps, and steels.	June 24, 1873	July 1, 1873
1,343	Sherwood & Genin, Buffalo, N. Y. Soap.	Apr. 28, 1873	July 1, 1873
1,228	Siloam Mineral-Spring Company. Mineral-water.	Mar. 20, 1873	Apr. 22, 1873
1,397	Silver Lake Company, Newtonville, Mass. Steam-packing for engines.	July 29, 1873	Aug. 5, 1873
1,398	Same. same.	July 29, 1873	Aug. 5, 1873
1,399	Same. same.	July 29, 1873	Aug. 5, 1873
1,400	Same. Solid-braid d cords.	July 29, 1873	Aug. 5, 1873
1,355	Sleeper, Wells & Aldrich, Burlington, N. J. Preserved, canned, or bottled vegetables, fruits, pickles, sauces, and honey.	June 12, 1873	July 8, 1873
1,541	Slingerland, T. B., Rome, N. Y. Cigars.	Nov. 15, 1873	Nov. 25, 1873
1,240	Smith & Montross, Gallen, Mich. Hake and other handles.	Apr. 5, 1873	Apr. 29, 1873
1,369	Smith & Parks, Cincinnati, Ohio. Globules for homeopathic medicines.	July 5, 1873	July 15, 1873
1,483	Smith, M. M., & Bro., Chicago, Ill. Distilled liquors.	Sept. 17, 1873	Oct. 7, 1873
1,484	Same. same.	Sept. 17, 1873	Oct. 7, 1873
1,485	Same. same.	Sept. 17, 1873	Oct. 7, 1873
1,496	Same. same.	Sept. 17, 1873	Oct. 7, 1873
1,449	Smyth & Co., Balbriggan, Ireland. Hosiery.	Sept. 2, 1873	Sept. 9, 1873
1,411	Solomons, M. J., Savannah, Ga. Fertilizers.	July 19, 1873	Aug. 19, 1873
1,370	Southard, Robinson & Co., New York, N. Y. Cylinder-stoves.	June 28, 1873	July 15, 1873
1,496	Spear, J. & Co., Philadelphia, Pa. Stoves.	Oct. 15, 1873	Oct. 14, 1873
1,360	Stark Mills, Manchester, N. H. Rough bathing-towels.	May 21, 1873	July 8, 1873
1,306	Steele & Price, Chicago, Ill. Flavoring extracts, &c.	Apr. 8, 1873	June 10, 1873
1,154	Sternberger, L., Philadelphia, Pa. Shirts, shirt-fronts, &c.	July 15, 1873	Mar. 4, 1873
1,459	Stewart, W. S., Saint Louis, Mo. Barrels of whisky.	Aug. 30, 1873	Sept. 16, 1873
1,276	Stone & Spencer, Syracuse, N. Y. Salt.	Apr. 30, 1873	May 20, 1873
1,155	Stone, J. W., Lynchburgh, Va. Manufactured tobacco.	Feb. 24, 1873	Mar. 4, 1873
1,159	Same. Smoking-tobacco.	Feb. 27, 1873	Mar. 4, 1873
1,151	Stoner, M. H., Skaneateles, N. Y. Pile-remedy.	Feb. 18, 1873	Feb. 25, 1873
1,298	Stowe, S. F., Providence, R. I. Beverage.	May 26, 1873	June 3, 1873
1,391	Same. Small or root beer.	July 14, 1873	July 29, 1873
1,387	Straight, S., & Son, Hudson, Ohio. Butter.	July 19, 1873	July 29, 1873
1,497	Straub, I., & Co., Cincinnati, Ohio. Grinding-mills.	Aug. 7, 1873	Oct. 14, 1873
1,230	Straub Mill Company, Cincinnati, Ohio. Grinding-mills.	Mar. 19, 1873	Apr. 22, 1873
1,190	Suire, F. E., & Co., Cincinnati, Ohio. Gin.	Jan. 30, 1873	Feb. 4, 1873
1,121	Same. same.	Jan. 30, 1873	Feb. 4, 1873
1,122	Same. same.	Jan. 30, 1873	Feb. 4, 1873
1,231	Sussfield, Lorsch & Co., New York, N. Y. Opera-glasses, field-glasses, and other telescopes.	Apr. 18, 1873	Apr. 22, 1873
1,380	Sweet, Barnes & Co., Syracuse, N. Y. Steel and iron wares.	May 24, 1873	July 22, 1873
1,114	Thomson, Langdon & Co., New York, N. Y. Corsets.	Jan. 23, 1873	Jan. 28, 1873
1,277	Same. Toilet and other brushes.	May 9, 1873	May 20, 1873
1,438	Thum, C. C., Philadelphia, Pa. Varnish and other brushes.	Aug. 15, 1873	Sept. 2, 1873
1,156	Tilden, H. A., New Lebanon, N. Y. Medicinal compound.	Feb. 21, 1873	Mar. 4, 1873
1,359	Tomey & Sons, Perth, Scotland. Water-gages for steam-boilers.	July 5, 1873	July 8, 1873
1,195	Tomlinson, D. D., San José, Cal. Medicine.	Mar. 29, 1873	Apr. 1, 1873
1,366	Tompkins, S. E., & Co., Sing Sing, N. Y. Saddle-trees.	May 17, 1873	July 15, 1873
1,589	Tompkins, S. E., Sing Sing, N. Y. Saddle-trees.	Dec. 20, 1873	Dec. 30, 1873
1,210	Townsend & Co., New York, N. Y. Lozenges and sirup.	Feb. 15, 1873	Apr. 8, 1873
1,351	Tracy, R. A., Brooklyn, N. Y. Preparation for toothache.	June 24, 1873	July 1, 1873
1,106	Tripp, J. C., Fairhaven, Mass., assignor to Boston and Fairhaven Iron Works. Printing-presses, &c.	Jan. 13, 1873	Jan. 21, 1873
1,457	Troxell, W. L., Brooklyn, N. Y. Soap.	Sept. 24, 1873	Oct. 7, 1873
1,313	Tubbs, E. M., & Co., Manchester, N. Y. Medical compound.	May 31, 1873	June 10, 1873
1,519	Tuttle, J. W., Watertown, Mass. Knit scarfs or tippets.	Oct. 31, 1873	Nov. 4, 1873
1,518	Union Stove and Manufacturing Company, Pittston, Pa. Stoves.	Sept. 27, 1873	Nov. 4, 1873
1,382	Utica Steam-Gage Company. Steam-gages and engine-room fixtures generally.	July 12, 1873	July 22, 1873
1,563	Vallier, I., New York, N. Y. Liniment.	Nov. 17, 1873	Dec. 2, 1873
1,477	Van Riper, H., and J. G. Beach, New York, N. Y. Fever and ague cure.	Sept. 13, 1873	Sept. 30, 1873
1,584	Van Skelline, T., Brooklyn, N. Y. Motto-papers.	Dec. 13, 1873	Dec. 23, 1873
1,409	Vergnole, M., New Orleans, La. Medicated liquor.	Apr. 14, 1873	Aug. 12, 1873
1,500	Wade, H. M., Philadelphia, Pa. Window and mirror polish.	Sept. 29, 1873	Oct. 14, 1873
1,285	Wadsworth Brothers & Co., New York, N. Y. White zinc-paint.	May 17, 1873	May 27, 1873
1,250	Walker, McGraw & Co., Detroit, Mich. Chewing-tobacco.	Apr. 24, 1873	May 6, 1873
1,136	Same. Fine-cut chewing-tobacco.	Feb. 10, 1873	Feb. 18, 1873
1,388	Wall, Belvin & Day, Saint Louis, Mo. Chewing-tobacco.	July 21, 1873	July 29, 1873
1,292	Walsh, Brooks & Kellogg, Cincinnati, Ohio, and Covington, Ky. Whisky.	May 27, 1873	June 3, 1873
1,293	Same. same.	May 27, 1873	June 3, 1873
1,294	Same. same.	May 27, 1873	June 3, 1873
1,165	Warder & Cooper, Valley Junction, Ohio. Maizola, (a product of corn).	Mar. 3, 1873	Mar. 11, 1873
1,336	Webb, H. P., New York, N. Y. Paint.	June 7, 1873	June 24, 1873
1,480	Webb, Turner & Co., New York, N. Y. Cheese.	Sept. 20, 1873	Sept. 30, 1873
1,471	Weiss, Eller & Kaoppel, New York, N. Y. Leaf-tobacco.	Sept. 13, 1873	Sept. 23, 1873
1,472	Same. same.	Sept. 13, 1873	Sept. 23, 1873
1,585	Wells, Richardson & Co., Burlington, Vt. Aniline-dyes.	Dec. 15, 1873	Dec. 23, 1873
1,577	Wenck, G. J., New York, N. Y. Perfumes, medicines, &c.	Nov. 22, 1873	Dec. 16, 1873
1,412	Wentz & Bardollar, Baltimore, Md. Packed oysters, fruits, and vegetables.	July 12, 1873	Aug. 19, 1873
1,334	Wenzell, W. T., San Francisco, Cal. Cosmetic.	May 9, 1873	June 24, 1873
1,580	West, C., & Sons, Baltimore, Md. Refined petroleum.	Oct. 21, 1873	Nov. 4, 1873
1,521	Wheelwright, S. T., and C. L. Locke, Buffalo, N. Y. Toy-wheels.	Sept. 27, 1873	Nov. 4, 1873
1,184	White, S. S., Philadelphia, Pa. Gold-foil.	Mar. 15, 1873	Mar. 25, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1, 127	Whiteley, Fassler & Kelly, Springfield, Ohio. Harvesting-machines	Feb. 1, 1873	Feb. 11, 1873
1, 128	Same.....Self-rakes, droppers, reels, &c., of harvesters	Feb. 1, 1873	Feb. 11, 1873
1, 129	Same.....Guard-fingers, knife-sections, &c., of harvesters	Feb. 1, 1873	Feb. 11, 1873
1, 349	Whitman, J. A., Cranston, R. I. Fountain-pump.....	July 8, 1872	June 24, 1873
1, 152	Williams, D., New York, N. Y. Printed publications.....	Feb. 15, 1873	Feb. 25, 1873
1, 185	Williams, J. B., & Co., Glastenbury, Conn. Soap.....	Mar. 19, 1873	Mar. 25, 1873
1, 186	Same.....same.....	Mar. 19, 1873	Mar. 25, 1873
1, 392	Wilson Carbolated Cod-Liver-Oil Company, New York, N. Y. Proprietary medicinal preparations.....	July 10, 1873	July 29, 1873
1, 295	Winall, A. W., Cincinnati, Ohio. Grinding-mills.....	May 20, 1873	June 3, 1873
1, 396	Wittichen, O., Haymarket, Va. Agricultural fertilizers	July 29, 1873	Aug. 5, 1873
1, 243	Wood, A. H., Boston, Mass. Gas-burners	Apr. 2, 1873	Apr. 29, 1873
1, 196	Woodbury, F. P., New York, N. Y. Hams and shoulders of pork.....	Feb. 27, 1873	Apr. 1, 1873
1, 197	Same.....same.....	Feb. 27, 1873	Apr. 1, 1873
1, 198	Same.....same.....	Feb. 27, 1873	Apr. 1, 1873
1, 544	Woods, G., & Co., Cambridgeport, Mass. Organs.....	July 25, 1873	Nov. 25, 1873
1, 441	Wright, J. A., & Co., Keene, N. H. Cleaning-powder.....	June 18, 1873	Sept. 2, 1873
1, 296	Zimmerman, C. C., Shoemakersville, Pa. Medicine	May 6, 1873	June 3, 1873

ALPHABETICAL LIST OF INVENTIONS.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Specification.	Drawing.	Volume.	Page.
A.							
Abdominal supporter.....	J. W. Gurley.....	141, 137	July 22, 1873	730	242	4	96
Abdominal supporter.....	E. J. Harding.....	140, 778	July 15, 1873	389	134	4	59
Abdominal supporter.....	M. M. Merrill.....	140, 585	July 8, 1873	223	75	4	38
Accordion, &c.....	F. Goetze and D. Müller.....	144, 025	Oct. 28, 1873	606	201	4	458
Acid and other vessels, Cap to prevent the bursting of carbonic.	J. Matthews.....	138, 171	Apr. 22, 1873	818	260	3	457
Acid generator, fountain, and other vessels, Carbonic.	J. Matthews.....	138, 908	May 13, 1873	398	.....	3	540
Acid, Manufacture of boracic.....	F. Gutzkow.....	137, 072	Mar. 25, 1873	658	218	3	328
Acid, Manufacture of sulphuric.....	J. Saunders.....	144, 928	Nov. 25, 1873	661	224	4	566
Acid, Manufacture of sulphuric.....	E. Thomson and W. H. Greene.....	143, 902	Sept. 23, 1873	765	264	4	337
Adding-machine.....	G. Linderoos.....	140, 146	June 24, 1873	665	209	3	694
Adding-machine.....	S. Pool.....	143, 184	Sept. 23, 1873	749	259	4	338
Adding-machine.....	A. M. Stephenson.....	137, 107	Mar. 25, 1873	688	229	3	330
Adjustable-bit.....	F. Jonas.....	137, 373	Apr. 1, 1873	85	28	3	364
Adjustable-bracket.....	J. B. Morrison.....	142, 263	Aug. 26, 1873	787	260	4	226
Addressing-machine.....	F. A. Darling.....	137, 599	Apr. 8, 1873	296	91	3	392
Addressing-machine.....	S. Holton.....	136, 323	Feb. 25, 1873	859	276	3	232
Advertising balloon.....	W. F. Browne.....	144, 436	Nov. 11, 1873	232	78	4	509
Advertising-box to post, Clamp for securing.....	P. McCosker.....	143, 365	Sept. 30, 1873	921	312	4	365
Advertising-lamp.....	F. R. Warner.....	141, 971	Aug. 19, 1873	515	170	4	194
Advertising-lantern.....	S. Kuh.....	141, 749	Aug. 12, 1873	282	92	4	166
Aerated liquids, Draught-pipe for.....	O. F. Steelman.....	134, 710	Jan. 7, 1873	198	64	3	22
Ageing and the production of vinegar, Apparatus for treating alcoholic liquids in spray with ozone for.	R. D. Turner.....	136, 470	Mar. 4, 1873	802	34	3	254
Ageing wine and liquor.....	A. Luquet.....	136, 741	Mar. 11, 1873	354	117	3	283
Agricultural boiler.....	C. M. Cloud.....	142, 326	Sept. 2, 1873	5	2	4	242
Agricultural boiler.....	H. A. Moars.....	140, 213	June 24, 1873	721	227	3	698
Agricultural boiler.....	H. A. Moars.....	145, 517	Dec. 16, 1873	441	144	4	645
Agricultural implements, Blade for.....	W. Scott.....	146, 026	Dec. 30, 1873	913	296	4	706
Air and gas engine.....	O. Trossin.....	141, 189	July 22, 1873	785	257	4	100
Air-brake, Locomotive.....	G. Westinghouse, jr.....	144, 005	Oct. 28, 1873	589	195	4	456
Air-brake, Steam-power.....	H. L. McAvoy.....	138, 339	Apr. 29, 1873	999	314	3	480
Air-compressing apparatus.....	J. Ericsson.....	146, 055	Dec. 30, 1873	939	303	4	708
Air-compressing apparatus.....	R. S. Pardee.....	143, 634	Oct. 14, 1873	217	73	4	407
Air-compressing apparatus, Hydraulic.....	C. Moore.....	140, 524	July 1, 1873	156	53	4	21
Air-compressor.....	H. H. Day.....	144, 390	Nov. 11, 1873	193	66	4	506
Air-compressor.....	H. P. Fairfield.....	142, 452	Sept. 2, 1873	116	37	4	252
Air-compressor or blower.....	L. Chase.....	141, 762	Aug. 12, 1873	321	105	4	169
Air-compressor or blower.....	L. Chase.....	143, 329	Sept. 30, 1873	882	{ 301 } { 302 }	4	363
Air-cooling apparatus.....	T. D. Kingan.....	140, 375	July 1, 1873	34	11	4	11
Air-cooling apparatus.....	P. Nezeraux.....	136, 753	Mar. 11, 1873	363	120	3	283
Air-engine.....	H. Norman and C. F. Dietrich.....	136, 259	Feb. 25, 1873	802	260	3	228
Air for use in the arts, Heating.....	J. A. Morrell.....	142, 497	Sept. 2, 1873	160	.....	4	254
Air heating-apparatus, Compressed.....	H. Bushnell.....	140, 466	July 1, 1873	104	35	4	17
Air-heating furnace.....	J. M. Wilson.....	142, 363	Sept. 2, 1873	37	13	4	245
Air-motor, Compressed.....	H. Bushnell.....	137, 889	Apr. 15, 1873	557	175	3	427
Air-navigating apparatus.....	T. Green.....	141, 785	Aug. 12, 1873	344	{ 113 } { 114 }	4	171
Air-spring, Automatic vent-opener for.....	J. Walther.....	139, 346	May 27, 1873	809	258	3	594
Air-stick for defense, Compressed.....	P. Giffard.....	136, 316	Feb. 25, 1873	854	275	3	232
Alarm: <i>See</i> Blast-furnace alarm. Burglar-alarm. Fire-alarm. Fog-alarm. Letter-box alarm. Low-water alarm. Milk-boiler alarm. Overflow-alarm. Till-alarm.							
Alkali, Encasing caustic.....	G. W. Humphrey.....	137, 137	Mar. 25, 1873	714	237	3	332
Alkaline carbonates, Manufacture of.....	H. De Grouilliers.....	143, 755	Oct. 21, 1873	352	.....	4	427
Alkaline solutions, &c., Furnace for evaporating.....	M. L. Keen.....	144, 682	Nov. 18, 1873	446	{ 150 } { 151 }	4	537
Alkaline solutions from treating straw, Re-using.....	J. H. Dugan.....	145, 409	Dec. 9, 1873	333	112	4	624
Alloy.....	H. W. Wright.....	141, 529	Aug. 5, 1873	103	.....	4	143
Alloy for producing ornamental coatings on metal.....	H. Aiken.....	137, 279	Apr. 1, 1873	1	.....	3	357
Alloying gold and silver, Manufacture of copper-ingots for.	J. Feix.....	144, 696	Nov. 25, 1873	635	.....	4	363
Alloy of nickel, zinc and copper.....	H. W. Wright.....	141, 530	Aug. 5, 1873	104	.....	4	143
Alloys to resemble silver.....	A. E. P. Bandvin.....	142, 760	Sept. 16, 1873	402	.....	4	297
Alloys, Coating iron, &c., with protecting.....	C. Marshall.....	144, 403	Nov. 11, 1873	203	.....	4	506
Alphabet-block.....	E. H. Muldaur.....	140, 722	July 8, 1873	337	114	4	47
Aluminum.....	J. A. Jeancon.....	140, 924	July 15, 1873	523	.....	4	70
Amalgamating gold and silver, Process of.....	J. Tunbridge.....	145, 603	Dec. 16, 1873	513	168	4	651
Amalgamating-pan.....	I. S. Parke.....	143, 635	Oct. 14, 1873	218	73	4	407
Amalgamator.....	F. Morris.....	137, 088	Mar. 18, 1873	673	223	3	329
Ammoniacal gas-engine.....	W. H. Smith and F. V. De Coppet.....	141, 242	July 29, 1873	846	276	4	113

Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.*	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	D'rg.	Vol.	Page.
Anchor	C. A. Chamberlin	142,769	Sept. 16, 1873	409	132	4	297
Anchor	Z. Hall	144,901	Nov. 25, 1873	638	217	4	564
Anchor	W. W. Smith	135,450	Feb. 4, 1873	55	18	3	132
Anemometer, Electrical	F. S. Baldwin	140,340	July 1, 1873	4	2	4	8
Angle-iron cutter	A. McGuffin	145,437	Dec. 9, 1873	356	119	4	626
Angling-fly	J. Mullaly	139,180	May 20, 1873	655	205	3	574
Angling-reel	C. L. Noe	135,283	Jan. 28, 1873	740	238	3	107
Animal and insect trap	W. W. Hannah	141,346	July 29, 1873	947	308	4	121
Animal cage-trap	S. W. Rice	137,864	Apr. 15, 1873	538	167	3	425
Animal-carasses, Apparatus for depilating	D. H. Sherman	144,150	Oct. 28, 1873	707	235	4	466
Animal-carasses, Machine for scraping	R. C. Tompkins	144,579	Nov. 11, 1873	351	119	4	518
Animal-matter, Apparatus for treating and drying	W. C. Marshall	137,699	Apr. 8, 1873	383	119	3	400
Animal-matter, Drying and disintegrating	C. C. Coe	141,853	Aug. 19, 1873	411	.....	4	186
Animal-power, Endless chain for	G. N. Palmer	139,604	June 3, 1873	139	45	3	620
Animal-shearing apparatus	C. A. J. Langelée	137,220	Mar. 25, 1873	791	261	3	338
Animal-trap	H. H. C. Arnold	145,082	Dec. 2, 1873	42	13	4	589
Animal-trap	E. A. C. Da Silva	135,732	Feb. 11, 1873	321	102	3	165
Animal-trap	S. F. Estell	135,534	Feb. 4, 1873	129	41	3	137
Animal-trap	F. Flora	135,268	Jan. 28, 1873	737	233	3	106
Animal-trap	J. Gould	139,572	June 3, 1873	110	37	3	618
Animal-trap	J. W. Greene	134,539	Jan. 7, 1873	34	11	3	10
Animal-trap	J. H. Hair	140,036	June 17, 1873	549	173	3	676
Animal-trap	J. Krummenauer	136,378	Mar. 4, 1873	25	8	3	247
Animal-trap	W. S. Lawrence	135,134	Jan. 21, 1873	587	190	3	82
Animal-trap	D. A. Leach	143,169	Sept. 23, 1873	738	254	4	335
Animal-trap	A. M. Lovett	136,842	Mar. 18, 1873	449	149	3	300
Animals-trap	H. J. Matthews	139,800	June 10, 1873	359	105	3	652
Animal-trap	R. B. May	136,330	Feb. 25, 1873	866	378	3	233
Animal-trap	J. Merchen	139,967	June 17, 1873	487	154	3	671
Animal-trap	G. A. Norman	139,182	May 20, 1873	656	205	3	574
Animal-trap	D. J. Owen	138,275	Apr. 29, 1873	942	297	3	475
Animal-trap	B. F. Smith	143,727	Oct. 14, 1873	309	102	4	413
Animal-trap	J. M. Wilkinson	142,362	Sept. 2, 1873	36	13	4	245
Animal-trap and seed-safe combined	S. V. Greor	140,773	July 15, 1873	384	132	4	59
Animals, Instrument for administering balls to	T. H. Bex	139,856	June 17, 1873	392	123	3	663
Animals, Stock for shoeing	J. Ditch	144,963	Nov. 25, 1873	689	233	4	568
Ankle supporter and filler	S. Silberschmidt	143,537	Oct. 7, 1873	120	41	4	390
Annealing Bessemer steel	G. W. Billings	140,759	July 15, 1873	373	128	4	58
Annunciator	C. H. Greeleaf	141,927	Aug. 19, 1873	481	159	4	191
Annunciator, Electric	G. W. Shawk	139,228	June 10, 1873	362	112	3	654
Annunciator, Electric	A. Storer	141,898	Aug. 19, 1873	459	149	4	189
Annunciator, Electric hotel	W. W. Foote	140,129	June 24, 1873	650	204	3	693
Annunciator, Electric vote	T. B. Doolittle	143,679	Oct. 14, 1873	259	86	4	410
Annunciator, Electro-magnetic	W. Humans	136,518	Mar. 4, 1873	149	48	3	257
Annunciator, Electro-magnetic	G. W. Shawk and A. Storer	136,465	Mar. 4, 1873	97	33	3	253
Annunciator, Speaking-tube	D. Rousseau	139,118	June 10, 1873	354	110	3	653
Anti-destroying process	J. J. Dulaney and H. Dreyer	144,075	Oct. 28, 1873	648	.....	4	461
Aut-trap	T. G. Ames	137,336	Apr. 1, 1873	56	17	3	361
Aut-trap	L. Rubarth	140,954	July 15, 1873	552	185	4	72
Apple-butter stirrer	G. W. Collins	142,208	Aug. 26, 1873	744	245	4	223
Arithmetical frame	E. T. Curtis	142,151	Aug. 26, 1873	695	229	4	218
Ash-leach	J. W. Kernodle and A. H. Haun	139,963	June 17, 1873	483	152	3	671
Ash-screener and commode	J. C. Morrell	136,609	Mar. 11, 1873	242	82	3	274
Asphalt-pipes, Manufacture of	A. Müller	143,922	Oct. 21, 1873	491	165 166	4	438
Asphalt, Treating	P. Barthel	135,879	Feb. 18, 1873	468	150	3	190
Atmosphere, Apparatus for moistening the	J. G. Garland	140,410	July 1, 1873	59	21	4	13
Atomizer-bulb	H. D. Lookwood	138,416	Apr. 29, 1873	1,064	335	3	485
Atomizer or vaporizer	J. N. Gerard	143,070	Sept. 23, 1873	664	228	4	328
Auger-bit, Machine for forming	J. Swan	141,401	July 29, 1873	999	324	4	124
Auger, Earth	G. H. Balsley and G. Wilson	140,756	July 15, 1873	371	127	4	58
Auger, Earth	W. H. Beach and C. N. Hanson	135,509	Feb. 4, 1873	104	33	3	136
Auger, Earth	E. H. Clark	143,963	Oct. 28, 1873	549	182	4	453
Auger, Earth	W. Cole	144,510	Nov. 11, 1873	290	98	4	514
Auger, Earth	G. G. Collins and J. A. Morrison	134,734	Jan. 14, 1873	230	74	3	39
Auger, Earth	W. T. Cooley	143,376	Sept. 30, 1873	836	288	4	359
Auger, Earth	S. Emery	142,218	Aug. 26, 1873	751	248	4	223
Auger, Earth	C. D. Pierce	141,664	Aug. 12, 1873	239	75	4	162
Auger, Earth	W. H. Salzer	141,892	Aug. 19, 1873	454	148	4	189
Auger, Earth	J. B. Smith	136,555	Mar. 4, 1873	183	59	3	260
Auger, Earth	A. Lorg and S. C. Bollman	140,226	June 24, 1873	730	230	3	699
Auger, Earth	H. C. Stouffer	137,036	Mar. 18, 1873	613	203	3	313
Auger, Earth	L. M. West	137,744	Apr. 8, 1873	498	132	3	403
Auger-handle	S. W. Hemenway	139,006	May 20, 1873	494	156	3	561
Auger-handle	F. B. Pease	142,410	Sept. 2, 1873	78	26	4	248
Auger, Hollow	G. F. Almy	141,745	Aug. 12, 1873	304	99	4	168
Auger, Hollow	C. W. Carr	136,138	Feb. 25, 1873	706	228	3	220
Auger, Hollow	O. A. Essig	138,623	May 6, 1873	136	44	3	509
Auger, Hollow	E. W. Faucett, E. W. Silver, and J. Deming	143,132	Sept. 23, 1873	711	244	4	332
Auger, Ice	W. A. Clark	139,769	June 10, 1873	312	97	3	650
Auger, Machine for forming the lip of	J. Swan	139,091	May 20, 1873	570	179	3	567
Auger, Means for operating earth	W. H. Beach and C. N. Hanson	135,510	Feb. 4, 1873	105	33,34	3	136
Auger, Means for operating earth	J. B. Christian	138,788	May 13, 1873	297	91	3	532
Auger-shaft, Coupling for earth	G. W. Irwin and T. A. Cox	140,710	July 8, 1873	327	111	4	46
Auger, Undermining	P. Sheldon	143,535	Oct. 7, 1873	118	40	4	390
Auger, Well	W. L. Payne	143,181	Sept. 23, 1873	747	258	4	335
Augers, Die for manufacturing	S. A. Smith	136,391	Mar. 4, 1873	34	13	3	248
Augers, Shaft-coupling for earth	T. Urie	139,092	May 20, 1873	571	179	3	567
Automatic gate	G. C. Crum	140,479	July 1, 1873	115	39	4	17
Automatic gate	L. Filson	138,238	Apr. 29, 1873	903	285	3	472
Automatic gate	J. S. Foit	141,925	Aug. 19, 1873	480	158	4	191
Automatic gate	C. E. Gillespie	139,712	June 10, 1873	256	80	3	645
Automatic gate	N. Long	138,033	Apr. 22, 1873	703	222	3	448

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Automatic gate.....	G. W. Olbert and W. Young.....	143, 839	Oct. 21, 1873	424	141	4	433
Automatic gate.....	J. P. Ponce.....	138, 283	Apr. 29, 1873	948	299	3	476
Automatic gate.....	G. B. Stevenson.....	137, 971	Apr. 15, 1873	628	198	3	432
Automatic gate.....	J. E. Stong.....	141, 900	Aug. 19, 1873	460	150	4	189
Automatic gate.....	E. P. Wheeler.....	143, 551	Oct. 7, 1873	139	46	4	391
Automatic gate.....	W. L. Wooster.....	136, 892	Mar. 18, 1873	491	162	3	303
Auxiliary table.....	E. Johnson.....	138, 406	Apr. 29, 1873	1, 053	332	3	484
Awning.....	J. Boyle.....	135, 966	Feb. 18, 1873	535	177	3	195
Awning.....	G. W. Gerau.....	137, 772	Apr. 15, 1873	461	144	3	419
Awning.....	H. Sykes.....	143, 542	Oct. 7, 1873	124	42	4	391
Awning frame.....	H. Stevens.....	142, 291	Aug. 26, 1873	810	268	4	228
Awning frame, Window.....	J. A. Allen.....	138, 223	Apr. 29, 1873	691	281	3	471
Awning, Street-car.....	C. B. Turnbull.....	140, 972	July 15, 1873	172	192	4	74
Awning, Painting striped.....	C. E. Wheeler.....	138, 773	May 13, 1873	283	88	3	530
Axle:							
See Car-axle							
Carriage-axle.							
Vehicle-axle.							
Axle-blank, Tool for finishing.....	H. E. Forrest.....	134, 742	Jan. 14, 1873	235	76	3	39
Axle-box, Alarm and lubricating device for car.....	O. Evans.....	135, 213	Jan. 28, 1873	676	218	3	102
Axle-box and sleeve for vehicle-wheel.....	W. H. Cowell.....	141, 699	Aug. 12, 1873	267	86	4	164
Axle-box and spindle.....	J. Bower.....	134, 725	Jan. 14, 1873	223	71	3	38
Axle-box, Attachment to car.....	D. A. Hopkins.....	139, 791	June 10, 1873	331	103	3	651
Axle-box, Car.....	J. E. Bering.....	145, 146	Dec. 2, 1873	100	33	4	593
Axle-box, Car.....	W. W. Crane.....	138, 794	May 13, 1873	303	93	3	532
Axle-box, Car.....	J. M. Dodge.....	136, 424	Mar. 4, 1873	60	21	3	250
Axle-box, Car.....	H. G. Dowus.....	134, 594	Jan. 7, 1873	89	28	3	14
Axle-box, Car.....	C. T. Fay.....	135, 977	Feb. 18, 1873	544	180	3	196
Axle-box, Car.....	S. F. Gates.....	138, 242	Apr. 29, 1873	906	296	3	473
Axle-box, Car.....	H. H. Hill and G. M. Sargent.....	141, 350	July 29, 1873	951	309	4	121
Axle-box, Car.....	J. Hogan.....	142, 104	Aug. 26, 1873	659	216	4	215
Axle-box, Car.....	W. B. Howe.....	143, 763	Oct. 21, 1873	357	119	4	427
Axle-box, Car.....	J. G. Johnson.....	145, 425	Dec. 9, 1873	347	116	4	625
Axle-box, Car.....	J. Kinzer.....	135, 343	Jan. 22, 1873	794	257	3	111
Axle-box, Car.....	W. J. Manker.....	136, 265	Apr. 29, 1873	932	294	3	474
Axle-box, Car.....	H. E. Marchand.....	139, 322	May 27, 1873	792	252	3	593
Axle-box, Car.....	W. J. L. Moulton.....	145, 227	Dec. 2, 1873	171	59	4	599
Axle-box, Car.....	D. Muzzey.....	145, 004	Nov. 25, 1873	724	244	4	571
Axle-box, Car.....	L. Schulze.....	143, 592	Oct. 14, 1873	180	61	4	404
Axle-box, Car.....	J. E. Uhl.....	138, 717	May 6, 1873	224	70	3	515
Axle-box, Car.....	S. Ustick.....	142, 303	Aug. 26, 1873	820	272	4	222
Axle-box, Car.....	S. Ustick.....	136, 472	Mar. 4, 1873	104	35	3	254
Axle-box, Car.....	S. Ustick.....	142, 202	Aug. 26, 1873	819	271	4	222
Axle-box, Car.....	W. W. Whitaker.....	142, 752	Sept. 9, 1873	384	129	4	284
Axle-box, Car.....	J. Whitaker and S. S. Cook.....	146, 116	Dec. 30, 1873	995	321	4	712
Axle-box, Carriage.....	J. Jones and J. and J. Dunkerley.....	138, 091	Apr. 22, 1873	754	239	3	452
Axle-box cover, Railway.....	E. Moyell and J. Howell.....	139, 179	May 20, 1873	655	204	3	574
Axle-box, Gage for setting.....	T. Scott.....	138, 347	Apr. 29, 1873	1, 006	316	3	480
Axle-box, Manufacture of carriage.....	W. J. Parmelee.....	137, 475	Apr. 1, 1873	177	56	3	371
Axle-box, Railway-car.....	R. Brewer.....	139, 655	June 10, 1873	198	65	3	641
Axle-box, Railway-car.....	C. W. Harvey.....	131, 801	Jan. 14, 1873	284	92	3	43
Axle-box, Vehicle.....	C. H. Allen.....	143, 950	Oct. 28, 1873	539	179	4	452
Axle-box, Vehicle.....	W. A. Clark.....	142, 556	Sept. 9, 1873	218	71	4	271
Axle-box, Vehicle.....	O. P. Rice.....	143, 300	Sept. 30, 1873	858	294	4	361
Axle-box, Vehicle.....	J. P. Smith.....	136, 778	Mar. 11, 1873	383	126	3	285
Axle-clip, mode of making.....	H. M. Boecher.....	141, 625	Aug. 12, 1873	205	65	4	160
Axle-iron, Carriage.....	S. J. Dennis.....	138, 795	May 13, 1873	304	94	3	532
Axle lubricator, Car.....	J. E. Bering.....	145, 634	Dec. 23, 1873	719	236	4	680
Axle lubricator, Car.....	G. A. Brannan.....	135, 517	Feb. 4, 1873	110	35	3	136
Axle lubricator, Car.....	W. J. L. Moulton.....	145, 226	Dec. 2, 1873	170	58	4	599
Axle lubricator, Car.....	T. R. Timby.....	135, 396	Jan. 28, 1873	832	268	3	114
Axle lubricator, Carriage.....	H. F. Phillips.....	137, 479	Apr. 1, 1873	180	57	3	374
Axle lubricator, Vehicle.....	C. C. Parker.....	145, 231	Dec. 2, 1873	174	60	4	599
Axle lubricator, Wagon.....	W. Loewenstein.....	138, 263	Apr. 29, 1873	929	293	3	474
Axle-turning machine.....	A. F. Moore.....	137, 316	Apr. 1, 1873	34	11	3	360
B.							
Baby-chair.....	P. Henrichs.....	134, 668	Jan. 7, 1873	161	53	3	19
Baby-jumper.....	A. F. Spooner.....	138, 209	Apr. 22, 1873	855	271	3	460
Baby-walker.....	J. Erickson.....	141, 431	Aug. 5, 1873	19	5	4	136
Back-band hook.....	J. Straus.....	139, 524	June 3, 1873	68	23	3	614
Bag:							
See Broom-bag.							
Dashboard-bag.							
Grain-bag.							
Horse nose-bag.							
Mail-bag.							
Paper bag.							
Traveling-bag.							
Bag-fastener.....	S. R. Bush.....	144, 738	Nov. 18, 1873	491	166	4	541
Bag-holder.....	J. B. Brown.....	134, 637	Jan. 7, 1873	130	42	3	17
Bag-holder.....	N. A. Geisinger.....	143, 897	Oct. 21, 1873	472	158	4	437
Bag-holder.....	J. Hunter and H. M. Clayton.....	138, 752	May 13, 1873	267	82	3	529
Bag-holder.....	G. W. Striker.....	143, 194	Sept. 23, 1873	760	262	4	337
Bag-holder.....	C. H. Thomas.....	141, 186	July 22, 1873	783	256	4	100
Bag-lock.....	H. Ahrend.....	139, 526	June 3, 1873	70	24	3	614
Bag-machine.....	N. Riedinger.....	140, 342	July 1, 1873	7	2	4	8
Bag-tie.....	J. Bannhr and S. H. Rhodes.....	136, 637	Mar. 11, 1873	268	90	3	276
Bag-turning machine.....	J. Martin.....	136, 926	Mar. 18, 1873	518	171	3	305
Bake-pan.....	W. B. Chamberlin.....	142, 144	Aug. 26, 1873	691	227	4	215
Bake-pan.....	J. G. Metsker.....	142, 928	Sept. 16, 1873	536	183	4	368
Baker, Folding camp.....	F. Lehnen.....	143, 288	Sept. 30, 1873	845	291	4	360
Baking-mold.....	G. Wingate.....	144, 939	Nov. 25, 1873	669	227	7	567
Baking-pan.....	C. T. Smith.....	144, 417	Nov. 11, 1873	219	72	4	508

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Baking-powder for bread.....	J. G. Kopping and J. Weideman.	143, 580	Oct. 14, 1873	172	4	403
Balance.....	E. C. Pickering.....	144, 286	Nov. 4, 1873	96	32	4	486
Balance, Weighing and price.....	A. M. Maynard.....	144, 914	Nov. 25, 1873	649	220	4	565
Bale-band stretcher.....	F. M. Logue.....	141, 447	Aug. 5, 1873	33	11	4	138
Bale-tie.....	G. Brodie.....	142, 894	Sept. 16, 1873	508	173	4	306
Bale-tie.....	L. Carter.....	145, 091	Dec. 2, 1873	50	15	4	589
Bale-tie.....	F. Cook.....	135, 526	Feb. 4, 1873	120	38	3	137
Bale-tie.....	F. Cook.....	138, 479	May 6, 1873	13	4	3	498
Bale-tie.....	F. Cook.....	138, 480	May 6, 1873	13	4	3	498
Bale-tie.....	F. Cook.....	142, 772	Sept. 16, 1873	411	138	4	297
Bale-tie.....	F. Cook.....	143, 223	Sept. 30, 1873	792	273	4	355
Bale-tie.....	F. Cook.....	145, 847	Dec. 23, 1873	733	240	4	681
Bale-tie.....	P. K. Dederick.....	135, 700	Feb. 11, 1873	295	93	3	163
Bale-tie.....	J. W. Hedenberg.....	137, 549	Apr. 8, 1873	253	78	3	389
Bale-tie.....	E. P. Jones.....	139, 675	June 10, 1873	216	70	3	642
Bale-tie.....	J. McMurtry.....	142, 803	Sept. 16, 1873	435	147	4	299
Bale-tie.....	M. Quin.....	135, 938	Feb. 18, 1873	513	167	3	193
Bale-tie.....	W. C. Stiff.....	140, 556	July 1, 1873	183	62	4	23
Bale-tie clamp.....	T. D. Leonard.....	144, 776	Nov. 18, 1873	524	178	4	544
Bale-tie, Cotton.....	A. S. Armstrong.....	139, 754	June 10, 1873	298	92	3	648
Bale-tie, Cotton.....	G. N. Beard.....	143, 319	Sept. 30, 1873	874	299	4	362
Bale-tie, Cotton.....	G. N. Beard.....	145, 273	Dec. 9, 1873	216	74	4	615
Bale-tie, Cotton.....	A. G. Buford.....	144, 502	Nov. 11, 1873	284	96	4	513
Bale-tie, Cotton.....	R. W. Cobb.....	140, 575	July 8, 1873	215	72	4	37
Bale-tie, Cotton.....	F. Cook.....	138, 481	May 6, 1873	14	5	3	498
Bale-tie, Cotton.....	F. Cook.....	138, 482	May 6, 1873	14	5	3	499
Bale-tie, Cotton.....	F. Cook.....	138, 483	May 6, 1873	15	5	3	499
Bale-tie, Cotton.....	F. Cook.....	136, 484	May 6, 1873	15	5	3	499
Bale-tie, Cotton.....	F. Cook.....	139, 777	June 10, 1873	319	99	3	650
Bale-tie, Cotton.....	F. Cook.....	140, 246	June 24, 1873	747	236	3	701
Bale-tie, Cotton.....	F. Cook.....	140, 766	July 15, 1873	379	130	4	58
Bale-tie, Cotton.....	F. Cook.....	142, 001	Aug. 19, 1873	542	179	4	196
Bale-tie, Cotton.....	T. Cromer.....	143, 124	Sept. 23, 1873	706	242	4	332
Bale-tie, Cotton.....	W. Crone.....	141, 494	Aug. 5, 1873	77	24	4	141
Bale-tie, Cotton.....	W. D. Field.....	138, 492	May 6, 1873	21	7	3	499
Bale-tie, Cotton.....	W. D. Field.....	140, 024	June 17, 1873	535	169	3	675
Bale-tie, Cotton.....	A. J. Going.....	137, 301	Apr. 1, 1873	20	6	3	351
Bale-tie, Cotton.....	J. M. Goldsmith.....	143, 343	Sept. 30, 1873	901	306	4	364
Bale-tie, Cotton.....	B. Kimball.....	143, 911	Oct. 21, 1873	483	163	4	438
Bale-tie, Cotton.....	O. R. McClean.....	142, 802	Sept. 16, 1873	435	147	4	299
Bale-tie, Cotton.....	W. J. Orr.....	142, 505	Sept. 2, 1873	165	53	4	255
Bale-tie, Cotton.....	F. Quarles.....	144, 793	Nov. 18, 1873	537	183	4	545
Bale-tie, Cotton.....	W. C. Ramsay.....	137, 570	Apr. 8, 1873	273	84	3	390
Bale-tie, Cotton.....	D. S. Skinner.....	145, 536	Dec. 16, 1873	461	150	4	646
Bale-tie, Cotton.....	H. D. Starr.....	142, 527	Sept. 2, 1873	183	60	4	256
Bale-tie, Cotton.....	L. Weil.....	146, 037	Dec. 30, 1873	919	298	4	706
Bale-tie, Wire.....	G. L. Loughland.....	141, 879	Aug. 19, 1873	444	145	4	188
Bale-ties, Device for framing.....	J. McClean.....	145, 357	Dec. 9, 1873	288	96, 97	4	621
Baling hay, Device for.....	L. Doty.....	141, 636	Aug. 12, 1873	215	68	4	160
Baling-press.....	J. M. Albertson.....	139, 849	June 17, 1873	387	121	3	663
Baling-press.....	H. W. Baumann.....	141, 622	Aug. 12, 1873	202	64	4	159
Baling-press.....	H. K. Burnett.....	136, 965	Mar. 18, 1873	551	182	3	308
Baling-press.....	W. M. Conner.....	141, 035	July 22, 1873	639	215	4	89
Baling-press.....	J. B. Root.....	146, 096	Dec. 30, 1873	976	315	4	711
Baling-press.....	G. Winship.....	144, 245	Nov. 4, 1873	68	21	4	483
Baling-press, Hand-power.....	P. C. Ingersoll.....	144, 982	Nov. 25, 1873	705	238	4	570
Ball.....	See Copper ball.						
Ball and socket-joint.....	M. W. St. John.....	142, 293	Aug. 26, 1873	812	269	4	228
Balloon-advertiser.....	E. L. Moodie.....	136, 930	Mar. 18, 1873	521	173	3	305
Ballot-box.....	J. Ganbar.....	141, 872	Aug. 19, 1873	438	143	4	188
Ballot-box, Registering.....	J. S. Savage.....	142, 124	Aug. 26, 1873	674	222	4	216
Balusters, Machines for cutting.....	P. J. Frantze, M. Tillesen, and J. A. Gregersen.	141, 214	July 29, 1873	622	268	4	111
Band-comb.....	E. Brown.....	136, 358	Mar. 4, 1873	4	2	3	245
Band-comb.....	D. N. Ropes.....	145, 071	Dec. 2, 1873	28	9	4	583
Band, Endless.....	L. Binns.....	143, 743	Oct. 21, 1873	342	114	4	426
Bands, Apparatus for shrinking metal.....	W. Carr.....	141, 992	Aug. 19, 1873	533	176	4	196
Bands, Machine for making endless.....	L. Binns.....	145, 386	Dec. 9, 1873	309	104, 105	4	623
Banjo.....	H. C. Dobson.....	136, 491	Mar. 4, 1873	121	39	3	255
Banjo.....	J. S. Stiles.....	141, 182	July 22, 1873	779	255	4	99
Bar.....	See Boring-bar.						
Barbers' chair.....	P. Haberstick.....	135, 986	Feb. 19, 1873	553	182, 183	3	197
Barbers' chair.....	A. Schwaab.....	136, 009	Feb. 18, 1873	572	189	3	198
Bark-extracts, Apparatus for leaching and concentrating.....	P. M. Church.....	140, 489	July 1, 1873	107	36	4	17
Bark-rossing machine.....	J. Martin and G. W. Wilson.....	141, 448	Aug. 5, 1873	34	11	4	138
Barrel.....	H. Willard.....	136, 196	Feb. 25, 1873	751	242	3	224
Barrel-cover.....	G. Hunt.....	137, 683	Apr. 8, 1873	368	114	3	398

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Awning.....	G. W. Gerau.....	137,772	Apr. 15, 1873	461	144	3	419
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Awning frame.....	H. Stevens.....	142,291	Aug. 26, 1873	810	268	4	228
Awning frame, Window.....	J. A. Allen.....	138,223	Apr. 29, 1873	891	281	3	471
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Awnings, Painting striped.....	C. E. Wheeler.....	138,773	May 13, 1873	283	88	3	530
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Axle-box, Attachment to car.....	D. A. Hopkins.....	139,791	June 10, 1873	331	103	3	651
Axle-box, Car.....	J. E. Bering.....	145,146	Dec. 2, 1873	100	33	4	593
Axle-box, Car.....	W. W. Crane.....	138,794	May 13, 1873	303	93	3	532
Axle-box, Car.....	J. M. Dodge.....	136,424	Mar. 4, 1873	60	21	3	250
Axle-box, Car.....	H. G. Downs.....	134,594	Jan. 7, 1873	89	28	3	14
Axle-box, Car.....	C. T. Fay.....	135,977	Feb. 18, 1873	544	180	3	196
Axle-box, Car.....	S. F. Gates.....	138,242	Apr. 29, 1873	906	296	3	473
Axle-box, Car.....	H. H. Hill and G. M. Sargent.....	141,350	July 29, 1873	951	309	4	121
Axle-box, Car.....	J. Hogan.....	142,104	Aug. 26, 1873	650	216	4	215
Axle-box, Car.....	W. B. Howe.....	143,763	Oct. 21, 1873	357	119	4	427
Axle-box, Car.....	J. G. Johnson.....	145,425	Dec. 9, 1873	347	116	4	625
Axle-box, Car.....	J. Kinzer.....	135,343	Jan. 28, 1873	794	257	3	111
Axle-box, Car.....	W. J. Manker.....	136,265	Apr. 29, 1873	932	294	3	474
Axle-box, Car.....	H. E. Marchand.....	139,322	May 27, 1873	792	252	3	593
Axle-box, Car.....	W. J. L. Moulton.....	145,227	Dec. 2, 1873	171	59	4	599
Axle-box, Car.....	D. Muzzey.....	145,004	Nov. 25, 1873	724	244	4	571
Axle-box, Car.....	L. Schulze.....	143,592	Oct. 14, 1873	180	61	4	404
Axle-box, Car.....	J. E. Uhl.....	138,717	May 6, 1873	224	70	3	515
Axle-box, Car.....	S. Ustick.....	142,303	Aug. 26, 1873	820	272	4	228
Axle-box, Car.....	S. Ustick.....	136,472	Mar. 4, 1873	104	35	3	234
Axle-box, Car.....	S. Ustick.....	142,302	Aug. 26, 1873	819	271	4	228
Axle-box, Car.....	W. W. Whitaker.....	142,752	Sept. 9, 1873	384	129	4	284
Axle-box, Car.....	J. Whitaker and S. S. Cook.....	146,116	Dec. 30, 1873	995	321	4	712
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Axle-box, Vehicle.....	C. H. Allen.....	143,950	Oct. 28, 1873	539	179	4	452
Axle-box, Vehicle.....	W. A. Clark.....	142,556	Sept. 9, 1873	218	71	4	271
Axle-box, Vehicle.....	O. P. Rice.....	143,300	Sept. 30, 1873	258	294	4	361
Axle-box, Vehicle.....	J. P. Smith.....	136,778	Mar. 11, 1873	383	126	3	285
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Axle lubricator, Car.....	J. E. Bering.....	145,834	Dec. 23, 1873	719	236	4	680
Axle lubricator, Car.....	G. A. Brannan.....	135,517	Feb. 4, 1873	110	35	3	136
Axle lubricator, Car.....	W. J. L. Moulton.....	145,226	Dec. 2, 1873	170	58	4	599
Axle lubricator, Car.....	T. R. Timby.....	135,366	Jan. 28, 1873	832	268	3	114
Axle lubricator, Carriage.....	H. F. Phillips.....	137,479	Apr. 1, 1873	180	57	3	372
Axle lubricator, Vehicle.....	C. C. Parker.....	145,231	Dec. 2, 1873	174	60	4	599
Axle lubricator, Wagon.....	W. Loewenstein.....	138,263	Apr. 29, 1873	929	293	3	474
Axle-turning machine.....	A. F. Moore.....	137,316	Apr. 1, 1873	34	11	3	360
B.							
Baby-chair.....	P. Henrichs.....	134,668	Jan. 7, 1873	161	53	3	19
Baby-jumper.....	A. F. Spooner.....	138,209	Apr. 22, 1873	855	271	3	460
Baby-walker.....	J. Erickson.....	141,431	Aug. 5, 1873	19	5	4	136
Back-band hook.....	J. Straus.....	139,524	June 3, 1873	68	23	3	614
Bag:							
<i>See</i> Broom-bag.							
Dashboard-bag.							
Grain-bag.							
Horse nose-bag.							
Mail-bag.							
Paper bag.							
Traveling-bag.							
Bag-fastener.....	S. R. Bush.....	144,738	Nov. 18, 1873	491	166	4	541
Bag-holder.....	J. B. Brown.....	134,637	Jan. 7, 1873	130	42	3	17
Bag-holder.....	N. A. Geisinger.....	143,897	Oct. 21, 1873	472	158	4	437
Bag-holder.....	J. Hunter and H. M. Clayton.....	138,752	May 13, 1873	267	82	3	529
Bag-holder.....	G. W. Striker.....	143,194	Sept. 23, 1873	760	262	4	337
Bag-holder.....	C. H. Thomas.....	141,186	July 22, 1873	783	256	4	100
Bag-lock.....	H. Ahrend.....	139,526	June 3, 1873	70	24	3	614
Bag-machine.....	N. Riedinger.....	140,342	July 1, 1873	7	2	4	8
Bag-tie.....	J. Bannhir and S. H. Rhodes.....	136,637	Mar. 11, 1873	268	90	3	276
Bag-turning machine.....	J. Martin.....	136,926	Mar. 18, 1873	518	171	3	305
Bake-pan.....	W. B. Chamberlin.....	142,144	Aug. 26, 1873	691	227	4	218
Bake-pan.....	J. G. Metaker.....	142,928	Sept. 16, 1873	536	183	4	308
Baker, Folding camp.....	F. Lehnen.....	143,288	Sept. 30, 1873	845	291	4	360
Baking-mold.....	G. Wingate.....	144,939	Nov. 25, 1873	669	227	7	567
Baking-pan.....	C. T. Smith.....	144,417	Nov. 11, 1873	219	72	4	508

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Baking-powder for bread.....	J. G. Kopping and J. Weideman.	143, 580	Oct. 14, 1873	172	4	403
Balance.....	E. C. Pickering.....	144, 286	Nov. 4, 1873	96	32	4	486
Balance, Weighing and price.....	A. M. Maynard.....	144, 914	Nov. 25, 1873	649	230	4	565
Bale-band stretcher.....	F. M. Logue.....	141, 447	Aug. 5, 1873	33	11	4	138
Bale-tie.....	G. Brodie.....	142, 894	Sept. 16, 1873	508	173	4	306
Bale-tie.....	L. Carter.....	145, 091	Dec. 2, 1873	50	15	4	589
Bale-tie.....	F. Cook.....	135, 526	Feb. 4, 1873	190	38	3	137
Bale-tie.....	F. Cook.....	138, 479	May 6, 1873	13	4	3	498
Bale-tie.....	F. Cook.....	138, 480	May 6, 1873	13	4	3	498
Bale-tie.....	F. Cook.....	142, 772	Sept. 16, 1873	411	138	4	287
Bale-tie.....	F. Cook.....	143, 223	Sept. 30, 1873	792	273	4	355
Bale-tie.....	F. Cook.....	145, 847	Dec. 23, 1873	733	240	4	61
Bale-tie.....	P. K. Dederick.....	135, 700	Feb. 11, 1873	295	93	3	163
Bale-tie.....	J. W. Hedenberg.....	137, 549	Apr. 8, 1873	253	76	3	389
Bale-tie.....	E. P. Jones.....	139, 675	June 10, 1873	216	70	3	642
Bale-tie.....	J. McMurtry.....	142, 803	Sept. 16, 1873	435	147	4	299
Bale-tie.....	M. Quin.....	135, 938	Feb. 18, 1873	513	167	3	193
Bale-tie.....	W. C. Stiff.....	140, 556	July 1, 1873	183	62	4	23
Bale-tie clamp.....	T. D. Leonard.....	144, 776	Nov. 18, 1873	524	178	4	544
Bale-tie, Cotton.....	A. S. Armstrong.....	139, 754	June 10, 1873	298	92	3	648
Bale-tie, Cotton.....	G. N. Beard.....	143, 319	Sept. 30, 1873	874	299	4	362
Bale-tie, Cotton.....	G. N. Beard.....	145, 273	Dec. 9, 1873	216	74	4	615
Bale-tie, Cotton.....	A. G. Buford.....	144, 502	Nov. 11, 1873	284	96	4	513
Bale-tie, Cotton.....	R. W. Cobb.....	140, 575	July 8, 1873	215	72	4	37
Bale-tie, Cotton.....	F. Cook.....	138, 481	May 6, 1873	14	5	3	498
Bale-tie, Cotton.....	F. Cook.....	138, 482	May 6, 1873	14	5	3	499
Bale-tie, Cotton.....	F. Cook.....	138, 483	May 6, 1873	15	5	3	499
Bale-tie, Cotton.....	F. Cook.....	138, 484	May 6, 1873	15	5	3	499
Bale-tie, Cotton.....	F. Cook.....	139, 777	June 10, 1873	319	99	3	650
Bale-tie, Cotton.....	F. Cook.....	140, 246	June 24, 1873	747	236	3	701
Bale-tie, Cotton.....	F. Cook.....	140, 766	July 15, 1873	379	130	4	58
Bale-tie, Cotton.....	F. Cook.....	142, 001	Aug. 19, 1873	542	179	4	196
Bale-tie, Cotton.....	T. Cromer.....	143, 124	Sept. 23, 1873	706	242	4	332
Bale-tie, Cotton.....	W. Crone.....	141, 494	Aug. 5, 1873	77	24	4	141
Bale-tie, Cotton.....	W. D. Field.....	138, 492	May 6, 1873	21	7	3	499
Bale-tie, Cotton.....	W. D. Field.....	140, 024	June 17, 1873	535	169	3	675
Bale-tie, Cotton.....	A. J. Going.....	137, 301	Apr. 1, 1873	20	6	3	353
Bale-tie, Cotton.....	J. M. Goldsmith.....	143, 343	Sept. 30, 1873	901	306	4	364
Bale-tie, Cotton.....	B. Kimball.....	143, 911	Oct. 21, 1873	483	163	4	438
Bale-tie, Cotton.....	O. R. McClean.....	142, 802	Sept. 16, 1873	435	147	4	299
Bale-tie, Cotton.....	W. J. Orr.....	142, 505	Sept. 2, 1873	165	53	4	255
Bale-tie, Cotton.....	F. Quarles.....	144, 793	Nov. 18, 1873	537	183	4	545
Bale-tie, Cotton.....	W. C. Ramsay.....	137, 570	Apr. 8, 1873	273	84	3	390
Bale-tie, Cotton.....	D. S. Skinner.....	145, 536	Dec. 16, 1873	461	150	4	646
Bale-tie, Cotton.....	H. D. Starr.....	142, 527	Sept. 2, 1873	183	60	4	256
Bale-tie, Cotton.....	L. Weil.....	146, 037	Dec. 30, 1873	919	298	4	706
Bale-tie, Wire.....	G. L. Laughland.....	141, 879	Aug. 19, 1873	444	145	4	188
Bale-tie, Device for framing.....	J. McClean.....	145, 357	Dec. 9, 1873	288	96, 97	4	621
Baling hay, Device for.....	L. Doty.....	141, 636	Aug. 12, 1873	215	68	4	160
Baling-press.....	J. M. Albertson.....	139, 849	June 17, 1873	387	121	3	663
Baling-press.....	H. W. Baumann.....	141, 622	Aug. 12, 1873	202	64	4	159
Baling-press.....	H. K. Burnett.....	136, 965	Mar. 18, 1873	551	182	3	308
Baling-press.....	W. M. Conner.....	141, 035	July 22, 1873	639	215	4	89
Baling-press.....	J. B. Root.....	146, 096	Dec. 30, 1873	976	315	4	711
Baling-press.....	G. Winship.....	144, 245	Nov. 4, 1873	68	21	4	483
Baling-press, Hand-power.....	P. C. Ingersoll.....	144, 982	Nov. 25, 1873	705	238	4	570
Ball: See Copper ball.							
Ball and socket-joint.....	M. W. St. John.....	142, 293	Aug. 26, 1873	812	269	4	228
Ballon-advertiser.....	E. L. Moodie.....	136, 930	Mar. 18, 1873	521	173	3	305
Ballot-box.....	J. Gamber.....	141, 872	Aug. 19, 1873	438	143	4	188
Ballot-box, Registering.....	J. S. Savage.....	142, 124	Aug. 26, 1873	674	222	4	216
Balusters, Machines for cutting.....	P. J. Frantze, M. Tillesen, and J. A. Gregersen.	141, 214	July 29, 1873	822	268	4	111
Band-comb.....	E. Brown.....	136, 358	Mar. 4, 1873	4	2	3	245
Band-comb.....	D. N. Ropes.....	145, 071	Dec. 2, 1873	22	9	4	588
Band, Endless.....	L. Binns.....	143, 743	Oct. 21, 1873	342	114	4	426
Bands, Apparatus for shrinking metal.....	W. Carr.....	141, 992	Aug. 19, 1873	533	176	4	196
Bands, Machine for making endless.....	L. Binns.....	145, 386	Dec. 9, 1873	309	104, 105	4	623
Banjo.....	H. C. Dobson.....	136, 491	Mar. 4, 1873	121	39	3	255
Banjo.....	J. S. Stiles.....	141, 182	July 22, 1873	779	255	4	99
Bar: See Boring-bar. Claw-bar. Clevie-bar. Grate-bar. Harvester-finger bar. Iron bar. Metal bar. Metallic bar. Miners' bar. Sickle-bar. Skylight-bar. Spike-bar. Tapered bar. Vehicle side-bar.							
Barbers' chair.....	P. Haberstick.....	135, 986	Feb. 19, 1873	553	182, 183	3	197
Barbers' chair.....	A. Schwaab.....	136, 009	Feb. 18, 1873	572	189	3	198
Bark-extracts, Apparatus for leaching and concentrating.....	P. M. Church.....	140, 469	July 1, 1873	107	36	4	17
Bark-rossing machine.....	J. Martin and G. W. Wilson.....	141, 448	Aug. 5, 1873	34	11	4	138
Barrel.....	H. Willard.....	136, 196	Feb. 25, 1873	751	242	3	224
Barrel-cover.....	G. Hunt.....	137, 683	Apr. 8, 1873	368	114	3	398

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Barrel-dressing and crozing machine	W. Brown	141,317	July 29, 1873	915	300	4	119
Barrel-head	A. Hanvey	143,571	Oct. 14, 1873	164	55	4	402
Barrel-head	J. W. Taylor	140,095	June 17, 1873	602	190	3	681
Barrel-head centering device	J. J. Ralya	141,816	Aug. 12, 1873	372	192	4	173
Barrel-head lining	G. A. Reed	136,763	Mar. 11, 1873	370	123	3	284
Barrel-header	C. B. Pettingill	137,567	Apr. 8, 1873	267	82, 83	3	290
Barrel-headers, Making	J. L. Kilgore	144,771	Nov. 18, 1873	520	177	4	543
Barrel-header	A. E. Salisbury, and S. S. Steel	138,531	May 6, 1873	58	19	3	502
Barrel-heading mechanism	J. Griffing	136,595	Mar. 11, 1873	232	78	3	273
Barrel-hoop	H. Ogborn	144,920	Nov. 25, 1873	654	222	4	565
Barrel-hoop	H. Willard	140,662	July 15, 1873	463	156	4	65
Barrel-hoops, Staple for securing the ends of	H. Ogborn	140,430	July 1, 1873	73	26	4	14
Barrel-making machine	H. P. Hall	140,776	July 15, 1873	386	133	4	59
Barrel-making machinery	C. Ruggles	144,635	Nov. 18, 1873	406	136	4	534
Barrel-pitching apparatus	G. Sichter	139,976	June 17, 1873	493	156	3	672
Barrel-stand and keg-holder	C. N. Cass	140,573	July 8, 1873	213	71	4	37
Barrel-support	F. W. Claussen	136,416	Mar. 4, 1873	54	19	3	250
Barrel-transporter	J. Griffing	140,364	July 1, 1873	24	8	4	10
Barrel-washer	A. Muntzenberger	145,003	Nov. 25, 1873	724	244	4	571
Barrels, &c., Apparatus for steaming and cleaning	A. K. Lee	138,810	May 13, 1873	315	97	3	533
Barrels, boxes, &c., Machine for lifting and carrying	J. W. Babcock	135,958	Feb. 18, 1873	529	174	3	195
Barrels, casks, &c., Machine for pitching	G. Meyer	135,139	Jan. 21, 1873	501	192	3	83
Barrels, &c., Fermentation guard for	A. P. Gardner	145,860	Dec. 23, 1873	743	243	4	682
Barrels, &c., Implements for rolling, guiding and controlling	B. V. Tamplin	138,055	Apr. 22, 1873	724	229	3	449
Barrels, Machine for forcing hoops on	J. Greenwood	145,942	Dec. 16, 1873	841	274	4	700
Barrels with glue, Process of lining oil	E. W. Leggett	143,770	Oct. 21, 1873	364	.....	4	428
Barrow, Truck	J. J. Richardson	135,157	Jan. 21, 1873	604	196	3	84
Barrow, Wheel	J. M. and J. L. Jones	143,767	Oct. 21, 1873	362	120	4	428
Barrow, Wheel	J. B. Schneider	139,823	June 10, 1873	360	111	3	653
Baryta, Manufacture of	C. M. T. DuMotay	144,517	Nov. 11, 1873	295	100	4	514
Basket	W. C. Higgins	137,368	Apr. 1, 1873	81	26	3	363
Basket	H. C. Jones	142,343	Sept. 2, 1873	19	7	4	243
Basket	S. H. Wheeler	141,023	July 22, 1873	630	212	4	88
Basket and bird-cage, Combined hanging	S. Vanstone	137,980	Apr. 15, 1873	635	200	3	433
Basket-form	A. F. Scow	138,765	May 13, 1873	277	86	3	530
Basket-form	A. F. Scow	139,025	May 20, 1873	508	160	3	562
Basket, Grain	G. P. Coan	144,018	Oct. 28, 1873	602	199	4	457
Basket, Grain	H. C. Jones	137,845	Apr. 15, 1873	523	163	3	424
Basket, Grain	H. C. Jones	137,846	Apr. 15, 1873	523	163	3	424
Basket, Grain	H. C. Jones	142,341	Sept. 2, 1873	17	6	4	243
Basket, Grain	H. C. Jones	142,342	Sept. 2, 1873	18	6	4	243
Basket, Machine for making	J. Moore and S. W. Day	134,920	Jan. 14, 1873	392	124	3	51
Basket, Wire	D. Sherwood	135,943	Feb. 18, 1873	517	169	3	194
Basket, Work	T. V. Hobbs	139,508	June 3, 1873	56	18	3	613
Bath:							
<i>See Shower-bath</i>							
<i>Swimming-bath</i>							
Bath-tub	L. Bagger	139,995	June 17, 1873	508	161	3	673
Bath-tub, Electro-medical	S. Russell, jr.	139,819	June 10, 1873	356	110	3	633
Bath-tub plug-socket	R. C. Scrimgeour	137,726	Apr. 8, 1873	410	126	3	402
Baton, Policeman's	S. Berry	143,610	Oct. 14, 1873	197	68	4	405
Battery:							
<i>See Galvanic battery.</i>							
<i>Non-freezing battery.</i>							
Batting, Machine for making	F. W. Bloodgood	145,615	Dec. 16, 1873	523	172	4	652
Bayonet attachment	J. W. Neil	134,608	Jan. 7, 1873	103	33	3	15
Bayonet-socket	B. Burton	143,495	Oct. 7, 1873	83	28	4	387
Beading sheet-metal vessels, Machine for	C. W. Priest	137,147	Mar. 25, 1873	721	239, 240	3	333
Beam, Composite	W. W. Lummus	139,902	June 17, 1873	439	136	3	667
Beam, Floor	W. W. Lummus	139,903	June 17, 1873	439	137	3	667
Beam, Floor	W. W. Lummus	139,904	June 17, 1873	440	137	3	667
Beam, Wrought-iron	L. Kirkup	138,029	Apr. 22, 1873	699	221	3	447
Beams and columns, Connection for wrought-iron	A. Bonzaou	140,455	July 1, 1873	93	32	4	16
Beater and compressing press	G. Ertel	135,533	Feb. 4, 1873	127	40, 41	3	137
Beater-press	J. Cory	135,780	Feb. 11, 1873	360	116	3	168
Bed and frame, Spring	W. Z. Cooke	135,892	Feb. 18, 1873	478	154	3	191
Bed and mattress filling	J. C. Wightman	145,140	Dec. 2, 1873	96	.....	4	583
Bed-bottom	P. Anderson	142,549	Sept. 9, 1873	213	69	4	271
Bed-bottom	A. H. Bell	134,839	Jan. 14, 1873	321	102	3	46
Bed-bottom	H. Benedict	140,571	July 8, 1873	212	71	4	37
Bed-bottom	P. Boesen and M. Bedessam	135,965	Feb. 18, 1873	535	177	3	195
Bed-bottom	E. L. Brockett	140,005	June 17, 1873	517	164	3	674
Bed-bottom	E. G. Cameron	135,774	Feb. 11, 1873	356	114	3	167
Bed-bottom	L. M. Crosby and E. G. Cameron	144,959	Nov. 25, 1873	686	232	4	568
Bed-bottom, &c.	J. Drusakle	143,970	Oct. 28, 1873	554	184	4	453
Bed-bottom	D. Frankfoder	140,492	July 1, 1873	126	44	4	18
Bed-bottom	S. B. Freeman	144,754	Nov. 18, 1873	507	172	4	542
Bed-bottom	F. K. Garretson and W. Fulghun	138,630	May 6, 1873	143	46	3	509
Bed-bottom	C. Gense	137,909	Apr. 15, 1873	577	181	3	428
Bed-bottom	P. C. Hard	136,158	Feb. 25, 1873	722	233	3	222
Bed-bottom	B. Holmes	135,989	Feb. 18, 1873	556	184	4	197
Bed-bottom	E. Hoyt	144,906	Nov. 25, 1873	642	218	3	564
Bed-bottom	M. A. Hunt	138,252	Apr. 29, 1873	920	290	3	474
Bed-bottom	S. L. Leach	140,264	June 24, 1873	751	247	3	704
Bed-bottom	T. L. Odell and J. C. Hudson	135,724	Feb. 11, 1873	314	100	3	164
Bed-bottom	H. Ogborn and A. W. Kendrick	135,725	Feb. 11, 1873	314	100	3	164
Bed-bottom	H. Ogborn and A. W. Kendrick	135,835	Feb. 11, 1873	415	135	3	171
Bed-bottom	H. Ogborn and A. W. Kendrick	135,933	Feb. 18, 1873	509	166	3	193
Bed-bottom	H. Ogborn and A. W. Kendrick	136,332	Mar. 4, 1873	28	10	3	247
Bed-bottom	C. Penfield	135,580	Feb. 4, 1873	178	56	3	141
Bed-bottom	E. W. Quincy	140,387	July 1, 1873	45	15	4	11
Bed-bottom	R. Rabestraw	135,844	Feb. 11, 1873	92	137	3	172

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Bed-bottom	C. V. Reeder	140,540	July 1, 1873	168	57	4	22
Bed-bottom	W. H. Sears	143,190	Sept. 23, 1873	758	261	4	336
Bed-bottom	T. J. Sheears	140,955	July 15, 1873	552	185	4	72
Bed-bottom	W. W. Skaats	143,035	Sept. 23, 1873	635	217	4	326
Bed-bottom	C. B. Spencer	145,023	Nov. 25, 1873	741	250	4	573
Bed-bottom	J. V. Taylor	140,856	July 15, 1873	456	155	4	65
Bed-bottom	A. Turnbull	137,511	Apr. 1, 1873	214	65	3	374
Bed-bottom	B. C. Vanduzen	137,039	Mar. 18, 1873	616	204	3	313
Bed-bottom	A. S. Wells	137,398	Apr. 1, 1873	106	34	3	365
Bed-bottom	N. O. Wilcox	138,971	May 13, 1873	448	141	3	545
Bed-bottom, Invalid	C. A. Towsley	136,562	Mar. 4, 1873	189	62	3	260
Bed-bottom, Spring	C. L. Ames and A. H. Frost	143,397	Oct. 7, 1873	1	1	4	381
Bed-bottom, Spring	H. H. Blair and S. Barry	138,472	May 6, 1873	7	3	3	498
Bed-bottom, Spring	G. W. Brown	142,895	Sept. 16, 1873	509	174	4	306
Bed-bottom, Spring	I. Bush	135,885	Feb. 18, 1873	472	152	3	190
Bed-bottom, Spring	C. H. Dunks	142,377	Sept. 2, 1873	49	17	4	246
Bed-bottom, Spring	S. Dunlap	136,494	Mar. 4, 1873	123	40	3	255
Bed-bottom, Spring	E. S. Field	138,490	May 6, 1873	19	7	3	499
Bed-bottom, Spring	E. S. Field	138,491	May 6, 1873	20	7	3	499
Bed-bottom, Spring	C. Gammel	139,567	June 3, 1873	107	36	3	617
Bed-bottom, Spring	H. A. Hight, sr.	146,072	Dec. 30, 1873	952	307	4	709
Bed-bottom, Spring	E. B. Hilland E. Van Valkenburg	142,391	Sept. 2, 1873	65	21	4	247
Bed-bottom, Spring	J. S. Judson	144,338	Nov. 4, 1873	137	46	4	489
Bed-bottom, Spring	W. C. McGill	144,688	Nov. 18, 1873	451	153	4	538
Bed-bottom, Spring	C. W. Northrup	143,373	Sept. 30, 1873	928	314	4	360
Bed-bottom, Spring	H. Ogborn and A. W. Kendrick	136,665	Mar. 11, 1873	290	97	3	278
Bed-bottom, Spring	J. Pollitt	141,726	Aug. 12, 1873	288	94	4	166
Bed-bottom, Spring	S. H. Reeves	138,529	May 6, 1873	56	19	3	502
Bed-bottom, Spring	J. L. Secomb	134,614	Jan. 7, 1873	106	35	3	15
Bed-bottom, Spring	E. G. Sherman	138,348	Apr. 29, 1873	1,006	317	3	480
Bed-bottom, Spring	W. D. Spencer and E. Parker	137,498	Apr. 1, 1873	203	62	3	373
Bed-bottom, Spring	W. Starke	138,446	Apr. 29, 1873	1,093	345	3	487
Bed-bottom, Spring	S. A. Thompson and C. T. Kendrick	138,056	Apr. 22, 1873	725	229	3	450
Bed-bottom, Spring	J. A. Van Wert and A. Crooley	140,975	July 15, 1873	574	193	4	74
Bed-bottom, Spring-fastener for	D. A. Scott	138,203	Apr. 22, 1873	850	269	3	460
Bed-bug extermiator	C. L. Fowell	139,562	June 3, 1873	103	34	3	617
Bed-bug trap for bedstead	C. Logab	137,936	Apr. 15, 1873	596	188	3	430
Bed-coat	L. B. Morse	135,573	Feb. 4, 1873	166	53	3	140
Bed, Head-rest for	B. F. Walton	136,395	Mar. 4, 1873	38	14	3	248
Bed-lounger	G. Hartzell	137,677	Apr. 8, 1873	264	113	3	398
Bed or cradle guard	J. J. Roll	136,097	Feb. 18, 1873	649	212	3	204
Bed, Sofa	E. N. Doring	145,494	Dec. 9, 1873	328	110	4	629
Bed, Spring	J. H. Baker and A. Doney	136,692	Mar. 11, 1873	311	103	3	274
Bed, Spring	O. C. Campbell	137,287	Apr. 1, 1873	7	3	3	357
Bed, Spring	W. W. Jones	144,984	Nov. 25, 1873	706	239	4	570
Bed, Spring	F. R. Smith	138,589	May 6, 1873	708	35	3	507
Bed, Spring	S. Smith and J. H. Gill	143,854	Oct. 21, 1873	439	146	4	437
Bed, Spring	S. Stout	139,627	June 3, 1873	157	52	3	632
Bed, Spring	D. E. Taylor	137,260	Mar. 25, 1873	627	272	3	340
Bedstead	F. G. Ford	137,191	Mar. 25, 1873	764	252	3	336
Bedstead	E. Morris	145,305	Dec. 9, 1873	243	82	4	617
Bedstead	H. D. Olds	138,756	May 13, 1873	270	83	3	529
Bedstead	D. C. Raub	138,582	May 6, 1873	102	33	3	506
Bedstead, Bureau or wardrobe	C. May	136,443	Mar. 4, 1873	77	27	3	251
Bedstead crib-attachment	E. F. Bryan	134,847	Jan. 14, 1873	328	104	3	46
Bedstead crib-attachment	B. Snyder	139,829	June 10, 1873	364	113	3	654
Bedstead crib-attachment	M. W. Tarbell and J. H. P. Inalee	138,280	Feb. 25, 1873	824	266	3	230
Bedstead-fastening	J. M. Baird	143,431	Oct. 7, 1873	32	11	4	383
Bedstead-fastening	L. G. Bradford	136,301	Feb. 25, 1873	842	272	3	231
Bedstead-fastening	J. F. Mancha	135,279	Jan. 28, 1873	737	237	3	107
Bedstead-fastening	C. Wolf	142,973	Sept. 16, 1873	578	195	4	312
Bedstead-fastening	C. Wolf	139,844	June 10, 1873	375	117	3	655
Bedstead-fastening	C. Wolf	145,266	Dec. 2, 1873	205	70	4	601
Bedstead, Folding	A. G. Bayles, J. W. H. Carroll, and G. D. Miner	138,840	May 13, 1873	344	106	3	536
Bedstead, Folding	J. L. Killgore	137,690	Apr. 8, 1873	375	116	3	399
Bedstead, Invalid	A. Bray	139,493	June 3, 1873	46	14	3	612
Bedstead, Invalid	C. M. Clinton and E. J. Morgan	137,596	Apr. 8, 1873	292	91	3	392
Bedstead, Invalid	O. G. Cosby	137,828	Apr. 15, 1873	506	158	3	422
Bedstead, Invalid	G. W. Grote	138,083	Apr. 22, 1873	746	236	3	451
Bedstead, Invalid	J. Robinson	140,646	July 8, 1873	275	93	4	42
Bedstead, Parlor	F. E. Coffin	139,454	June 3, 1873	8	3	3	609
Bedstead, Sofa	J. Beiersdorf	140,453	July 1, 1873	92	31	4	16
Bedstead, Sofa	J. Braids	134,843	Jan. 14, 1873	324	163	3	46
Bedstead, Sofa	C. F. Grundin	139,952	June 17, 1873	476	150	3	670
Bedstead, Sofa	J. B. Harlow	135,643	Feb. 11, 1873	244	77	3	159
Bedstead, Sofa	P. J. Larson	145,508	Dec. 16, 1873	432	140	4	644
Bedstead, Sofa	E. Lord	145,741	Dec. 23, 1873	644	211	4	674
Bedstead, Sofa	E. Lovell	142,249	Aug. 26, 1873	777	256	4	225
Bedstead, Sofa	C. Rosow	138,819	May 13, 1873	324	100	3	534
Bedstead, Sofa	J. K. Stockton	136,276	Feb. 25, 1873	820	265	3	229
Bedstead, Sofa	C. Streit	137,505	Apr. 1, 1873	210	64	3	374
Bedstead, Sofa	S. M. and S. A. Winn	143,553	Oct. 7, 1873	141	47	4	392
Bedstead, Wardrobe	C. L. Barritt	140,109	June 24, 1873	634	199	3	691
Bedstead, Wardrobe	J. Byrnes	138,610	May 6, 1873	122	40	3	508
Bedstead, Wardrobe	R. W. Frost	137,356	Apr. 1, 1873	72	23	3	363
Bedstead, Wardrobe	E. Hunter and D. Van Sickle	139,316	May 27, 1873	789	251	3	592
Bedstead, Wardrobe	J. Smith	137,628	Apr. 8, 1873	318	99	3	394
Bee-hive	L. Adams	145,324	Dec. 9, 1873	264	88	4	619
Bee-hive	A. M. Brubaker and B. R. Witmer	136,642	Mar. 11, 1873	272	91	3	276
Bee-hive	S. T. Davis	137,831	Apr. 15, 1873	510	159	3	423
Bee-hive	A. Deweece	137,348	Apr. 1, 1873	68	21	3	363
Bee-hive	L. J. Diehl	145,634	Dec. 16, 1873	539	177	4	653

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Bee-hive	J. R. East	144,750	Nov. 18, 1873	592	170	4	542
Bee-hive	C. Flinn	137,834	Apr. 15, 1873	514	160	3	423
Bee-hive	E. Gerry	137,433	Apr. 1, 1873	138	45	3	368
Bee-hive	D. L. Grover	140,497	July 1, 1873	131	45	4	19
Bee-hive	E. E. Henegan	140,702	July 8, 1873	321	109	4	46
Bee-hive	W. S. Hough	144,847	Nov. 25, 1873	598	203	4	560
Bee-hive	E. Kretschmer	138,661	May 6, 1873	171	55	3	511
Bee-hive	D. Latchaw	141,443	Aug. 5, 1873	29	9, 10	4	137
Bee-hive	W. Lehman	135,566	Feb. 4, 1873	159	51	3	140
Bee-hive	D. Loofbourrow	134,687	Jan. 7, 1873	178	58	3	21
Bee-hive	D. M. Calvin	137,530	Apr. 8, 1873	238	73	3	388
Bee-hive	D. M. Calvin	145,048	Dec. 2, 1873	5	2	4	586
Bee-hive	G. Miller	143,295	Sept. 30, 1873	854	293	4	360
Bee-hive	J. Newman and N. Brown	136,933	Mar. 12, 1873	524	173	3	305
Bee-hive	D. Rice	141,818	Aug. 12, 1873	374	122	4	173
Bee-hive	S. Rogers and A. J. Mason	142,221	Aug. 26, 1873	803	265	4	227
Bee-hive	J. H. Shook	143,643	Oct. 14, 1873	226	76	4	407
Bee-hive	H. P. Simmons	135,493	Feb. 4, 1873	91	29	3	134
Bee-hive	C. J. Sperry and L. Chandler	143,307	Sept. 30, 1873	864	296	4	361
Bee-hive	A. J. Sternberg	142,748	Sept. 9, 1873	360	127	4	284
Bee-hive	J. H. Stockwell	143,937	Oct. 21, 1873	503	170	4	439
Bee-hive	N. W. Walton and J. L. Cunningham	142,537	Sept. 2, 1873	193	62	4	257
Bee-hive	R. H. Woodside	137,645	Apr. 8, 1873	333	103	3	395
Bee-hive	A. T. Wright	142,318	Aug. 26, 1873	831	276	4	229
Bee-hive, Fumigator for	A. R. Denlinger	139,881	June 17, 1873	417	130	3	685
Bee-hive honey-box	H. M. Johnson and C. M. Barker	134,674	Jan. 7, 1873	166	55	3	20
Bee-hive, Moth-trap for	L. Gates	136,911	Mar. 18, 1873	506	167	3	304
Bee-keepers' protecting-mask	L. C. Huff	140,417	July 1, 1873	64	23	4	13
Beefsteak-tenderer	J. S. Morris	144,216	Nov. 4, 1873	42	12	4	481
Beer and other liquids from barrels, Apparatus for forcing	J. Devlin	139,882	June 17, 1873	418	130	3	665
Beer and wine, Cooler for preserving	F. Loesch	145,955	Dec. 30, 1873	859	277	4	701
Beer and yeast, Manufacture of	L. Pasteur	141,072	July 22, 1873	671	225	4	91
Beer, Apparatus for preserving and forcing	E. C. Krausnick	144,987	Nov. 25, 1873	708	239	4	570
Beer-cask	M. Seitz	139,334	May 27, 1873	800	255	3	593
Beer-cooler	J. Chandless	135,688	Feb. 11, 1873	286	90	3	162
Beer-cooler	J. Gimlich	139,310	May 27, 1873	785	250	3	594
Beer-cooler	A. Pfund	140,073	June 17, 1873	581	184	3	679
Beer-cooler	A. F. Rick	138,195	Apr. 22, 1873	844	267	3	459
Beer-cooler	F. Schmidt	138,289	Apr. 29, 1873	956	301	3	476
Beer-cooler, Tap-holder attachment for	J. H. Fisher	143,068	Sept. 21, 1873	663	227	4	328
Beer-mug	W. C. King	146,078	Dec. 30, 1873	957	309	4	709
Beer on draught, Apparatus for preserving	J. W. Moore	141,944	Aug. 19, 1873	495	163	4	192
Beer, Process for preserving	A. Adametz	142,428	Sept. 2, 1873	93	31	4	250
Bell attachment, Alarm	A. Sherwood	142,287	Aug. 26, 1873	807	267	4	227
Bell, Call	H. Stratton	135,860	Feb. 11, 1873	434	141	3	173
Bell-clasp, Leather	L. Sanders	136,549	Mar. 4, 1873	179	58	3	259
Bell, Door	J. Harrison	138,151	Apr. 22, 1873	789	255	3	456
Bell, Door	W. M. Preston	143,412	Sept. 2, 1873	79	26	4	249
Bell, Door	E. B. Sims	142,953	Sept. 16, 1873	561	190	4	310
Bell, Door	A. A. Stuart	139,206	May 20, 1873	678	213	3	576
Bell, Door	W. T. Mungler	139,687	June 10, 1873	228	77	3	643
Bell-pull	A. L. Swan	142,057	Aug. 19, 1873	589	193	4	200
Bell-ringer, Steam	J. West and O. M. Parker	134,719	Jan. 7, 1873	204	66	3	23
Bell-ringing	J. Harrison	139,147	May 20, 1873	623	195	3	571
Bellows	W. Pilcher	141,888	Aug. 19, 1873	451	147	4	189
Bellows of furnace, Operating	H. Crumlish	143,439	Oct. 7, 1873	37	13	4	384
Belt-clamp	E. Ainsworth	143,604	Oct. 14, 1873	192	65	4	405
Belt, Driving	W. R. Colton	135,409	Feb. 4, 1873	15	5	3	139
Belt, Driving	A. Schpakowsky	145,907	Dec. 23, 1873	788	258	4	625
Belt, Endless driving	J. F. Reigart	145,447	Dec. 9, 1873	362	121	4	627
Belt-fastener	A. Hyde	140,419	July 1, 1873	65	23	4	13
Belt-fastening	J. E. Richard	138,194	Apr. 22, 1873	843	267	3	459
Belt-fastening	T. Ruediger	135,492	Feb. 4, 1873	90	28	3	134
Belt-fastening	P. Subit	143,474	Oct. 7, 1873	63	22	4	386
Belt-gearing, Idler for	T. Bell and J. F. Hillerich	141,417	Aug. 5, 1873	6	2	4	135
Belt-holt cover	T. P. Rodgers	144,144	Oct. 28, 1873	703	233	4	466
Belt-hole scupper	B. L. Wood	144,816	Nov. 18, 1873	557	189	4	546
Belt-lacing gage	H. Gould	138,639	May 6, 1873	151	49	3	510
Belt-lacing needle	J. W. Smith	138,540	May 6, 1873	64	22	3	503
Belt-shifter and tightener	B. O'Bryan	140,299	June 24, 1873	793	252	3	705
Belt-shifting apparatus	O. H. Wade	143,736	Oct. 14, 1873	316	105	4	414
Belt-tension apparatus	S. E. Jewett	141,004	July 22, 1873	614	207	4	86
Belt-tightener	W. Sellers	145,908	Dec. 23, 1873	789	258	4	685
Belt, Tool for use in lacing	F. N. DuBois	132,740	May 13, 1873	256	79	3	528
Belt, Waist	J. H. Vogt and G. Dietzel	136,685	Mar. 11, 1873	306	101	3	279
Belting	W. P. Powers	142,272	Aug. 26, 1873	796	262	4	226
Belting, Apparatus for manufacture of vulcanized rubber	D. C. Gately and J. B. Forsyth	141,433	Aug. 5, 1873	20	6	4	136
Belting, hose, &c., Plate for vulcanizing	D. C. Gately	140,494	July 1, 1873	129	44	4	19
Bench	See Carpenter's bench. Saw-bench. Wash-bench. Work-bench.						
Bench-hook	D. Boyce	143,054	Sept. 23, 1873	654	224	4	327
Bending-machine	S. W. Kimble	144,109	Oct. 28, 1873	676	223	4	464
Bending machine, Wood	H. Hanna	145,416	Dec. 9, 1873	338	113	4	625
Berth for vessels	B. Weisker	139,638	June 3, 1873	170	56	3	623
Berth for vessels, Oscillating	B. Weisker	141,614	Aug. 5, 1873	179	57	4	150
Berth-lock for sleeping-cars	T. A. Biemel	145,235	Dec. 23, 1873	719	237	4	680
Berth, Ship's oscillating	I. A. Chomell	140,014	June 17, 1873	525	166	3	674
Bessemer or Kelly converters, Compound for lining bottoms of	J. E. Atwood	138,780	May 13, 1873	290		3	531

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Bevel, Carpenter's	H. Fairbanks and I. J. Robinson.	136, 714	Mar. 11, 1873	399	109	3	281
Bevel, Carpenter's	S. D. Sargent	141, 081	July 22, 1873	681	228	4	92
Bevel-rest	J. E. Seavey	146, 027	Dec. 30, 1873	913	296	4	706
Beverage cooling and dispensing apparatus.	J. Matthews	138, 671	May 6, 1873	182	58	3	512
Bilge-water, Device for discharging.	J. A. Miller	135, 656	Feb. 11, 1873	254	80	3	160
Billiard-cue	L. Nemetz	136, 535	Mar. 4, 1873	165	53	3	258
Billiard-cue	H. Platts	139, 519	June 3, 1873	64	22	3	614
Billiard-cue clamp	O. D. Benjamin	144, 824	Nov. 25, 1873	576	196	4	558
Billiard-cue tip	G. W. Dickinson	144, 324	Nov. 4, 1873	126	42	4	489
Billiard-cushion	H. A. Alden	138, 356	Apr. 29, 1873	1, 013	319	3	481
Billiard-cushion	W. St. Martin	139, 434	May 27, 1873	892	287	3	601
Billiard-light	W. St. Martin	136, 275	Feb. 25, 1873	819	264	3	229
Billiard-table	A. and F. Braun	142, 202	Aug. 26, 1873	739	243	4	222
Billiard-table	E. Brunswick	138, 609	May 6, 1873	122	40	3	508
Billiard-table	G. Buntin	138, 850	May 13, 1873	352	109	3	536
Billiard-table	G. Buntin	141, 539	Aug. 5, 1873	112	35	4	144
Billiard-table	H. W. Collender	145, 787	Dec. 23, 1873	683	224	4	677
Billiard-table	L. C. Prindle	140, 162	June 24, 1873	680	213	3	695
Billiard-table	C. Schlenburg	145, 533	Dec. 16, 1873	458	150	4	646
Billiard-table	S. H. Waldie	144, 716	Nov. 18, 1873	473	160	4	540
Billiard-table ball-holder	H. W. Collender	143, 500	Oct. 7, 1873	87	30	4	387
Billiard-table chalk-holder	H. W. Collender	143, 885	Oct. 21, 1873	463	156	4	436
Billiard-table cushion	S. Brunswick and H. Borlinghaus, sr.	143, 961	Oct. 28, 1873	547	181	4	453
Billiard-table cushion	J. E. Came	142, 435	Sept. 2, 1873	93	32	4	250
Billiard-table cushion	G. E. Phelan	136, 178	Feb. 25, 1873	738	237	3	223
Billiard-table leveler	D. H. Hill	144, 028	Oct. 28, 1873	609	201	4	458
Bin:							
<i>See</i> Potato-bin.							
Binder, Temporary	W. H. Barnard	139, 998	June 17, 1873	511	162	3	673
Binder, Temporary	D. Dunton	137, 131	Mar. 25, 1873	708	235	3	332
Binding-folder	E. P. West	138, 772	May 13, 1873	283	88	3	530
Bird-cage	G. Günther	138, 396	Apr. 29, 1873	1, 045	329	3	483
Bird-cage	E. Hutchinson	144, 907	Nov. 25, 1873	642	219	4	564
Bird-cage	O. Lüdemann	135, 567	Feb. 4, 1873	160	52	3	140
Bird-cage	J. Maxheimer	145, 886	Dec. 23, 1873	769	251	4	684
Bird-cage	G. J. Munschauer	136, 611	Mar. 11, 1873	243	82	3	274
Bird-cage bath-tub	G. T. and G. E. Peters	138, 692	May 6, 1873	199	63	3	513
Biscuit-cutting machine	J. and S. Turner	137, 114	Mar. 25, 1873	684	231	3	331
Biscuit, Manufacture of sweet	H. Even	137, 766	Apr. 15, 1873	455		3	418
Bit:							
<i>See</i> Adjustable-bit.							
Auger-bit.							
Boring-bit.							
Bridle-bit.							
Expansive-bit.							
Bit-brace	W. E. Perea	145, 524	Dec. 16, 1873	447	146	4	645
Bit-stock	A. P. Daboll	139, 876	June 17, 1873	413	129	3	665
Bit-stock	L. Feely	146, 056	Dec. 30, 1873	941	303	4	708
Bit-stock	A. D. Goodell	139, 667	June 10, 1873	209	68	3	642
Bit-stock	A. D. Goodell	141, 345	July 29, 1873	946	308	4	121
Bit-stock	D. A. Newton	144, 123	Oct. 28, 1873	686	227	4	464
Bitumen, ore, &c., Compound of	P. Lea	144, 396	Nov. 11, 1873	198		4	506
Blackboard	J. Reber	144, 289	Nov. 4, 1873	98	33	4	486
Blackboard	T. J. Thorp	135, 019	Jan. 21, 1873	493	158	3	75
Blackboard, Adjustable	P. W. Moeller	144, 917	Nov. 25, 1873	652	221	4	565
Blackboard eraser	W. S. Read	135, 487	Feb. 4, 1873	87	27	3	134
Blackboard, Revolving	C. B. Lyon	144, 212	Nov. 4, 1873	38	11	4	481
Blackboard-rubber	P. B. Horton	144, 674	Nov. 18, 1873	438	148	4	537
Blacking-box cover	J. B. Shaler	138, 102	Apr. 22, 1873	762	242	3	453
Blacking-box holder	S. T. Wyman	145, 544	Dec. 16, 1873	467	152	4	647
Blacking-case	G. H. Rice	137, 722	Apr. 8, 1873	407	125	3	401
Blacking for leather	A. D. Strong	141, 829	Aug. 12, 1873	383		4	174
Blacking for shoes, &c.	J. L. Sneed	144, 801	Nov. 18, 1873	545		4	545
Blast and cupola furnace	D. W. Hendrickson	139, 891	June 17, 1873	427	133	3	666
Blast and cupola furnace	F. Lawrence	142, 482	Sept. 2, 1873	143	47	4	253
Blast and puddling furnace for making wrought-iron direct from the ore, Combined rotary.	J. Neville	138, 429	Apr. 29, 1873	1, 078	340	3	466
Blast-furnace	E. B. Andrews	143, 487	Oct. 7, 1873	75	26	4	387
Blast-furnace	J. G. Blunt	137, 884	Apr. 15, 1873	552	173	3	426
Blast-furnace	F. Büttgenback	144, 829	Nov. 25, 1873	579	197	4	559
Blast-furnace	D. W. Hendrickson	137, 366	Apr. 1, 1873	80	26	3	363
Blast-furnace	J. V. Woodhouse	139, 489	June 3, 1873	42	13	3	612
Blast-furnace alarm-apparatus	E. Davis	139, 300	May 27, 1873	776	246	3	591
Blast-furnace breast-plate	R. A. Fisher	141, 043	July 22, 1873	646	217	4	89
Blast-furnace, Cinder-plate for	S. W. Harris	142, 463	Sept. 2, 1873	127	42	4	252
Blast-furnace for smelting iron and other ores.	S. W. Harris	142, 464	Sept. 2, 1873	128	42	4	252
Blast-furnace slag, Apparatus for cooling and removing.	A. Kloman	140, 927	July 15, 1873	526	176	4	70
Blasting, Charging and tamping platform for submarine.	J. Burson	139, 452	June 3, 1873	5	2	3	609
Blasting, Package of powder-charges for	H. M. Boies	144, 434	Nov. 11, 1873	231	77	4	509
Blasting-plug	J. H. Holsey	140, 628	July 8, 1873	259	88	4	41
Blasting-plug	D. Shoemaker	142, 948	Sept. 16, 1873	555	188	4	310
Blasting rocks, Method of	I. Whitcomb	141, 248	July 29, 1873	854	279	4	113
Blasting-squib	S. H. Daddow	143, 396	Sept. 30, 1873	945	320	4	367
Bleaching damaged cotton	J. B. Richards	145, 816	Dec. 23, 1873	606		4	679
Bleaching-liquors, Manufacture of	H. Deacon	139, 239	May 27, 1873	721		3	587
Blind, Corner-support for	G. W. Day	140, 150	June 24, 1873	644	202	3	692
Blind, Inside	D. Y. Kilgore	139, 899	June 17, 1873	437	135	3	667
Blind, Inside	E. Metcalf	141, 286	July 29, 1873	885	290	4	116
Blind, Inside	W. Potter, Jr.	138, 761	May 13, 1873	273	84	3	529
Blind-opener and slit-regulator, Combined	A. Ball	135, 063	Jan. 21, 1873	531	172	3	78
Blind-slat adjuster, Window	R. C. Beach and G. A. Berry	145, 461	Dec. 16, 1873	402	132	4	642

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Blind-slat fastener.....	G. W. Brooks.....	142, 674	Sept. 9, 1873	317	105	4	279
Blind-slat fastener.....	A. F. Champlin.....	144, 062	Oct. 23, 1873	636	210	4	460
Blind-slat fastener.....	T. G. Springer.....	142, 526	Sept. 2, 1873	183	60	4	256
Blind-slat, Machine for entering.....	J. Church.....	139, 043	May 20, 1873	521	165	3	563
Blind-slat, Mold for making glass.....	E. B. Hungerford.....	136, 835	Mar. 18, 1873	444	147	3	299
Blind-slat-operator, Window.....	E. C. Byam.....	145, 842	Dec. 23, 1873	727	239	4	680
Blind-slat staple.....	C. H. Palmer.....	139, 516	June 3, 1873	63	21	3	614
Blind-stiles boring-machine.....	A. B. Carlin.....	141, 545	Aug. 5, 1873	118	37	4	145
Blind-stiles boring-machine.....	L. G. Kirkham.....	137, 932	Apr. 15, 1873	594	187	3	430
Blind, Stitching-gage for the.....	W. R. Richardson.....	140, 645	July 8, 1873	274	83	4	42
Blind-stop.....	J. H. Cranston.....	144, 019	Oct. 28, 1873	602	199	4	457
Blind-stop.....	J. Weber.....	143, 207	Sept. 23, 1873	772	266	4	337
Blind, Window.....	L. Park.....	136, 858	Mar. 18, 1873	462	153	3	301
Blind, Window.....	M. C. Weld.....	141, 841	Aug. 12, 1873	393	128	4	174
Blinds, Machine for wiring.....	C. McGill.....	143, 521	Oct. 7, 1873	103	36	4	369
Block:							
See Alphabet-block.							
Root crimping-block.							
Building-block.							
Hat-block.							
Head-block.							
Last-block.							
Presser-block.							
Pulley-block.							
Bibbon-block.							
Saw-mill head-block.							
Tackle-block.							
Toy-block.							
Toy building-block.							
Block-fitting machine.....	E. H. Woodsum.....	144, 427	Nov. 11, 1873	226	76	4	508
Bloom-rolling machine.....	G. W. Billings.....	139, 358	May 27, 1873	818	262	3	595
Blow-pipe.....	J. E. McClure and D. H. Ainsworth.	144, 345	Nov. 4, 1873	143	48	4	490
Blow-pipe, Steam.....	J. S. Anderson.....	135, 058	Jan. 21, 1873	527	170 171	3	77
Blower, Compound.....	T. Shaw.....	140, 597	July 8, 1873	234	79	4	39
Blower, Fan.....	T. T. Prosser.....	145, 753	Dec. 23, 1873	653	214	4	674
Blower for gas-engine.....	J. H. Bean.....	140, 397	July 1, 1873	51	18	4	12
Blower, Piston.....	C. W. Isbell.....	137, 553	Apr. 8, 1873	257	79	3	389
Blower, Rotary.....	R. F. Knox.....	140, 509	July 1, 1873	143	49	4	20
Blower, Rotary.....	J. A. Svedberg.....	138, 448	Apr. 29, 1873	1, 094	346	3	487
Blowing-machine.....	J. G. Baker.....	145, 382	Dec. 9, 1873	307	103	4	623
Board:							
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Center-board.							
Dash-board.							
Drawing-board.							
Game-board.							
Ironing-board.							
Key-board.							
Kneading-board.							
Lap-board.							
Leather-board.							
Music black-board.							
Organ reed-board.							
Stove-board.							
Straw-board.							
Telegraph switch-board.							
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Wash-board.							
Boards, Rotary cutter-head for matching.....	G. Greenwood.....	135, 907	Feb. 12, 1873	489	158	3	192
Boat:							
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Ferry-boat.							
Life-boat.							
Boat-detaching apparatus.....	H. Ashford.....	142, 834	Sept. 16, 1873	461	156	4	301
Boat-detaching apparatus.....	C. A. Enell.....	138, 386	Apr. 29, 1873	1, 036	238	3	483
Boat-detaching apparatus.....	J. M. Kilner.....	138, 165	Apr. 22, 1873	812	258	3	457
Boat-detaching apparatus.....	F. M. Munger.....	138, 041	Apr. 22, 1873	710	234	3	448
Boat-detaching apparatus.....	S. Sneden.....	141, 470	Aug. 5, 1873	56	17	4	139
Boat-detaching device.....	W. F. Morgan.....	142, 496	Sept. 2, 1873	159	52	4	254
Boats, Device for pitching.....	W. H. Richardson.....	135, 490	Feb. 4, 1873	89	28	3	134
Boats, Disengaging towing apparatus for.....	J. H. Wygant, C. Preston, and C. J. Westervelt.	143, 050	Sept. 23, 1873	650	222	4	327
Boats, Flexible vertically extensible attachment for.....	J. R. Adams.....	143, 052	Sept. 23, 1873	652	203	4	327
Boats, Means for chocking and securing.....	F. M. Howes.....	145, 873	Dec. 23, 1873	756	247	4	683
Boats, Means for detaching.....	T. Shaw.....	137, 325	Apr. 1, 1873	46	14	3	360
Boats, Mechanism for towing.....	G. S. Olin.....	145, 813	Dec. 23, 1873	703	231	4	678
Boats, Paddle-mechanism for.....	C. Howard.....	135, 710	Feb. 11, 1873	305	96	3	164
Boats, Sectional folding frame for.....	W. M. Ducker.....	141, 860	Aug. 19, 1873	417	136	4	186
Bobbin.....	A. I. Earle.....	139, 558	June 3, 1873	99	33	3	617
Bobbin.....	T. G. McLaughlin.....	141, 575	Aug. 5, 1873	142	46	4	147
Bobbin-winding machine.....	W. Atkinson.....	142, 188	Aug. 26, 1873	725	240	4	221
Bobbin-winding machine.....	J. Goodyear.....	141, 434	Aug. 5, 1873	21	6, 7	4	136
Bobbins, Machine for pointing the journals of.....	D. M. Church.....	138, 789	May 13, 1873	297	91	3	532
Bobbins, Machine for turning heads of.....	C. M. Spencer.....	137, 631	Apr. 8, 1873	320	100	3	394
Boiler:							
See Agricultural boiler.							
Culinary boiler.							
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Locomotive boiler.							
Milk-boiler.							
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Boiler and condenser.....	B. T. Babbitt.....	142, 664	Sept. 9, 1873	309	103	4	279
Boiler and other furnaces, Steam.....	C. Schemloth.....	144, 241	Nov. 4, 1873	64	20	4	483
Boiler, Electrical protection for.....	A. T. Hay.....	140, 196	June 24, 1873	708	223	3	697
Boiler feed-regulator, Automatic.....	B. Brett.....	139, 702	June 10, 1873	306	95	3	649
Boiler-feeder.....	R. Rafael.....	142, 866	Sept. 16, 1873	486	166	4	304
Boiler-feeder, Steam.....	J. H. Blessing.....	134, 972	Jan. 21, 1873	447	143	3	71
Boiler, Feeder and filter for.....	J. G. Fulton.....	137, 357	Apr. 1, 1873	73	24	3	363
Boiler-feeder, Steam.....	A. Spencer, jr., and T. C. Spencer.....	137, 497	Apr. 1, 1873	202	61	3	373
Boiler-flue cleaner.....	J. Arnbruster.....	144, 046	Oct. 28, 1873	623	206	4	459
Boiler-flue, Thimble for protecting.....	J. C. Farmer.....	138, 998	May 20, 1873	466	154	3	560
Boiler-flues, &c., Apparatus for cleaning.....	T. H. Donohue.....	142, 775	Sept. 16, 1873	415	140	4	298
Boiler for vaporizing volatile fluids.....	J. F. Haskins.....	145, 175	Dec. 2, 1873	126	42	4	595
Boiler for warming buildings.....	C. T. Hitchings.....	145, 654	Dec. 16, 1873	555	183	4	654
Boiler-furnace.....	S. A. Ford.....	141, 870	Aug. 19, 1873	436	142	4	187
Boiler-furnace.....	J. B. Root.....	141, 594	Aug. 5, 1873	157	50	4	148
Boiler-furnace.....	A. B. Smith.....	139, 522	June 3, 1873	66	23	3	614
Boiler-furnace.....	C. D. Smith.....	143, 305	Sept. 30, 1873	862	295	4	361
Boiler-furnace.....	C. D. Williams.....	135, 869	Feb. 11, 1873	440	143	3	173
Boiler-furnace, Blast for steam.....	R. Gigodot.....	144, 757	Nov. 18, 1873	509	173	4	543
Boiler-furnace, Mouth-piece for steam.....	C. Stewart.....	144, 092	Oct. 28, 1873	587	195	4	456
Boiler-furnace, Oil-burning.....	F. Hungerford.....	142, 468	Sept. 2, 1873	132	43	4	253
Boiler-furnace, Steam.....	M. A. Foster.....	136, 497	Mar. 4, 1873	126	41	3	256
Boiler-furnace, Steam.....	M. A. Foster.....	136, 275	May 13, 1873	374	117	3	538
Boiler-furnace, Steam.....	C. H. Fox.....	135, 105	Jan. 21, 1873	560	182	3	80
Boiler-furnace, Steam.....	C. H. Fox.....	135, 106	Jan. 21, 1873	561	182	3	80
Boiler-furnace, Steam.....	S. Keyes.....	144, 393	Nov. 11, 1873	195	67	4	506
Boiler-furnace, Steam.....	A. C. Rand.....	138, 694	May 6, 1873	200	63	3	513
Boiler-furnace, Steam.....	C. D. Smith.....	138, 588	May 6, 1873	107	34	3	506
Boiler-furnace, Steam.....	U. B. Stribling.....	144, 296	Nov. 4, 1873	103	35	4	486
Boiler-furnace, Steam.....	J. Westerman.....	136, 948	Mar. 18, 1873	537	177	3	306
Boiler-heater and feeder.....	G. C. Williams.....	144, 937	Nov. 25, 1873	667	226	4	566
Boiler, Man-hole lid for.....	R. Tippett.....	137, 806	Apr. 15, 1873	489	153	3	421
Boiler-stand and heater.....	C. F. Hitchings.....	137, 448	Apr. 1, 1873	150	49	3	369
Boilers, Water-feed for.....	A. C. Bristol.....	140, 462	July 1, 1873	101	34	4	16
Booster, pillow, &c.....	C. P. Cooper.....	143, 502	Oct. 7, 1873	88	30	4	388
Booster-plates, Manufacturing.....	W. J. Lewis.....	141, 227	July 29, 1873	832	272	4	111
Bolt:							
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Door-bolt.....							
Door and gate bolt.....							
Draw-bolt.....							
Expansion-bolt.....							
Flour-bolt.....							
Flush-bolt.....							
King-bolt.....							
Middlings-bolt.....							
Prison-door bolt.....							
Screw-bolt.....							
Seal-bolt.....							
Bolt.....	J. F. Carlin.....	139, 767	June 10, 1873	311	96	3	649
Bolt.....	E. M. Judd.....	135, 560	Feb. 4, 1873	154	49	3	139
Bolt and rivet cutter.....	D. D. Cone and P. Polder.....	140, 405	July 1, 1873	56	20	4	13
Bolt and rivet machine.....	N. Beauregard.....	142, 193	Aug. 26, 1873	730	241	4	221
Bolt and rivet manufacture.....	W. Livingstone.....	137, 009	Mar. 18, 1873	589	196	3	311
Bolt and rod cutter.....	S. H. Preston.....	137, 956	Apr. 15, 1873	614	193	3	431
Bolt and rod cutter.....	H. Schmidt.....	142, 384	Sept. 2, 1873	29	11	4	244
Bolt and rod cutter.....	L. H. Smith.....	143, 645	Oct. 14, 1873	227	76	4	407
Bolt-cutter.....	L. J. Chapman.....	135, 887	Feb. 18, 1873	474	153	3	190
Bolt-cutter.....	E. W. R. Fawcett and W. E. Sefton.....	141, 265	July 29, 1873	871	285	4	115
Bolt-cutter.....	W. W. Hill.....	137, 076	Mar. 25, 1873	664	220	3	328
Bolt-cutter.....	J. S. Ryder.....	138, 940	May 13, 1873	424	133	3	542
Bolt-cutter.....	J. Tomlinson.....	135, 497	Feb. 4, 1873	95	30	3	135
Bolt-heading device.....	W. M. Thoroughgood.....	138, 958	May 13, 1873	438	137	3	544
Bolt-heading machine.....	C. Hall.....	141, 711	Aug. 12, 1873	276	90	4	165
Bolt-heading machine.....	J. O. Jones.....	141, 059	July 22, 1873	657	222	4	90
Bolt-machine.....	J. O. Jones.....	137, 688	Apr. 8, 1873	372	115	3	399
Bolt-machine.....	S. B. Wilkins and A. Marcellus.....	140, 103	June 17, 1873	608	192	3	681
Bolt-threading machine.....	M. Hine.....	143, 154	Sept. 23, 1873	726	250	4	334
Bolts, Cutter-head for pointing ends of.....	O. C. Burdick.....	135, 520	Feb. 4, 1873	112	36	3	136
Bolts, Device for rounding ends of.....	J. I. Schermerhorn.....	144, 569	Nov. 11, 1873	343	116	4	517
Bolting-machine.....	H. Cabanes.....	144, 739	Nov. 18, 1873	491	167	4	541
Bone-black, Apparatus and process for revivifying.....	A. Lonsky.....	134, 686	Jan. 7, 1873	177	58	3	21
Bonnet-frame, Machine for stiffening netting for.....	P. C. Ritchie.....	135, 730	Feb. 11, 1873	318	101	3	165
Book and paper-clamp.....	J. P. McLean.....	143, 088	Sept. 23, 1873	677	233	4	329
Book, Blank.....	J. C. Bonnell.....	135, 760	Feb. 11, 1873	344	110	3	167
Book-case, Folding.....	E. Haakell.....	138, 022	Apr. 22, 1873	689	218	3	447
Book-case, Revolving.....	L. B. Pert.....	138, 279	Apr. 29, 1873	945	298	3	475
Book-clamp.....	W. A. Miller.....	145, 582	Dec. 16, 1873	496	163	4	649
Book-cover.....	A. H. Jocelyn.....	140, 275	June 24, 1873	773	244	3	703
Book-holding press.....	L. Heitkamp.....	143, 410	Oct. 7, 1873	11	4	4	381
Book, Indexing.....	J. S. Hicks.....	143, 075	Sept. 23, 1873	668	230	4	329
Book-mark.....	H. M. Ward and G. E. Dolton.....	139, 936	June 17, 1873	465	146	3	669
Book, Memorandum.....	H. M. Hinadill.....	134, 546	Jan. 7, 1873	39	13	3	10
Book-rest.....	L. Tarring.....	139, 341	May 27, 1873	805	257	3	594
Book-rest for desk.....	L. A. Tarring.....	138, 728	May 6, 1873	235	73	3	516
Book rounding and backing machine.....	R. F. Foster, T. S. Baylie, and J. Harbin.....	137, 192	Mar. 25, 1873	765	252	3	336
Book, Scrap.....	S. L. Clemens.....	140, 245	June 24, 1873	746	235	3	701
Book-stand.....	J. B. Annin.....	140, 107	June 24, 1873	633	199	3	691
Book-support.....	R. B. Hindle.....	140, 380	July 1, 1873	29	10	4	10
Boom and raft rudder.....	L. W. Pond.....	138, 760	May 13, 1873	272	84	3	529
Booms, Elastic antifriction attachment for vessels.....	H. Gregory, jr.....	144, 975	Nov. 25, 1873	699	236	4	569
Boot.....	L. H. Farnsworth.....	143, 001	Sept. 23, 1873	606	206	4	324

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Boot	G. S. Lee	137, 781	Apr. 15, 1873	468	146	3	419
Boot	G. C. Parker	143, 589	Dec. 16, 1873	502	165	4	650
Boot	P. West and G. S. Leo	142, 424	Sept. 2, 1873	89	28	4	249
Boot and shoe	H. Rogers and I. Felton	135, 591	Feb. 4, 1873	188	58	3	142
Boot and shoe bottom, Machine for molding	S. W. Baldwin	139, 354	May 27, 1873	14	200	3	595
Boot and shoe channeling machine	A. E. Chickering and H. B. Tuttle	141, 693	Aug. 12, 1873	263	85	4	164
Boot and shoe channeling machine	C. S. Dunbrack	143, 561	Oct. 14, 1873	155	52	4	402
Boot and shoe channeling machine	B. H. Hadley	143, 247	Sept. 30, 1873	803	277	4	356
Boot and shoe, Construction of	M. M. Wheeler	136, 293	Feb. 25, 1873	634	270	3	230
Boot and shoe counters, Mechanism for making	E. Andrews	140, 569	July 8, 1873	208	69, 70	4	36
Boot and shoe crimper	C. Glantz	137, 543	Apr. 8, 1873	247	76	3	388
Boot and shoe fastening	G. H. Ward	136, 111	Feb. 18, 1873	663	216	3	205
Boot and shoe gore, Elastic material for	C. Winslow	136, 119	Feb. 18, 1873	669	219	3	205
Boot and shoe leather-crimping machine	S. W. Jamison	139, 717	June 10, 1873	259	82	3	646
Boot and shoe, Machine for making shank-piece for	C. H. D. D. and F. M. Blake	174, 584	Jan. 7, 1873	80	25	3	13
Boot and shoe nailing-machine, Driver for	A. S. Libby	143, 699	Oct. 14, 1873	279	92	4	411
Boot and shoe rivet	P. West	135, 051	Jan. 21, 1873	522	169	3	77
Boot and shoe shank	G. Goodyear	136, 991	Mar. 12, 1873	572	191	3	310
Boot and shoe shank-burnishing machine	A. C. Carey	142, 990	Sept. 23, 1873	597	203	4	323
Boot and shoe shave	D. Harrington	136, 328	Apr. 29, 1873	992	312	3	479
Boot and shoe shipping and show case	M. Buhler	140, 007	June 17, 1873	518	165	3	674
Boot and shoe stretcher	J. Lyons	142, 710	Sept. 9, 1873	345	116	4	282
Boot and shoe tacking-machine	D. M. Smith	143, 388	Sept. 30, 1873	938	318	4	367
Boot and shoe tip	F. M. Rhineland	145, 590	Dec. 16, 1873	502	165	4	650
Boot and shoe tip, Detachable	M. R. Hanley	139, 060	May 20, 1873	541	170	3	565
Boot and shoe tree and stretcher	T. R. Evans	141, 550	Aug. 5, 1873	122	38	4	145
Boot and shoe uppers, Machine for crimping	A. Knowlton	142, 402	Sept. 2, 1873	73	24	4	248
Boot-blackening kit	S. Van Gilder	140, 447	July 1, 1873	86	30	4	15
Boot-brushing apparatus	M. Beck and C. Schneidt	141, 196	July 29, 1873	799	261	4	109
Boot-crimping block	H. Bordner and D. Sullivan	142, 369	Sept. 2, 1873	42	15	4	245
Boot, Gaiter	C. Hersome	145, 601	Dec. 23, 1873	694	227	4	678
Boot, Half	L. U. Williams	142, 312	Aug. 26, 1873	827	274	4	229
Boot-jack	H. Arndt	140, 179	June 24, 1873	695	218	3	696
Boot-jack	F. Dorsett, sr	143, 408	Oct. 7, 1873	10	3	4	321
Boot-legs, Mode of siding	G. C. Parker	140, 726	July 8, 1873	339	115	4	47
Boot-lining	H. White	142, 307	Aug. 26, 1873	823	273	4	229
Boot, Moccasin	E. A. Buck	139, 234	May 27, 1873	717	226	3	587
Boot or bootie	T. P. Mitchell	145, 117	Dec. 2, 1873	72	23	4	591
Boot, Plowman's	A. G. Walker and S. Brown	142, 061	Aug. 19, 1873	603	199	4	201
Boot-seams, Machine for rubbing and rolling	A. Thompson	138, 713	May 6, 1873	280	69	3	515
Boot-stretcher	D. Harris	139, 671	June 10, 1873	212	69	3	642
Boot-tree	T. Branigan	144, 312	Nov. 4, 1873	114	38, 39	4	488
Boot-tree	O. V. Elliott	140, 490	July 1, 1873	125	43	4	18
Boots and shoes, Apparatus for molding box-toes for	D. H. Packard	143, 926	Oct. 21, 1873	494	167	4	439
Boots and shoes, Edge-protecting welt for	J. Green	143, 623	Oct. 14, 1873	209	70	4	406
Boots, &c., Channel-opener for	F. Gasetti	138, 883	May 13, 1873	381	119	3	539
Boots, &c., Crimping-apparatus for	M. R. Marcell	145, 995	Nov. 25, 1873	718	242	4	571
Boots and shoes, Jack for nailing, &c.	J. G. Ross	143, 786	Oct. 21, 1873	378	125	4	429
Boots and shoes, Machine for buffing	G. C. Hawkins	145, 501	Dec. 16, 1873	418	137	4	643
Boots and shoes, Machine for crimping the uppers of	C. Glantz	145, 940	Dec. 16, 1873	839	273	4	700
Boots and shoes, Machinery for making wood shanks for	W. N. Sprague	145, 024	Nov. 25, 1873	748	250	4	573
Boots and shoes, Manufacture of	J. Boyle	141, 257	July 29, 1873	861	281	4	414
Boots, Manufacture of	W. H. Ferguson	143, 687	Oct. 14, 1873	989	68	4	110
Boots and shoes, Manufacture of	J. L. Joyce	141, 357	July 29, 1873	959	312	4	122
Boots and shoes, Manufacture of	C. A. Keith	141, 797	Aug. 12, 1873	356	117	4	172
Boots and shoes, Manufacture of	F. Ware, jr	142, 538	Sept. 2, 1873	194	63	4	257
Boots and shoes, Nailing	L. R. Blake and A. S. Libby	140, 400	July 1, 1873	53	19	4	12
Boots and shoes, Spring-shank for	W. J. Neill	145, 963	Dec. 30, 1873	860	279	4	701
Boots, &c., Sample-holder for displaying	J. Closs	139, 044	May 20, 1873	522	165	3	563
Boots, &c., Shank for	F. P. Buren	138, 851	May 13, 1873	353	110	3	536
Boring and drilling machine	J. J. Sheridan	142, 416	Sept. 2, 1873	82	27	4	249
Boring-bars, Tool-holder and cutter-head for	J. Wheelock	144, 583	Nov. 11, 1873	355	120	4	518
Boring-bit	S. Hipkins, jr.	140, 370	July 1, 1873	29	10	4	10
Boring-machine	I. Cory	135, 693	Feb. 11, 1873	290	92	3	162
Boring-machine	H. Longwell	139, 901	June 17, 1873	438	136	3	667
Boring-machine	R. O. Moorhouse and S. L. Wiegand	141, 657	Aug. 12, 1873	232	73	4	162
Boring-machine	H. Pletcher	138, 927	May 13, 1873	414	130	3	542
Boring-machine	B. F. Rea, M. Pyke, and D. M. Renne	144, 139	Oct. 28, 1873	700	232	4	466
Boring-machine	J. Strickler	142, 296	Aug. 26, 1873	815	270	4	228
Boring-machine, Earth	W. H. Saylor	140, 595	July 8, 1873	231	78	4	38
Boring-mill	F. E. Hahn	142, 694	Sept. 9, 1873	331	111	4	281
Boring-tool, Expanding	J. K. Kacerovsky	136, 736	Mar. 11, 1873	348	115	3	282
Bosom and collar, Combined over	I. T. Dyer	144, 267	Nov. 4, 1873	83	27	4	485
Bosom-pad	H. M. Millar	143, 921	Oct. 21, 1873	491	165	4	436
Bosom-pad	C. A. Phillips	135, 936	Feb. 18, 1873	512	167	3	193
Bosoms, collars, and similar articles of apparel	A. Johnson	136, 247	Feb. 25, 1873	790	256	3	227
Bottle	W. H. Lyon	139, 905	June 17, 1873	440	137	3	667
Bottle and bottle-stopper	H. Naylor	136, 534	Mar. 4, 1873	164	52	3	258
Bottle, Attaching cork-retaining bale to	L. B. Flanders	139, 886	June 17, 1873	424	132	3	666
Bottle, Box for holding and transporting	J. Matthews	139, 722	June 10, 1873	266	83	3	646
Bottle cap and spoon, Mustard	H. J. White	141, 844	Aug. 12, 1873	396	129	4	175
Bottle cap or cover	J. G. Chillingworth	140, 346	July 1, 1873	12	4	4	9
Bottle-casing	J. Dugan	142, 685	Sept. 9, 1873	325	108	4	280
Bottle, Caster	A. Weber	140, 564	July 1, 1873	191	64	4	24
Bottle, Caster	do	145, 138	Dec. 2, 1873	95	31	4	593
Bottle, &c., closing device	J. Matthews	137, 941	Apr. 15, 1873	601	189	3	430
Bottle-corking apparatus	A. C. Jordan	142, 240	Aug. 26, 1873	771	253	4	224
Bottle-corking machine	J. Armstrong	143, 606	Oct. 14, 1873	193	65	4	405
Bottle, Cosmetic	M. H. Huntington	143, 627	Oct. 14, 1873	212	71	4	406
Bottle-cover	W. Bourguignon	145, 484	Dec. 16, 1873	405	133	4	642
Bottle-filler	J. Matthews	138, 421	Apr. 29, 1873	073	338	3	485
Bottle-filling apparatus	F. Schlich and A. Feyh	138, 534	May 6, 1873	60	20	3	592

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Bottle, Glass.....	J. Borden and J. L. Trimble.....	144, 885	Nov. 25, 1873	628	213	3	563
Bottle, Liquid-effervescing	H. Codd	138, 230	Apr. 29, 1873	896	283	4	472
Bottle-mold, Glass	C. D. Fox	138, 323	Apr. 29, 1873	968	311	4	479
Bottle, Nursing	W. Hobson	139, 958	June 17, 1873	480	151	3	671
Bottle, Nursing	T. J. Mayall	140, 518	July 1, 1873	151	51	3	20
Bottle, Nursing	G. R. White	138, 219	Apr. 22, 1873	864	274	3	461
Bottle-protector	O. Fitzgerald	144, 082	Oct. 23, 1873	653	215	4	482
Bottle, Sample	S. H. Gilman	143, 753	Oct. 21, 1873	350	117	4	427
Bottle-stand, Wire	G. D. Dudley	145, 284	Dec. 9, 1873	227	76	4	616
Bottle-stopper	D. M. Cumings	135, 267	Jan. 28, 1873	727	232	3	106
Bottle-stopper	A. De Mestre	136, 045	Feb. 18, 1873	602	198	3	201
Bottle-stopper	F. Kutscher	136, 326	Feb. 25, 1873	861	277	3	232
Bottle-stopper	H. S. Lesber	144, 777	Nov. 18, 1873	525	178	4	544
Bottle-stopper	T. J. Mayall	140, 517	July 1, 1873	150	51	4	20
Bottle-stopper	H. F. Reiter	136, 095	Feb. 18, 1873	648	212	3	204
Bottle-stopper	L. Rhoades	141, 950	Aug. 19, 1873	500	165	4	193
Bottle-stopper for volatile salts	A. Hebbard	134, 600	Jan. 7, 1873	98	31	3	15
Bottle-stopper, Inflammable liquid	L. G. Chaput	141, 628	Aug. 12, 1873	208	66	4	160
Bottle stopper, Smelling	E. F. Marble and R. W. Glidden	137, 938	Apr. 15, 1873	599	188	3	430
Bottle-washer	W. Dick	136, 423	Mar. 4, 1873	59	21	3	250
Bottle-washing apparatus	F. Schlich and A. Feyh	138, 046	Apr. 22, 1873	715	226	3	449
Bottle-wrapper	A. E. Francis	139, 308	May 27, 1873	784	249	3	592
Bottles, Tool for holding glass	T. B. Hewitt	145, 945	Dec. 16, 1873	845	275	4	700
Bottles, Valvular stopper for	C. Patterson	146, 018	Dec. 30, 1873	907	294	4	705
Bottling liquids	J. Klee	141, 360	July 29, 1873	961	313	4	122
Bouquet-holder	A. F. Ransom	139, 477	June 3, 1873	30	10	3	611
Bowl, Water	B. Brower	141, 421	Aug. 5, 1873	11	3	4	136
Bowls, Making footed glass	E. G. Cate	144, 061	Oct. 22, 1873	638	210	4	460
Box:							
<i>See</i> Advertising-box.							
Axle-box.							
Ballot-box.							
Blacking-box.							
Cartridge-box.							
Check-box.							
Cigar-box.							
Dice-box.							
Dredge-box.							
Fare-box.							
Feed-box.							
File-box.							
Fire-box.							
Fire-alarm box.							
Fruit-box.							
Journal-box.							
Letter-box.							
Lunch-box.							
Match-box.							
Miter-box.							
Music-box.							
Packing-box.							
Paper-box.							
Porters' box.							
Post-office box.							
Pump-box.							
Resin-box.							
Sheet-metal box.							
Shuttle-box.							
Spice-box.							
Spool-box.							
Tobacco-box.							
Toy money-box.							
Trunk and hat box.							
Work-box.							
Box	J. S. Lash	145, 663	Dec. 16, 1873	564	185	4	655
Box	E. C. Patterson	137, 385	Apr. 1, 1873	93	30	3	364
Box, &c. Eccentric fastening for	W. Youngblood	135, 873	Feb. 11, 1873	444	144	3	174
Box-former	G. W. Swan	143, 103	Sept. 23, 1873	689	237	4	330
Box-lifter	B. H. Smith	139, 029	May 20, 1873	510	161	3	562
Box-making machine	G. W. Swan	142, 297	Aug. 26, 1873	816	270	4	228
Box, Metallic corner-shield for	J. F. Sargent	140, 080	June 17, 1873	586	186	3	680
Box-opener	W. J. Hinden	144, 454	Nov. 11, 1873	244	83	4	510
Box-opener	L. Mills	138, 177	Apr. 22, 1873	824	262	3	458
Box-planting machine	O. M. Chamberlain	136, 362	Mar. 4, 1873	7	3	3	246
Box-scraper	A. Tester	140, 857	July 15, 1873	457	155	4	65
Box-stuff, Machine for cutting	C. W. Royse	138, 584	May 6, 1873	104	33	3	506
Brace:							
<i>See</i> Bit-brace.							
Chair-brace.							
Shoulder-brace.							
Vehicle-spring brace.							
Brace-coupling, Adjustable	C. M. Hall	137, 609	Apr. 8, 1873	304	94	3	393
Brace-drill	G. Gibbs	136, 830	Mar. 18, 1873	440	146	3	299
Bracelet	T. L. Cornell	134, 735	Jan. 14, 1873	230	74	3	39
Bracelet	A. Fobes	145, 164	Dec. 2, 1873	117	38	4	594
Bracelet	J. W. Grant and C. H. Cook	139, 311	May 27, 1873	786	250	3	592
Bracelet	S. W. Grant	139, 888	June 17, 1873	425	132	3	666
Bracelet	H. A. Williams	143, 109	Sept. 23, 1873	695	238	4	331
Bracelet-fastening	S. Cottle	145, 788	Dec. 23, 1873	684	224	4	677
Bracelet-fastening	F. Kursh	134, 681	Jan. 7, 1873	173	57	3	20
Bracelet-fastening	B. Ranger and J. B. Smiley	143, 382	Sept. 30, 1873	934	316	4	366
Bracelet-joint, Manufacture of	J. B. Black	139, 361	May 27, 1873	820	262	3	595

Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Bracket: See Adjustable bracket. Flower-pot bracket. Gas-bracket. Hanging-bracket. Lamp-bracket. Metallic bracket. Pump-bracket. Shelving-bracket. Shingling-bracket.							
Bracket: Bracket: See Air-brake. Car-brake. Elevator-brake. Hemp-brake. Railway-brake. Sewing-machine brake. Sled-brake. Sleigh-brake. Spinning-mule brake. Steam-brake. Steam and air brake. Wagon-brake.	L. Benecke	138,367	Apr. 29, 1873	1,022	322	3	482
Brake-coupling, Steam-power	G. Westinghouse, jr	136,396	Mar. 4, 1873	39	14	3	248
Brake-coupling, Steam-power	G. Westinghouse, jr	136,631	Mar. 11, 1873	262	88	3	275
Brake-mechanism	O. Grüninger	140,700	July 8, 1873	318	108	4	45
Brake-reaction movement	H. B. Martin	140,057	June 17, 1873	567	179	3	678
Brake, Shoe	J. W. Moffitt	138,514	May 6, 1873	43	15	3	501
Brake-shoe, Wagon	H. Seitz	139,086	May 20, 1873	566	177	3	567
Bran-duster	J. T. McNally	137,228	Mar. 25, 1873	798	263	3	338
Bran-duster, Feeding-screen for	G. S. Cooper	135,085	Jan. 21, 1873	545	177	3	79
Brass, Furnace for melting	I. D. Bush	135,967	Feb. 18, 1873	536	177	3	195
Bread-raising apparatus	J. Sutton	137,974	Apr. 15, 1873	630	198	3	433
Bread-worker	J. H. Balderston	135,959	Feb. 18, 1873	529	174	3	195
Breakwater, Construction of	D. Cunningham	137,659	Apr. 8, 1873	346	107	3	397
Breast-cup	A. M. Knapp	141,005	July 22, 1873	614	207	4	87
Breast-pin tongue	L. H. Sondheim	137,154	Mar. 25, 1873	736	241	3	333
Brewing beer and ale	L. Pasteur	135,245	Jan. 28, 1873	710	227	3	105
Brick	J. Dennen	142,087	Aug. 26, 1873	643		4	214
Brick and tile machine	G. Baldwin	136,481	Mar. 4, 1873	111	37	3	254
Brick-kiln	D. Blocher	140,343	July 1, 1873	8	3	4	8
Brick-kiln	A. W. M. Maass	138,905	May 13, 1873	396	125	3	540
Brick-kiln	H. Tugby	141,404	July 29, 1873	1,002	325	4	125
Brick-kiln	P. J. Walsh and W. J. Taylor	136,568	Mar. 4, 1873	194	64	3	261
Brick-machine	R. T. Barton	137,122	Mar. 25, 1873	702	233	3	231
Brick-machine	G. C. Bovey	138,731	May 13, 1873	247	77	3	587
Brick-machine	J. D. Bush	143,806	Oct. 21, 1873	397	{ 131 } 132	4	430
Brick-machine	W. Cole	141,855	Aug. 19, 1873	413	134	4	186
Brick-machine	P. K. Dederick	142,375	Sept. 2, 1873	47	17	4	246
Brick-machine	A. Elliot and J. O. Woodward	143,972	Oct. 28, 1873	556	185	4	454
Brick-machine	D. W. Glendinning	143,569	Oct. 14, 1873	161	54	4	402
Brick-machine	D. Goldthorp and T. Hield	145,169	Dec. 2, 1873	120	39, 40	4	595
Brick-machine	J. Hotchkiss and P. N. Wolliston	138,251	Apr. 29, 1873	919	{ 299 } 290	3	473
Brick-machine	G. O. Houck and C. E. Sawyer	139,894	June 17, 1873	430	134	3	666
Brick-machine	E. R. Hubbard	134,672	Jan. 7, 1873	164	54	3	19
Brick-machine	H. Hughes	138,651	May 6, 1873	161	52	3	511
Brick-machine	D. J. Hunter	141,646	Aug. 12, 1873	221	70	4	161
Brick-machine	D. J. Irwin	136,520	Mar. 4, 1873	151	48	3	257
Brick-machine	D. J. Irwin and H. S. Langdon	141,560	Aug. 5, 1873	131	41	4	146
Brick-machine	S. Martin	137,460	Apr. 1, 1873	162	51	3	370
Brick-machine	H. Martin	138,754	May 13, 1873	268	83	3	529
Brick-machine	J. N. McLean and J. Bennor	142,114	Aug. 26, 1873	664	219	4	216
Brick-machine	J. W. Metz	135,353	Jan. 28, 1873	802	259	3	112
Brick-machine	J. M. Mitchell	145,358	Dec. 9, 1873	289	97	4	621
Brick-machine	C. H. Murray	140,286	June 24, 1873	790	251	3	704
Brick-machine	L. Patterson	145,444	Dec. 9, 1873	361	121	4	626
Brick-machine	J. S. Thomas	140,742	July 8, 1873	356	130	4	48
Brick-machine, Die or mouth for	C. H. Murray	140,297	June 24, 1873	792	251	3	705
Brick, Method of burning	T. Billesbach	144,652	Nov. 18, 1873	424	142	4	535
Brick-press, mold, or box	J. McKenna	141,942	Aug. 19, 1873	493	163	4	192
Brick-repressing machine	J. K. Caldwell	139,113	May 20, 1873	588	184	3	568
Brick, Reversible curb	E. Linson	134,994	Jan. 21, 1873	168	150	3	73
Brick, stove-lining, &c., Composition for fire	E. H. Richter	145,448	Dec. 9, 1873	364		4	627
Brick-yard shed	R. A. Smith	141,520	Aug. 5, 1873	97	30	4	143
Bricks by hydraulic pressure, Machine for molding and pressing	E. Rogers	143,188	Sept. 23, 1873	754	{ 260 } 261	4	336
Bricks for pavement, Treating	W. H. De Valin	144,749	Nov. 18, 1873	501		4	542
Bricklayers' pointer	J. S. Merriken	138,911	May 13, 1873	401	126	3	540
Bridge	B. F. Davis	143,125	Sept. 23, 1873	706	242	4	332
Bridge	J. R. Durfee	142,776	Sept. 16, 1873	416	140	4	298
Bridge	J. B. Eads	142,378	Sept. 2, 1873	50	17	4	246
Bridge	J. B. Eads	144,519	Nov. 11, 1873	298	100	4	514
Bridge	J. Gates	135,705	Feb. 11, 1873	300	95	3	163
Bridge	J. M. Goodwin	142,785	Sept. 16, 1873	423	143	4	298
Bridge	H. Pettit	136,177	Feb. 25, 1873	737	237	3	223
Bridge	A. Reiling	145,685	Dec. 16, 1873	583	191	4	657
Bridge	J. Valley	146,034	Dec. 30, 1873	918	297	4	706
Bridge, Chain suspension	E. W. and E. W. Serrill, jr	143,788	Oct. 21, 1873	380	126	4	429
Bridge-column	J. Zellweger	145,545	Dec. 16, 1873	468	153	4	647
Bridge, Constructing	T. C. Clarke	140,888	July 15, 1873	484	163	4	67
Bridge, Construction of	S. B. B. Nowlan	136,935	Mar. 18, 1873	526	{ 173 } 174	3	306

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Bridge, Ferry	C. J. Atkins	141, 911	Aug. 19, 1873	470	154	4	190
Bridge-foundation, Iron	J. B. Eads	142, 382	Sept. 2, 1873	57	19	4	246
Bridge-girder	J. W. Evans	144, 751	Nov. 18, 1873	502	170	4	542
Bridge, Iron	C. Bender, C. H. Latrobe, and C. H. Smith.	141, 310	July 29, 1873	906	297	4	118
Bridge, Iron	W. B. Cooper	135, 970	Feb. 18, 1873	538	178	3	196
Bridge, Iron	J. B. Eads	142, 379	Sept. 2, 1873	51	18	4	246
Bridge, Iron	J. B. Eads	142, 380	Sept. 2, 1873	53	18	4	246
Bridge, Iron	J. B. Eads	142, 381	Sept. 2, 1873	55	18	4	246
Bridge, Iron	D. Hammond, M. Adler, and J. Abbott.	135, 802	Feb. 11, 1873	384	{ 194 125 }	3	169
Bridge, Iron	P. Johnson	144, 766	Nov. 18, 1873	516	175	4	543
Bridge, Iron	J. D. Pierce	141, 458	Aug. 5, 1873	44	14	4	138
Bridge, Iron	W. Sellers	136, 389	Mar. 4, 1873	33	12	3	248
Bridge, Lifting	S. Swartz	136, 278	Feb. 25, 1873	822	{ 265 266 }	3	229
Bridge, Pivot	T. C. Clarke, A. Bonzano, and J. Griffen.	135, 776	Feb. 11, 1873	357	115	3	168
Bridge-railing, Balusters for iron	S. Sellers and M. M. Manly	138, 049	Apr. 22, 1873	719	{ 226 227 }	3	449
Bridge safety-switch and signal, Draw	E. H. Tobey	140, 319	June 24, 1873	813	257	3	706
Bridge-truss	J. Anderson	136, 951	Mar. 18, 1873	539	178	3	307
Bridge-truss	A. Bannister	141, 026	July 22, 1873	632	213	4	88
Bridge-truss	D. C. Bower	140, 181	June 24, 1873	696	219	3	696
Bridge-truss	T. C. Clarke, A. Bonzano, and J. Griffen.	140, 471	July 1, 1873	109	37	4	17
Bridge-truss	H. J. Hunter and J. Rice	141, 056	July 22, 1873	654	221	4	90
Bridge-truss	F. Schwatka	141, 293	July 29, 1873	890	292	4	117
Bridge-truss frame	J. H. Linville	145, 114	Dec. 2, 1873	67	22	4	591
Bridge-truss, Wooden	T. W. Pratt	137, 492	Apr. 1, 1873	183	58	3	372
Bridle-bit	D. H. Carpenter	140, 010	June 17, 1873	520	165	3	674
Bridle-bit	J. M. Fabrè	140, 023	June 17, 1873	535	169	3	675
Bridle-bit	C. L. Ginkinger	137, 913	Apr. 15, 1873	579	182	3	428
Bridle-bit	J. Letchworth	134, 694	Jan. 7, 1873	176	57	3	20
Bridle-bit	B. L. Rowley	136, 767	Mar. 11, 1873	374	124	3	284
Bridle-bit	Vincenzo, Count Di Tergolina	141, 334	July 29, 1873	930	303	4	120
Bridle-blind	J. Patterson, jr.	145, 233	Dec. 2, 1873	175	60	4	599
Bridle for horses	J. Muller	145, 892	Dec. 23, 1873	773	253	4	684
Bridles, Machine for punching, splitting, and creasing	J. B. Gathright	145, 292	Dec. 9, 1873	232	78	4	616
Bridle, Safety	J. M. Elder and P. A. Bishop	138, 872	May 13, 1873	371	115	3	538
Bronching-machine	A. P. Stephens	141, 091	July 22, 1873	689	232	4	92
Bromine, Apparatus for the manufacture of	D. C. Turner	137, 512	Apr. 1, 1873	215	65	3	374
Bromine from bitters, Apparatus for producing	G. Leyer and J. A. Winter	137, 222	Mar. 25, 1873	793	262	3	338
Bronzing-machine	L. G. Chaput and W. and J. Braidwood.	144, 741	Nov. 18, 1873	493	167	4	541
Bronzing-pad	L. G. Chaput	143, 880	Oct. 21, 1873	459	154	4	436
Broom	J. D. Bell	140, 180	June 24, 1873	696	218	3	696
Broom	C. Hoeckh	136, 694	Mar. 11, 1873	312	103	3	279
Broom	F. Reese	137, 721	Apr. 8, 1873	406	125	3	401
Broom	S. Standish	136, 273	Feb. 25, 1873	818	264	3	229
Broom-bag	E. D. Bronson	136, 026	Feb. 18, 1873	587	193	3	199
Broom-corn duster	J. L. Stranahan	137, 805	Apr. 15, 1873	489	153	3	421
Broom-handles, &c., Clamp for splicing	C. L. W. Baker	146, 041	Dec. 30, 1873	923	299	4	707
Broom-handles, moldings, &c., Apparatus for painting or coating	S. A. Shepard	138, 767	May 13, 1873	279	87	3	530
Broom-hanger	M. A. Clifford	143, 063	Sept. 23, 1873	661	226	4	322
Broom-head	B. C. Cook	135, 525	Feb. 4, 1873	120	38	3	137
Broom-head	D. J. Owen and J. G. Brydges	135, 661	Feb. 11, 1873	258	82	3	160
Broom-protector	G. Hunt	137, 774	Apr. 15, 1873	463	145	3	419
Brush	C. L. W. Baker	144, 496	Nov. 11, 1873	280	95	4	513
Brush	C. W. Palmer	139, 474	June 3, 1873	27	8	3	611
Brush	P. Wagner	138, 913	Apr. 22, 1873	858	279	3	460
Brush	J. S. White	135, 053	Jan. 21, 1873	594	169	3	77
Brush and mop holder	I. Smith	138, 946	May 13, 1873	499	135	3	543
Brush, Blacking	W. S. Fickett	141, 638	Aug. 12, 1873	915	68	4	160
Brush, Blacking	C. W. Maguire	137, 376	Apr. 1, 1873	87	28	3	384
Brush, Blacking	F. W. C. Von Kessler and A. F. Medenwald.	138, 353	Apr. 29, 1873	1, 011	318	3	481
Brush, Coiled-wire	J. B. Christoffel	138, 317	Apr. 29, 1873	962	308	3	478
Brush-ferrule	W. F. Lorey	136, 005	Mar. 11, 1873	238	81	3	274
Brush, Fly	J. A. Lyle	144, 779	Nov. 18, 1873	527	179	4	544
Brush, Fountain	R. Lapham	145, 301	Dec. 9, 1873	239	81	4	617
Brush-handle	R. S. Craig	135, 090	Jan. 21, 1873	548	178	3	79
Brush-handle, Lather	W. H. Miles, jr.	144, 553	Nov. 11, 1873	330	111	4	516
Brush-handles, Machine for driving	J. Ames, jr.	142, 137	Aug. 26, 1873	685	225	4	217
Brush-handles, Machine for driving	P. Peartree	138, 344	Apr. 29, 1873	1, 003	316	3	480
Brush-holder	C. L. W. Baker	145, 479	Dec. 16, 1873	401	139	4	642
Brush, Horse	R. Dickson	137, 536	Apr. 8, 1873	242	74	3	388
Brush-machine	E. F. Bradley	137, 411	Apr. 1, 1873	117	39, 39	3	366
Brush-machine	M. Dillon	135, 634	Feb. 11, 1873	236	74	3	158
Brush-machine	E. A. Hill	142, 913	Sept. 16, 1873	524	178	4	307
Brush-machine	E. D. Van Horn and C. N. Farr	138, 545	May 6, 1873	68	23	3	503
Brush, Marking	F. W. Wentworth	140, 228	June 24, 1873	732	231	3	699
Brush, mop, and wringer, Combined scrubbing	J. D. Smith	140, 655	July 8, 1873	281	95	4	42
Brush, Paint	G. H. Chinuock	138, 787	May 13, 1873	296	91	3	531
Brush, Paint	M. Dillon	135, 635	Feb. 11, 1873	237	74	3	158
Brush, Paint	J. J. Gorman	134, 745	Jan. 14, 1873	238	77	3	40
Brush, Paint	J. J. Gorman	139, 887	June 17, 1873	424	132	3	666
Brush, Paint	S. Standish	140, 314	June 24, 1873	806	256	3	706
Brush, Paint	A. S. Thompson	141, 522	Aug. 5, 1873	98	30	4	143
Brush, Paint	P. Wagner	136, 288	Feb. 25, 1873	831	268	3	920
Brush, Paper-hanger's	J. M. McComb	144, 999	Nov. 25, 1873	721	243	4	571
Brush, Rotary	G. Carlisle	143, 666	Oct. 14, 1873	244	82	4	409
Brush, Scrubbing	C. Herold	143, 695	Oct. 14, 1873	276	91	4	411
Brush, Shoe	G. Wale	136, 289	Feb. 25, 1873	832	269	3	230

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Brush-socket	P. Wagner	137,515	Apr. 1, 1873	217	66	3	374
Brush, Tooth	J. and W. O'Donoghue	140,429	July 1, 1873	72	26	4	14
Brush-woods, Machine for shaping	J. Ames, jr	145,546	Dec. 16, 1873	469	153	4	647
Brushes, Manufacture of	A. C. Estabrook	135,415	Feb. 4, 1873	20	6	3	129
Bucket	R. T. Brown	143,959	Oct. 22, 1873	546	181	4	453
Bucket	J. V. Denell	136,140	Feb. 25, 1873	708	223	3	220
Bucket, Butter	J. Gilberts and M. Harris	142,456	Sept. 2, 1873	119	38	4	252
Bucket, Dinner	F. E. Heinig	143,241	Sept. 30, 1873	808	277	4	356
Bucket, Sheet-metal	W. Austin	141,748	Aug. 12, 1873	307	100	4	168
Bucket, Well	C. F. Stites	140,439	July 1, 1873	80	28	4	15
Buckle	J. M. Borchardt	142,076	Aug. 26, 1873	632	908	4	213
Buckle	S. H. Doughty	138,487	May 6, 1873	17	6	3	499
Buckle	W. Parsons	142,721	Sept. 9, 1873	353	119	4	282
Buckle	A. B. Shaw	141,729	Aug. 12, 1873	290	95	4	166
Buckle, Breeching-loop	J. H. McGarran	135,238	Jan. 28, 1873	702	225	3	104
Buckle-fastening	F. H. Gladding	136,151	Feb. 25, 1873	716	231	3	221
Buckle, Harness	J. Allbee	145,270	Dec. 9, 1873	214	73	4	615
Buckle, Harness	K. Frazer	142,907	Sept. 16, 1873	519	177	4	306
Buckle, Harness	C. C. Lee	139,253	May 27, 1873	733	232	3	588
Buckle, Harness	J. McLean	137,558	Apr. 8, 1873	261	60	3	389
Buckle, Harness	O. B. North	143,180	Sept. 23, 1873	746	258	4	335
Buckle, Harness	J. W. Ropp and R. C. Kibby	136,766	Mar. 11, 1873	373	123	3	284
Buckle, Harness	J. L. Selleck	138,291	Apr. 29, 1873	957	301	3	476
Buckle, Harness-trace	H. H. Hartzell	143,284	Sept. 30, 1873	843	290	4	359
Buckle, Harness-tug	C. W. Adams	135,744	Feb. 11, 1873	330	106	3	165
Buckle, Harness-tug	F. Seifert	135,601	Feb. 4, 1873	199	61	3	143
Buckle, Suspender	S. Hamm	143,144	Sept. 23, 1873	719	247	4	333
Buckle, Trace	C. K. Brayton and J. Baugh	141,108	July 22, 1873	705	236	4	94
Buckle, Trace	T. Browlee	140,463	July 1, 1873	102	34	4	16
Buckle, Trace	M. B. DeSilva and G. T. Benjamin	135,093	Jan. 21, 1873	550	179	3	79
Buckle, Trace	J. Kennedy	141,565	Aug. 5, 1873	136	43	4	146
Buckle, Turn	T. Gaillard	136,910	Mar. 18, 1873	505	167	3	304
Buffet-table	W. H. Tufts	144,424	Nov. 11, 1873	224	74-75	4	508
Buffing-machine	W. W. Messer, jr.	137,465	Apr. 1, 1873	167	53	3	370
Buffing-wheel	E. and W. Dixon	145,492	Dec. 16, 1873	411	135	4	642
Bug-extinator, Potato	C. Cole	144,065	Oct. 28, 1873	641	211	4	461
Buggy	C. T. Stoddard	137,577	Apr. 8, 1873	279	85-86	3	391
Buggy shifting-top	R. C. Diehl	140,351	July 1, 1873	16	5	4	9
Building-block	F. W. Colby	143,809	Oct. 21, 1873	400	133	4	431
Building-block	G. De Witt and J. Fairman	140,122	June 24, 1873	645	203	3	692
Building-block	S. T. Fowler	139,462	June 3, 1873	17	5	3	610
Building-block	T. Hyatt	142,475	Sept. 2, 1873	137	45	4	253
Building-block	R. M. Soldis	144,149	Oct. 28, 1873	706	235	4	466
Building-block, Fire-proof	W. T. Van Zandt and L. A. Tartiere	136,684	Mar. 11, 1873	306	3	3	279
Building-block, Mold for forming	A. Derron	139,050	May 20, 1873	527	166	3	564
Building-elevator	E. Keach	139,896	June 17, 1873	434	134	3	667
Building-elevator	L. S. Schuyler and S. I. Thursby	140,082	June 17, 1873	588	186	3	650
Building, Fire-proof	A. K. Holte	136,515	Mar. 4, 1873	145	47	3	257
Building, Fire-proof	G. H. Johnson	143,351	Sept. 30, 1873	907	308	4	364
Building, Fire-proof	J. E. Mulford	139,415	May 27, 1873	877	281	3	589
Building, Fire-proof	L. A. Tartiere	143,196	Sept. 23, 1873	761	263	4	337
Building, Fire-proof	L. A. Tartiere	143,197	Sept. 23, 1873	762	263	4	337
Building, Fire-proof	J. H. Walker	142,422	Sept. 2, 1873	87	29	4	249
Building material, Device for elevating	J. H. Coe	140,116	June 24, 1873	640	201	3	692
Building material, Machine for elevating	J. King	139,161	May 20, 1873	639	200	3	572
Building-ventilator	G. R. Barker	193,868	Oct. 21, 1873	449	149	4	435
Buildings, Compound for sanitary and decorative articles used in.	J. Rust	143,096	Sept. 23, 1873	685	4	4	330
Buildings, Construction of	W. Beschke	136,407	Mar. 4, 1873	47	17	3	249
Buildings, Construction of	H. H. Bryant	139,451	June 3, 1873	4	1	3	609
Buildings, Construction of	W. J. Morden	135,044	Jan. 21, 1873	515	166	3	76
Buildings, Construction of	J. Tall	138,710	May 6, 1873	215	68	3	515
Buildings, &c., Elevator for	G. Müller	144,350	Nov. 4, 1873	148	49	4	490
Buildings, Fire-extinguishing water-pipe attachment for.	T. Miller	144,690	Nov. 18, 1873	452	153	4	538
Buildings, Fine for	E. T. Gould	141,219	July 29, 1873	825	270	4	111
Buildings, Ventilating	L. B. Valk	142,598	Sept. 9, 1873	254	83	4	274
Bullet	J. Rein and J. Stock	143,419	Oct. 7, 1873	22	9	4	382
Bullet-mold, revolving	J. Bradford	135,197	Jan. 28, 1873	659	212	3	101
Bullets, machine for patching	S. W. Wood	136,352	Feb. 25, 1873	886	285	3	234
Bundling kindling-wood, &c.	H. A. House	138,026	Apr. 22, 1873	692	219	3	447
Bundling kindling-wood, &c., Machine for	H. A. House	138,027	Apr. 22, 1873	695	220	3	447
Bung	W. F. Class	136,415	Mar. 4, 1873	54	19	3	250
Bung	H. K. Hazlett	143,573	Oct. 14, 1873	165	55	4	402
Bung-bush	C. P. and L. W. Briggs	136,696	Mar. 11, 1873	314	104	3	279
Bung-bush inserter	L. Littlejohn	138,568	May 6, 1873	92	29	3	505
Bung-bush inserter	L. Littlejohn	145,807	Dec. 23, 1873	699	229	4	678
Bung-bushes, Tool for seating	L. Littlejohn	141,511	Aug. 5, 1873	90	28	4	142
Bung-bushings, Wrench for	G. W. Harris	143,757	Oct. 21, 1873	354	117	4	497
Bung for beer-barrels	E. Kraff	145,878	Dec. 23, 1873	762	249	4	683
Bung-hole, Tool for facing	T. T. Prosser and G. W. Gillett	135,843	Feb. 11, 1873	421	137	3	172
Bung, Machine for making	R. Boeklen	135,196	Jan. 28, 1873	657	212	3	101
Bung, Self-venting	C. F. Spencer	142,051	Aug. 19, 1873	595	196	4	200
Bungs for casks, &c., Making	R. Penlarge	145,897	Dec. 23, 1873	779	255	4	684
Bureau and ironing-table combined	W. W. Adams	139,101	May 20, 1873	577	181	3	568
Bureau and wardrobe combined	H. H. Stangaard	145,312	Dec. 9, 1873	252	84	4	618
Bureau-drawers, Fastening for	A. J. Graut	141,001	July 22, 1873	610	205	4	486
Bureau, washstand, and wardrobe combined	T. W. Moore	137,380	Apr. 1, 1873	89	29	3	364
Burglar-alarm	F. W. Blakemore	145,636	Dec. 23, 1873	720	237	4	680
Burglar-alarm	H. L. Brown	145,332	Dec. 9, 1873	269	90	4	619
Burglar-alarm	H. L. Brower	136,210	Feb. 25, 1873	760	246	3	225
Burglar-alarm	J. F. Coppoch	137,532	Apr. 8, 1873	239	73	3	388
Burglar-alarm	E. M. Hendrickson	140,134	June 24, 1873	655	206	3	693

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Burglar-alarm	H. P. Hood	142,630	Sept. 9, 1873	279	91	4	276
Burglar-alarm	J. J. Kane	146,006	Dec. 30, 1873	896	290	4	704
Burglar-alarm	W. H. McPherson	137,016	Mar. 18, 1873	597	198	3	312
Burglar-alarm	M. R. Perkins	141,291	July 29, 1873	889	291	4	116
Burglar-alarm, Electrical	H. E. Walter	138,965	May 13, 1873	444	139	3	544
Burglar-alarm, Portable	J. Pennepacker	143,379	Sept. 30, 1873	932	316	4	366
Burglar-alarm, Portable	J. H. Thorp	139,440	May 27, 1873	897	289	3	601
Burial-case	J. B. Cox	143,438	Oct. 7, 1873	36	13	4	384
Burial-casket	H. Henika and M. F. Carder	139,465	June 3, 1873	19	6	3	610
Burial-casket	S. Stein	134,570	Jan. 7, 1873	64	20	3	12
Burial-casket handle	A. G. Chapman	137,289	Apr. 1, 1873	10	3	3	358
Burial-caskets, Composition for	A. N. Atwood	136,404	Mar. 4, 1873	45	.....	3	249
Burial-caskets, Composition for	W. H. Ross	141,238	July 29, 1873	843	.....	4	112
Burner Argand	C. E. Ball	140,108	June 24, 1873	634	199	3	691
Burner Argand gas	T. Clough	138,858	May 13, 1873	360	111	3	537
Burner for carbureters	I. W. Shaler	143,385	Sept. 30, 1873	936	317	4	367
Burner for heating, Gas	J. Van	142,360	Sept. 2, 1873	35	12	4	945
Burner, Gas	B. Andraee	139,352	May 27, 1873	813	260	3	594
Burner, Gas	J. W. Averill	141,415	Aug. 5, 1873	4	1	4	135
Burner, Gas	T. B. Fogarty	135,978	Feb. 18, 1873	544	190	3	196
Burner, Gas	T. B. Fogarty	135,979	Feb. 18, 1873	545	180	3	196
Burner, Gas	E. Foote	137,905	Apr. 15, 1873	574	180	3	498
Burner, Gas	G. W. Hatch	137,303	Apr. 1, 1873	21	7	3	359
Burner, Gas	J. and T. D. Richardson	140,164	June 24, 1873	680	214	3	695
Burner, Gas	J. Rigby	139,919	June 17, 1873	452	141	3	668
Burner, Gas	D. E. Ryan	139,481	June 3, 1873	34	11	3	611
Burner, Gas	I. W. Shaler	137,964	Apr. 15, 1873	622	196	3	432
Burner, Gas	I. Simmons	139,828	June 10, 1873	363	112	3	654
Burner, globe, and holder for gas	G. M. Ramsay	140,075	June 17, 1873	583	185	3	679
Burner, Lamp	L. J. Atwood	138,601	May 6, 1873	116	38	3	507
Burner, Lamp	B. F. Chappell	136,586	Mar. 11, 1873	226	76	3	272
Burner, Lamp	J. H. Doolittle	140,687	July 8, 1873	307	104	4	45
Burner, Lamp	T. W. Gardner	134,657	Jan. 7, 1873	148	47	3	18
Burner, Lamp	R. S. Merrill	145,438	Dec. 9, 1873	356	119	4	626
Burner, Lamp	W. N. Weedon	136,113	Feb. 18, 1873	664	217	3	205
Burner, Lamp	M. J. Wellman	134,718	Jan. 7, 1873	203	66	3	23
Burner, Lamp	J. N. Wyatt	137,276	Mar. 25, 1873	840	276	3	342
Burner, Oxyhydrocarbon gas	J. D. Averell	143,555	Oct. 14, 1873	151	51	4	401
Burner, Revolving attachment for gas	J. O. Belknap	137,406	Apr. 1, 1873	112	37	3	366
Burner, Smoke and steam	J. W. Kingman and A. Eurgens	141,277	July 29, 1873	878	288	4	115
Burner, Tar and petroleum	J. Burns	140,465	July 1, 1873	103	35	4	17
Burner, Tar or petroleum	J. Law	135,649	Feb. 11, 1873	249	79	3	159
Burner, Vapor	J. Benson and A. H. Watkins	136,021	Feb. 18, 1873	584	192	3	199
Burner, Vapor	J. Benson and A. H. Watkins	136,022	Feb. 18, 1873	585	192	3	199
Burner, Vapor	M. F. Gale	140,029	June 17, 1873	539	171	3	676
Burner, Vapor	M. F. Gale	140,030	June 17, 1873	540	171	3	676
Burner, Vapor	J. C. Love	143,915	Oct. 2, 1873	486	164	4	438
Burner, Vapor	F. G. Palmer	138,923	May 13, 1873	411	129	3	541
Burner, Vapor	T. Simmons	141,823	Aug. 12, 1873	377	123	4	173
Burning liquid fuel and generating steam, Apparatus for	W. T. Scheide	140,220	June 24, 1873	726	229	3	699
Bushing, Anti-frictional	F. S. Burr	137,415	Apr. 1, 1873	120	40	3	367
Bustle	M. K. Bortoe	136,127	Feb. 25, 1873	692	224	3	219
Bustle	M. Boupard	142,764	Sept. 16, 1873	404	136	4	297
Bustle	J. H. Hall	135,801	Feb. 11, 1873	384	124	3	169
Bustle	T. S. Sperry	135,379	Jan. 28, 1873	827	267	3	114
Bustle	T. Stookman	135,858	Feb. 11, 1873	433	141	3	173
Bustle	A. W. Thomas	140,966	July 15, 1873	565	189	4	73
Butcher's knife, saw, and spring-scales, combined.	J. Baggs	138,362	Apr. 29, 1873	1,017	320	3	481
Butter-bucket.	J. F. Dumont	136,713	Mar. 11, 1873	328	108	3	281
Butter-coloring compound.	G. Bogart, W. H. Cramer, and W. L. Lewis	142,891	Sept. 16, 1873	505	.....	4	305
Butter cutter and lifter, Gaged	T. E. Colbrunn	142,207	Aug. 26, 1873	743	244	4	222
Butter-knife rest	B. D. Reed	135,156	Jan. 21, 1873	604	196	3	84
Butter package	J. Andrews	137,752	Apr. 15, 1873	441	137	3	417
Butter-paddle	D. L. Grover	138,800	May 13, 1873	307	95	3	533
Butter-print press	L. Coates and J. T. Criswell	142,838	Sept. 16, 1873	464	157	4	302
Butter-printing machine	D. E. Dutrow	135,323	Jan. 28, 1873	775	251	3	110
Butter-printing machine	A. F. Hines	140,704	July 8, 1873	323	109	4	46
Butter, Refining	G. W. Kirchhöffer	139,796	June 10, 1873	335	104	3	651
Butter-rolls, Forming and gaging	C. H. Fischer	137,064	Mar. 25, 1873	650	215	3	227
Butter-tub	A. J. Drake	142,843	Sept. 16, 1873	469	159	4	302
Butter-tub, &c., Hasp for	H. C. Carter	144,889	Nov. 25, 1873	630	214	4	563
Butter-worker	S. H. Bush	145,624	Dec. 16, 1873	531	174	4	652
Butter-worker	D. W. Dake	134,788	Jan. 14, 1873	275	90	3	42
Butter-worker	D. W. Dake	144,662	Nov. 18, 1873	429	145	4	536
Butter-worker	D. W. Dake	145,338	Dec. 9, 1873	274	92	4	620
Butter-worker	W. N. Golden	139,571	June 3, 1873	109	37	3	618
Butter-worker	J. McBride	138,723	June 10, 1873	267	84	3	646
Butter-worker	E. E. Scott	143,260	Sept. 30, 1873	824	283	4	358
Butter-worker	F. M. Stackhouse	140,739	July 8, 1873	352	118	4	48
Button	J. N. Allen	139,991	June 17, 1873	504	160	3	673
Button	M. F. Carpenter	137,824	Apr. 15, 1873	503	157	3	422
Button	J. Durand	142,686	Sept. 8, 1873	326	109	4	280
Button	A. E. Thurber	136,882	Mar. 18, 1873	480	159	3	302
Button	F. Washbourne	138,107	Apr. 22, 1873	766	243	3	453
Button and lacing-hook, Machine for setting	H. C. Bradford	135,763	Feb. 11, 1873	346	111	3	167
Button and stud attachment	H. Freeman	138,745	May 13, 1873	260	81	3	528
Button and stud, Shirt	J. T. Thornton	138,595	May 6, 1873	112	37	3	507
Button, Clasp	A. Flatloy	136,648	Mar. 11, 1873	276	92	3	276
Button, Cuff	F. McCarthy	140,211	June 24, 1873	720	226	3	698
Button-fastening	A. Brookmann	138,608	May 6, 1873	121	40	3	508
Button-fastening	D. Cannata	140,008	June 17, 1873	519	165	3	674
Button-fastening	I. F. Eaton	143,892	Oct. 21, 1873	468	157	4	436

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Button-fastening	W. Holloway	140,627	July 8, 1873	259	88	4	41
Button-fastening	W. A. and F. V. Johnson and H. S. Worth	143,512	Oct. 7, 1873	96	34	4	388
Button-fastening	M. Ormsbee	139,808	June 10, 1873	346	107	3	652
Button-fastening	C. H. Reid	142,043	Aug. 19, 1873	586	192	4	199
Button-fastening	N. B. Smith	136,556	Mar. 4, 1873	184	59	3	260
Button-fastening	E. J. F. Stolpe	138,708	May 6, 1873	214	67	3	515
Button-fastening	E. S. Wheeler	141,743	Aug. 12, 1873	302	99	4	188
Button, Garment	A. C. Wilhelm	135,739	Feb. 11, 1873	325	104	3	165
Button, Glass	A. M. Smith	135,375	Jan. 28, 1873	824	286	3	114
Button-holder	M. J. Cooper	145,556	Dec. 16, 1873	476	156	4	648
Button-hole cutter	A. Day	135,893	Feb. 18, 1873	479	154	3	191
Button-hole cutter	W. C. McGill	139,472	June 3, 1873	26	8	3	611
Button-hole cutter	C. F. Tebbets and G. Nutting	139,437	May 27, 1873	894	288	3	601
Button-hole cutter	C. Van Hoosey	139,983	June 17, 1873	499	158	3	672
Button-hole cutter and punch	A. L. Whitney	137,745	Apr. 8, 1873	429	132	3	403
Button-making machine	J. F. Baptesse	141,749	Aug. 12, 1873	308	101	4	168
Button, Manufacture of	C. M. Platt	138,525	May 6, 1873	52	18	3	502
Button mold, Fancy	F. Maass	143,916	Oct. 21, 1873	487	164	4	438
Button-mold, Tool for making	J. S. Hawkins	143,073	Sept. 23, 1873	666	229	4	329
Button or stud, Collar	J. I. Waddell	137,807	Apr. 15, 1873	490	153	3	491
Button or stud, Shirt	T. J. Holmes	145,948	Dec. 30, 1873	847	275	4	700
Buttons, Means for fastening	I. F. Eaton	143,891	Oct. 21, 1873	467	157	4	436
C.							
Cabinet chair and secretary combined	C. S. Trevitt	137,738	Apr. 8, 1873	422	130	3	403
Cable stopper	J. M. Kilner	140,202	June 24, 1873	713	224	3	628
Cage, Wire	M. Grebner	139,734	June 10, 1873	325	101	3	651
Caisson	A. G. Wolfgram	145,039	Nov. 25, 1873	757	256	4	574
Cake and bread, Box for preserving	A. R. Ledoux	135,433	Feb. 4, 1873	39	11	3	130
Cake-cutter	J. Webster	139,217	May 20, 1873	686	216	3	577
Cake-pan	J. B. Firth	140,619	July 8, 1873	254	86	4	40
Calculating machine	T. Eersky	144,523	Nov. 11, 1873	302	102	4	514
Calculating machine	G. B. Grant	138,245	Apr. 29, 1873	910	287	3	473
Calendar-catch	R. C. Opden	140,300	June 24, 1873	793	252	3	705
Calendar-rolls, Feed-regulator for	M. Lawler	134,810	Jan. 14, 1873	295	95	3	44
Calendar-making machine	D. Lecheval	142,872	Sept. 16, 1873	491	167	4	304
Calipers	W. H. Miner	143,584	Oct. 14, 1873	174	59	4	403
Caloric engine	N. A. Otto	145,123	Dec. 2, 1873	77	25	4	591
Camera:							
<i>See</i> Photographic camera.							
Stereoscopic camera.							
Camera-stand	N. S. Bowdish	141,256	July 29, 1873	860	281	4	114
Camera-stand	B. Holler	136,997	Mar. 18, 1873	579	193	3	310
Cam-grooves, Machine for dressing	G. M. Pratt and V. A. King	135,584	Feb. 4, 1873	181	56	3	141
Cam-movement	J. E. Goodwin	143,235	Sept. 30, 1873	801	276	4	356
Cam, Sectional adjustable slotted	F. D. Eldersfield	141,548	Aug. 5, 1873	121	38	4	145
Camphor, preparing	W. F. Simes	136,623	Mar. 11, 1873	257	.....	3	275
Can:							
<i>See</i> Cotton or woolen can.							
Dinner-can.							
Fruit-can.							
Measuring-can.							
Metal can.							
Milk-can.							
Oil-can.							
Oil-dripping can.							
Oyster-can.							
Oyster-packing can.							
Paint-can.							
Preserving-can.							
Sealed can.							
Seamless can.							
Tin can.							
Can	C. A. Murdock	139,181	May 20, 1873	656	205	3	574
Can-filler	R. Newton	138,574	May 6, 1873	96	31	3	505
Can for transporting oil, &c	J. E. Pimley	146,020	Dec. 30, 1873	909	294	4	705
Cans, Machine for holding and soldering	J. Redheffer	136,265	Feb. 25, 1873	612	222	3	229
Cans, Machine for holding and soldering	W. J. jr. and T. G. Redheffer, and L. A. Smith	137,027	Mar. 18, 1873	605	200	3	312
Can-opener	C. J. C. Petersen	140,072	June 17, 1873	580	184	3	679
Can-opener	J. J. Reed	137,149	Mar. 25, 1873	723	240	3	333
Can-opener	L. B. Smith	140,088	June 17, 1873	596	188	3	680
Can-opener	J. Wood	140,604	July 8, 1873	242	82	4	39
Can-opener and knife or fork combined	T. Konlerdine	142,109	Aug. 26, 1873	682	217	4	215
Can-opener and pipe-cutter	D. A. Barnes	144,051	Oct. 28, 1873	628	207	4	460
Can with tomatoes, Apparatus for filling	C. S. Bucklin	143,613	Oct. 14, 1873	199	67	4	405
Canal	H. Hill	138,156	Apr. 22, 1873	804	256	3	456
Canal-boat	W. A. Leggo	138,664	May 6, 1873	175	56	3	512
Canal-boats, Construction of	G. B. Martin	134,555	Jan. 7, 1873	49	15	3	11
Canal-boats, Means of snubbing	T. W. Edgar	136,982	Mar. 18, 1873	565	188	3	309
Canal-boats, Towing	I. P. Tice	136,343	Feb. 25, 1873	878	283	3	234
Canals, &c., Means of keeping open the navigation of	J. Mullaly	143,833	Oct. 21, 1873	420	140	4	433
Candle-guard	B. Morgan	141,066	July 22, 1873	666	224	4	91
Candle-mold tip	I. Cole	138,380	Apr. 29, 1873	1,032	325	3	483
Candle, Drip-cup for	D. M. Ayer	140,735	July 15, 1873	371	127	4	58
Candlestick	C. H. Dougherty	136,233	Feb. 25, 1873	770	249	3	225
Candlestick	S. D. Hill	142,162	Aug. 26, 1873	705	233	4	219
Candlestick	W. H. H. Hinds	145,502	Dec. 16, 1873	420	138	4	643
Candlestick	Z. I. Pratt	136,864	Mar. 18, 1873	465	154	3	301
Candlestick	A. E. Rogers	137,029	Mar. 18, 1873	608	201	3	312
Candlestick for ships, Swinging	J. J. Walton and E. A. Barrett	136,290	Feb. 25, 1873	832	269	3	220
Candy-cutter	J. W. Kaskel	146,076	Dec. 30, 1873	955	308	4	709
Candy-cutter	F. Quinn	143,590	Oct. 14, 1873	178	60	4	403

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Candy-jar lid	W. C. King	138, 503	May 6, 1873	99	10	3	500
Candyng machine	F. W. C. Spiess	135, 679	Feb. 11, 1873	270	85	3	161
Cane	F. Eckstein	146, 054	Dec. 30, 1873	938	309	4	708
Cane	M. Osborn	139, 090	May 20, 1873	504	159	3	562
Cane-crusher, Hydraulic	C. H. Dickinson	137, 349	Apr. 1, 1873	67	21	3	392
Cane-juice, Apparatus for treating	G. C. Taylor	140, 443	July 1, 1873	83	29	4	15
Cane-juice-extracting apparatus	D. Moffat	143, 089	Sept. 23, 1873	678	233	4	330
Cane-juice with sulphur-fume, Apparatus for treating	W. G. Billin	141, 914	Aug. 19, 1873	472	155	4	190
Cane-juice with sulphurous-acid gas, Apparatus for treating	J. Dymond	134, 655	Jan. 7, 1873	146	47	3	18
Cane-seats for chairs, Needle for weaving	D. C. Mosher	142, 808	Sept. 16, 1873	440	148	4	300
Cane-stripper	R. C. James	141, 037	July 22, 1873	655	221	4	90
Cane, Walking	C. K. Pevey	143, 246	Sept. 30, 1873	814	279	4	357
Canopied chair	T. Elkhinton	144, 521	Nov. 11, 1873	300	101	4	514
Canteen	R. Kelly	135, 433	Feb. 4, 1873	38	11	3	130
Canteen, Hospital	H. Beck	136, 808	Mar. 18, 1873	423	140	3	298
Cant-hook	E. Mansfield	142, 032	Aug. 19, 1873	573	199	4	199
Cant-hook	R. Whittier	141, 906	Aug. 19, 1873	467	152	4	190
Canvas and cordage, Solution for preserving	C. Nelson	134, 559	Jan. 7, 1873	55		3	11
Canvas-stretcher	H. W. Holly	142, 232	Aug. 26, 1873	765	251	4	224
Canvas stretching and protecting frame	A. Dickerman	141, 547	Aug. 5, 1873	120	37	4	145
Canvas to form tarpaulins, Coating	C. Cobb	141, 764	Aug. 12, 1873	323		4	169
Cap	M. N. Myers	138, 681	May 6, 1873	190	61	3	513
Cap	B. Scharl	137, 032	Mar. 18, 1873	610	202	3	313
Cap setting and extracting device	E. S. Holmes	139, 674	June 10, 1873	215	70	3	642
Capped-nail	C. Walsh	143, 393	Sept. 30, 1873	943	319	4	367
Capsules, Machine for making platted	J. J. Baranowski	137, 403	Apr. 1, 1873	109	35, 36	3	396
Car and window washer	P. S. Devlan	136, 310	Feb. 25, 1873	846	273	3	231
Car-axle	B. Ahrens and D. Gerhard	142, 757	Sept. 16, 1873	400	135	4	286
Car-axle	G. W. Miltimore	144, 347	Nov. 4, 1873	145	48	4	490
Car-axle	T. R. Timby	136, 791	Mar. 11, 1873	394	130	3	286
Car-axle, Lubricating	J. R. Morris	134, 696	Jan. 7, 1873	187	60	3	21
Car-axle, Railway	R. N. Allen	139, 226	May 27, 1873	707	223	3	566
Car-axle, Railway	T. C. Theaker	137, 977	Apr. 15, 1873	632	199	3	433
Car-axles with axle-boxes, Device for connecting	L. Pritchard	140, 303	June 24, 1873	796	253	3	705
Car-basket, Railway	J. F. Hudson	140, 504	July 1, 1873	138	47	4	19
Car-body and truck, Connecting and disconnecting	C. D. Tisdale	139, 835	June 10, 1873	369	114	3	654
Car-brake	W. H. Browne and W. M. Pegrum	136, 561	Mar. 11, 1873	222	74	3	273
Car-brake	J. N. Brush	138, 126	Apr. 22, 1873	779	249	3	454
Car-brake	W. Ebbitt	140, 260	June 24, 1873	759	240	3	702
Car-brake	E. Farnsworth	138, 141	Apr. 22, 1873	791	252	3	455
Car-brake	E. P. Harrington	144, 537	Nov. 11, 1873	316	107	4	515
Car-brake	M. Karg	144, 681	Nov. 18, 1873	445	150	4	537
Car-brake	J. L. Knowlton	137, 079	Mar. 25, 1873	666	221	3	328
Car-brake	A. Langellier	143, 083	Sept. 23, 1873	674	229	4	329
Car-brake	W. Naylor	144, 351	Nov. 4, 1873	148	50	4	490
Car-brake	J. B. Pelton	144, 787	Nov. 18, 1873	532	181	4	545
Car-brake	E. O. Richard	143, 187	Sept. 23, 1873	751	260	4	336
Car-brake	A. M. Rouse	134, 934	Jan. 14, 1873	402	128	3	52
Car-brake	W. H. M. Sanger	135, 161	Jan. 21, 1873	607	197	3	84
Car-brake	J. Shannon	138, 535	May 6, 1873	60	20	3	502
Car-brake	J. Temple	141, 608	Aug. 5, 1873	173	55	4	149
Car-brake	L. H. Voorhies	137, 964	Mar. 25, 1873	632	273	3	341
Car-brake	W. Warinner	142, 858	Sept. 9, 1873	304	100	4	278
Car-brake	W. Warwick and H. C. Duggan	144, 240	Nov. 4, 1873	63	19	4	483
Car-brake	J. G. Wiggin	145, 470	Dec. 9, 1873	383	127	4	628
Car-brake and propelling mechanism, Combined	J. W. Hill	141, 272	July 29, 1873	876	267	4	113
Car-brake, Automatic-railway	G. E. Earl	139, 557	June 3, 1873	97	33	3	617
Car-brake, Coal	D. Wetzel	139, 097	May 20, 1873	574	180	3	567
Car-brake, Hydraulic	J. F. Taylor	144, 578	Nov. 11, 1873	351	118	4	518
Car-brake, Hydraulic or air	W. M. Henderson	143, 980	Oct. 28, 1873	565	187	4	454
Car-brake, Hydraulic-railway	W. M. Henderson	141, 790	Aug. 12, 1873	351	115	4	171
Car-brake, Railway	L. Adams	144, 013	Oct. 28, 1873	598	198	4	457
Car-brake, Railway	J. S. Anderson	139, 527	June 3, 1873	71	24	3	614
Car-brake, Railway	F. G. Bates	136, 019	Feb. 18, 1873	562	192	3	199
Car-brake, Railway	G. W. Crowe	140, 349	July 1, 1873	15	4	4	9
Car-brake, Railway	J. F. Elder	135, 212	Jan. 28, 1873	675	216	3	102
Car-brake, Railway	G. W. Morris	136, 678	May 6, 1873	188	60	3	513
Car-brake, Railway	W. D. Pope	142, 649	Sept. 9, 1873	294	96	4	277
Car-brake, Railway	L. Stebbins	135, 017	Jan. 21, 1873	492	158	3	75
Car-brake, Railway	G. Westinghouse, jr.	142, 600	Sept. 9, 1873	256	84	4	274
Car-brake, Self-acting coal	J. D. Leonard	142, 572	Sept. 9, 1873	232	76	4	274
Car-brake wheel, Railway	C. A. Waterbury	138, 968	May 13, 1873	446	140	3	544
Car, Buffer spring for railway	C. W. Saladee	135, 399	Jan. 28, 1873	818	264	3	113
Car by compressed air, Apparatus for propelling street	W. H. Bowers	142, 433	Sept. 2, 1873	96	32	4	250
Car-chock for railway-rails	W. O. Stephenson	136, 625	Mar. 11, 1873	259	97	3	275
Car, Convertible freight	T. Fogg	138, 142	Apr. 22, 1873	792	253	3	455
Car, Convertible freight	W. Worsley	137, 871	Apr. 15, 1873	542	169	3	425
Car-coupler	W. D. Tisdale	136, 627	Mar. 11, 1873	260	87	3	275
Car-coupling	O. Albrecht	139, 850	June 17, 1873	388	121	3	663
Car-coupling	T. Andress	144, 428	Nov. 11, 1873	227	76	4	508
Car-coupling	A. A. Atwater	144, 494	Nov. 11, 1873	279	94	4	513
Car-coupling	B. Atkinson	140, 667	July 8, 1873	290	98	4	43
Car-coupling	E. W. Barker	140, 805	July 15, 1873	413	140	4	61
Car-coupling	W. B. Barnes	141, 258	July 29, 1873	862	262	4	114
Car-coupling	J. W. Bates	134, 629	Jan. 7, 1873	120	39	3	16
Car-coupling	T. Beddow and A. T. Jackson	141, 103	July 22, 1873	701	235	4	94
Car-coupling	W. E. Beman	136, 958	Mar. 18, 1873	544	180	3	307
Car-coupling	L. D. Bennett	142, 142	Aug. 26, 1873	690	227	4	218
Car-coupling	E. Bickell	141, 312	July 29, 1873	908	298	4	118
Car-coupling	C. S. Bigler	135, 686	Feb. 11, 1873	265	89	3	162
Car-coupling	A. W. Bohaker	143, 491	Oct. 7, 1873	79	27	4	387
Car-coupling	W. A. Boyden	143, 655	Sept. 23, 1873	654	224	4	328
Car-coupling	D. Bradford	135, 316	Jan. 28, 1873	766	247	3	109

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Car-coupling.....	W. C. Brooks.....	144, 015	Oct. 28, 1873	599	198	4	457
Car-coupling.....	R. B. Buckner.....	141, 756	Aug. 12, 1873	315	103	4	169
Car-coupling.....	R. Butt.....	144, 439	Nov. 11, 1873	834	79	4	509
Car-coupling.....	D. C. Camerer.....	141, 991	Aug. 19, 1873	532	176	4	195
Car-coupling.....	A. F. Chandler.....	144, 954	Nov. 25, 1873	681	231	4	568
Car-coupling.....	W. J. Chaplin.....	135, 775	Feb. 11, 1873	356	114 115	3	167
Car-coupling.....	J. T. L. Cochran.....	144, 956	Nov. 25, 1873	683	231	4	568
Car-coupling.....	W. A. Cochran.....	144, 658	Nov. 18, 1873	427	144	4	536
Car-coupling.....	G. W. Coffin.....	136, 033	Feb. 18, 1873	593	195	3	900
Car-coupling.....	W. T. Collins.....	135, 890	Feb. 18, 1873	477	153	3	191
Car-coupling.....	C. C. Converse.....	144, 386	Nov. 11, 1873	190	65	4	505
Car-coupling.....	W. R. Covert.....	144, 257	Nov. 4, 1873	75	24	4	484
Car-coupling.....	J. Crist.....	142, 209	Aug. 26, 1873	744	245	4	292
Car-coupling.....	T. H. Cross.....	142, 993	Sept. 23, 1873	600	204	4	293
Car-coupling.....	G. D. Crothwait.....	136, 039	Feb. 18, 1873	598	196	3	900
Car-coupling.....	P. H. Decker and N. Lee.....	141, 635	Aug. 12, 1873	214	67	4	160
Car-coupling.....	J. L. De Good.....	134, 648	Jan. 7, 1873	140	45	3	18
Car-coupling.....	M. Disney.....	140, 124	June 24, 1873	646	203	3	692
Car-coupling.....	M. C. Doubleday.....	136, 222	Feb. 25, 1873	769	249	3	225
Car-coupling.....	R. H. Dowling.....	142, 682	Sept. 9, 1873	323	107	4	280
Car-coupling.....	J. L. Duncan.....	142, 998	Sept. 23, 1873	604	205	4	324
Car-coupling.....	G. Edmonds.....	143, 680	Oct. 14, 1873	261	86	4	410
Car-coupling.....	J. M. Enos.....	142, 219	Aug. 26, 1873	751	248	4	223
Car-coupling.....	J. Enos.....	143, 894	Oct. 21, 1873	470	158	4	436
Car-coupling.....	M. Ferren.....	143, 231	Sept. 30, 1873	793	275	4	355
Car-coupling.....	F. A. Fleming.....	143, 752	Oct. 21, 1873	349	116	4	427
Car-coupling.....	F. Fox and F. A. Howarth.....	135, 537	Feb. 4, 1873	133	42	3	138
Car-coupling.....	J. J. Franklin.....	141, 432	Aug. 5, 1873	19	5	4	136
Car-coupling.....	J. A. Gale.....	140, 131	June 24, 1873	653	205	3	693
Car-coupling.....	C. H. Gearhart.....	137, 067	Mar. 25, 1873	653	216	3	298
Car-coupling.....	E. N. Gifford.....	142, 926	Aug. 26, 1873	759	250	4	223
Car-coupling.....	J. W. and J. W. Gillam, jr.....	135, 984	Feb. 18, 1873	550	182	3	197
Car-coupling.....	M. Goolaven.....	138, 748	May 13, 1873	261	81	3	529
Car-coupling.....	J. Griffith and W. F. Miller.....	143, 281	Sept. 30, 1873	841	289	4	359
Car-coupling.....	J. Growdon.....	136, 237	Feb. 25, 1873	782	252	3	296
Car-coupling.....	J. Gum.....	143, 756	Oct. 21, 1873	353	117	4	427
Car-coupling.....	W. W. Haver.....	142, 849	Sept. 16, 1873	473	161	4	303
Car-coupling.....	J. W. Hess.....	145, 652	Dec. 16, 1873	554	182	4	654
Car-coupling.....	J. Hiers.....	142, 230	Aug. 26, 1873	762	251	4	224
Car-coupling.....	J. E. Hitt.....	135, 552	Feb. 4, 1873	147	47	3	139
Car-coupling.....	J. F. L. Holman.....	143, 011	Sept. 23, 1873	614	209	4	325
Car-coupling.....	F. E. Howard.....	142, 395	Sept. 2, 1873	67	22	4	247
Car-coupling.....	E. H. Janney.....	138, 405	Apr. 29, 1873	1, 052	331	3	484
Car-coupling.....	J. W. Jones.....	136, 523	Mar. 4, 1873	154	49	3	258
Car-coupling.....	J. Keck.....	145, 428	Dec. 9, 1873	350	117	4	625
Car-coupling.....	C. H. Kendall.....	134, 676	Jan. 7, 1873	168	55	3	20
Car-coupling.....	P. Kendrick.....	142, 634	Sept. 9, 1873	281	92	4	276
Car-coupling.....	P. Kennedy, jr., and A. B. Dias.....	135, 714	Feb. 11, 1873	307	97	3	164
Car-coupling.....	A. K. Kline.....	136, 655	Mar. 16, 1873	281	94	3	277
Car-coupling.....	C. H. Knowlton.....	137, 455	Apr. 1, 1873	156	50	3	370
Car-coupling.....	G. E. Knox.....	143, 165	Sept. 23, 1873	734	253	4	334
Car-coupling.....	G. Koeb.....	141, 278	July 29, 1873	879	288	4	116
Car-coupling.....	X. Krapf and J. F. Boerckel.....	145, 353	Dec. 9, 1873	285	95	4	621
Car-coupling.....	T. R. Land.....	146, 008	Dec. 30, 1873	897	291	4	704
Car-coupling.....	A. Langellier.....	141, 648	Aug. 12, 1873	225	71	4	161
Car-coupling.....	A. Langellier.....	144, 624	Nov. 18, 1873	398	133	4	533
Car-coupling.....	R. Lloyd.....	143, 828	Oct. 21, 1873	413	138	4	432
Car-coupling.....	I. B. Lewis.....	141, 445	Aug. 5, 1873	32	10	4	137
Car-coupling.....	H. C. Lowrie.....	142, 487	Sept. 2, 1873	149	49	4	254
Car-coupling.....	J. C. Maloy.....	145, 067	Dec. 2, 1873	25	8	4	587
Car-coupling.....	H. E. Marchand.....	137, 225	Mar. 25, 1873	796	263	3	338
Car-coupling.....	F. W. Marston and O. Jones.....	137, 014	Mar. 18, 1873	595	197	3	311
Car-coupling.....	T. & J. W. Meikle.....	142, 713	Sept. 9, 1873	347	117	4	299
Car-coupling.....	J. A. Merrill and D. W. Kempton.....	143, 594	Oct. 7, 1873	106	37	4	389
Car-coupling.....	A. Middleton, jr.....	142, 492	Sept. 2, 1873	158	51	4	254
Car-coupling.....	H. Millard.....	138, 912	May 13, 1873	402	127	3	540
Car-coupling.....	C. L. Miller.....	142, 715	Sept. 9, 1873	348	118	4	292
Car-coupling.....	D. M. Miller.....	143, 368	Sept. 30, 1873	923	313	4	366
Car-coupling.....	S. Miller.....	140, 720	July 8, 1873	338	114	4	47
Car-coupling.....	J. D. Mills.....	143, 369	Sept. 30, 1873	924	313	4	366
Car-coupling.....	W. B. Mitchell.....	145, 584	Dec. 16, 1873	498	163	4	650
Car-coupling.....	B. D. Moody.....	139, 016	May 20, 1873	591	158	3	562
Car-coupling.....	B. Moore.....	134, 695	Jan. 7, 1873	185	60	3	21
Car-coupling.....	G. R. Moore.....	145, 746	Dec. 23, 1873	648	213	4	674
Car-coupling.....	D. C. Morris.....	137, 617	Apr. 8, 1873	309	96	3	394
Car-coupling.....	J. Moulton.....	136, 610	Mar. 11, 1873	242	82	3	274
Car-coupling.....	H. Mulhollen.....	137, 470	Apr. 1, 1873	173	55	3	371
Car-coupling.....	J. F. Mullen, S. R. Brooks, and J. Cope.....	145, 228	Dec. 2, 1873	171	59	4	599
Car-coupling.....	S. A. Otis.....	143, 459	Oct. 7, 1873	52	18	4	385
Car-coupling.....	J. H. Payne.....	143, 636	Oct. 14, 1873	218	74	4	407
Car-coupling.....	E. W. Peloubet.....	141, 290	July 29, 1873	889	291	4	116
Car-coupling.....	D. O. Pender.....	137, 860	Apr. 15, 1873	535	166	3	425
Car-coupling.....	T. N. Pengelly.....	136, 176	Feb. 25, 1873	736	237	3	223
Car-coupling.....	J. M. Phelps.....	136, 758	Mar. 11, 1873	366	121	3	284
Car-coupling.....	E. F. Plant.....	136, 759	Mar. 11, 1873	367	122	3	284
Car-coupling.....	W. D. Pope.....	143, 638	Oct. 14, 1873	221	74	4	407
Car-coupling.....	C. Porter.....	136, 540	Mar. 4, 1873	172	55	3	259
Car-coupling.....	H. H. Potter.....	145, 446	Dec. 9, 1873	363	121	4	627
Car-coupling.....	A. Pritz.....	137, 238	Mar. 25, 1873	807	266	3	339
Car-coupling.....	A. Pursell.....	137, 719	Apr. 8, 1873	404	124	3	401
Car-coupling.....	G. W. Putnam.....	143, 716	Oct. 14, 1873	298	97	4	412
Car-coupling.....	J. V. Reed.....	142, 943	Sept. 16, 1873	552	187	4	309
Car-coupling.....	S. Reed.....	144, 476	Nov. 1873	262	88	4	511

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Car-coupling	L. P. Rider	144, 412	Nov. 11, 1873	210	71	4	507
Car-coupling	S. B. Replogle	136, 547	Mar. 4, 1873	178	57	3	259
Car-coupling	S. Rogers	140, 545	July 1, 1873	173	59	4	92
Car-coupling	J. Royal, M. A. Lents, and J. M. Delbert	135, 849	Feb. 11, 1873	427	138	3	172
Car-coupling	L. Ruel	144, 034	Oct. 28, 1873	613	203	4	458
Car-coupling	H. G. Russell	144, 479	Nov. 11, 1873	267	90	4	511
Car-coupling	T. W. & T. D. Ryan	143, 932	Oct. 21, 1873	499	168	4	439
Car-coupling	A. Schorg and B. Van Valkenburgh	143, 099	Sept. 23, 1873	686	246	4	330
Car-coupling	E. R. Scott	143, 730	Oct. 14, 1873	303	100	4	413
Car-coupling	J. Seislove	143, 593	Oct. 14, 1873	180	61	4	404
Car-coupling	W. F. Senior	142, 873	Sept. 16, 1873	492	168	4	304
Car-coupling	F. J. Seybold	141, 895	Aug. 19, 1873	456	149	4	189
Car-coupling	W. P. Siddens	140, 957	July 15, 1873	554	186	4	72
Car-coupling	E. D. Smith	143, 728	Oct. 14, 1873	309	102	4	413
Car-coupling	J. E. Smith	142, 818	Sept. 16, 1873	447	151	4	300
Car-coupling	T. Smith	141, 177	July 22, 1873	775	253	4	99
Car-coupling	W. B. Snedaker	144, 293	Nov. 4, 1873	101	34	4	486
Car-coupling	X. Saint Pierre	144, 038	Oct. 28, 1873	616	204	4	459
Car-coupling	A. Strain	145, 371	Dec. 9, 1873	297	100	4	622
Car-coupling	J. R. Succop	136, 011	Feb. 18, 1873	573	189	3	196
Car-coupling	J. M. Sutton	136, 879	Mar. 18, 1873	478	159	3	302
Car-coupling	P. Swineford	143, 791	Oct. 21, 1873	383	127	4	429
Car-coupling	F. F. Taylor and G. Withington	142, 962	Sept. 16, 1873	568	192	4	311
Car-coupling	O. Taylor	143, 646	Oct. 14, 1873	228	76	4	408
Car-coupling	J. Temple	135, 948	Feb. 18, 1873	521	170	3	194
Car-coupling	J. Temple	142, 059	Aug. 19, 1873	601	198	4	201
Car-coupling	P. M. Thompson	142, 965	Sept. 16, 1873	571	193	4	311
Car-coupling	W. Todd	135, 387	Jan. 28, 1873	833	269	3	114
Car-coupling	J. B. Tracy	143, 429	Oct. 7, 1873	30	11	4	383
Car-coupling	A. Truxell and F. J. Williams	135, 866	Feb. 11, 1873	437	142	3	173
Car-coupling	W. H. and L. Waddell, and J. A. Lutz	142, 970	Sept. 16, 1873	576	194	4	311
Car-coupling	J. Waite	142, 750	Sept. 9, 1873	382	128	4	284
Car-coupling	J. M. Wells	144, 288	Nov. 4, 1873	105	35	4	487
Car-coupling	J. P. Whipple	137, 642	Apr. 8, 1873	331	102	3	395
Car-coupling	J. Wilcox	141, 846	Aug. 12, 1873	397	130	4	175
Car-coupling	E. Wiley	139, 221	May 20, 1873	690	217	3	577
Car-coupling	L. B. Wilson	135, 871	Feb. 11, 1873	442	144	3	174
Car-coupling	W. M. Wiswell	144, 008	Oct. 28, 1873	594	197	4	457
Car-coupling	G. Withington and F. F. Taylor	136, 969	Mar. 18, 1873	467	162	3	303
Car-coupling	M. R. Wood	144, 490	Nov. 11, 1873	276	93	4	512
Car-coupling	S. H. Zink	135, 955	Jan. 28, 1873	718	229	3	105
Car-coupling	A. Zeigler	143, 215	Sept. 23, 1873	778	268	4	338
Car-coupling attachment	W. G. Brown and J. W. Jenkins	135, 262	Jan. 28, 1873	723	231	3	105
Car-coupling device	L. L. Bond	136, 640	Mar. 11, 1873	270	90	3	276
Car-coupling pins, Die for making	C. H. Williams	140, 980	July 15, 1873	577	194	4	74
Car-coupling pins, Die for manufacturing	C. H. Williams	140, 981	July 15, 1873	579	195	4	74
Car coupling, Street	J. Stephenson	134, 616	Jan. 7, 1873	108	35	3	15
Car-couplings, Automatic attachment for	G. H. Merriam	145, 873	Dec. 16, 1873	573	188	4	656
Car-couplings, Link-guide for	W. Warinner and W. L. D. Johnson	144, 297	Nov. 4, 1873	104	35	4	487
Car, Deck-sash or ventilator-opener for railway	J. E. Cross	141, 037	July 22, 1873	642	216	4	89
Car, Device for applying steam-power to street-railway	W. W. Crane	138, 793	May 13, 1873	302	83	3	532
Car-door, Operating	J. G. and G. M. Brill	145, 839	Dec. 23, 1873	723	238	4	680
Car-door, Operating	J. A. O'Haire	142, 810	Sept. 15, 1873	441	149	4	300
Car, Driving-gear for hand	J. D. Hinckley	137, 922	Apr. 15, 1873	586	184	3	429
Car, Dumping	O. M. Avery	138, 361	Apr. 29, 1873	1, 016	320	3	481
Car, Dumping	L. C. Brady	144, 654	Nov. 18, 1873	425	143	4	535
Car, Dumping	T. Bootsmann	139, 362	May 27, 1873	821	262	3	595
Car, Dumping	J. Elliott, J. P. Harrington, and W. R. Davenport	144, 966	Nov. 25, 1873	692	224	4	569
Car, Dumping	J. M. Hanford and J. Wood	139, 575	June 3, 1873	112	37, 38	3	618
Car, Dumping	J. Hughes	140, 779	July 15, 1873	389	134	4	59
Car, Dumping	J. Hughes	142, 021	Aug. 19, 1873	560	185	4	198
Car, Dumping	J. G. Payson	140, 534	July 1, 1873	163	55	4	21
Car elevator, Coal	P. H. Lamey	135, 565	Feb. 4, 1873	157	51	3	140
Car elevator, Coal	P. H. Lamey	141, 148	July 22, 1873	742	245	4	97
Car for carrying petroleum	J. Clark	136, 813	Mar. 18, 1873	427	141	3	298
Car-frame	R. M. C. Parker	134, 701	Jan. 7, 1873	190	62	3	22
Car, Hand	J. D. Hinckley	140, 039	June 17, 1873	551	174	3	677
Car, Hand	D. M. Hunt	136, 652	Mar. 11, 1873	279	93	3	277
Car, Hand	L. H. Kenyon	143, 513	Oct. 7, 1873	96	34	4	388
Car heater, Railway	B. Berghausen and A. L. Kissling	144, 183	Nov. 4, 1873	6	2	4	479
Car heater, Railway	J. P. Michaels and L. W. Broadwell	135, 239	Jan. 28, 1873	702	225	3	104
Car heater, Railway	E. S. Scripture and W. Stackman	142, 737	Sept. 9, 1873	369	124	4	283
Car heater, Railway	J. H. Weibel	144, 425	Nov. 11, 1873	224	75	4	508
Car heater and ventilator, Railway	C. F. Whorf	138, 062	Apr. 22, 1873	730	231	3	450
Car heating and ventilating apparatus, Railway	T. H. Mott	141, 372	July 29, 1873	971	316	4	122
Car indicator, Railway	C. H. Coffin	139, 771	June 10, 1873	315	98	3	650
Car-mat	J. O'Neill	145, 588	Dec. 16, 1873	501	165	4	650
Car-mover	R. A. Cowell	141, 327	July 29, 1873	923	302	4	119
Car, Pneumatic railway	H. G. Yates	142, 605	Sept. 9, 1873	260	85	4	275
Car-propeller	J. Day	142, 443	Sept. 2, 1873	109	35	4	251
Car-propeller	G. W. Earl	144, 076	Oct. 28, 1873	648	213	4	461
Car-propeller	R. Steel and S. Austin	144, 235	Nov. 4, 1873	59	16	4	483
Car-pusher	A. S. Bailey	139, 529	June 3, 1873	72	25	3	615
Car, Railway	H. Buck	136, 359	Mar. 4, 1873	5	2	3	246
Car, Railway	L. G. Macfarlane	139, 680	June 10, 1873	221	71	3	643

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Car, Railway.....	F. Marin.....	143,363	Sept. 30, 1873	920	312	4	365
Car, Railway.....	C. W. Saladee.....	145,365	Dec. 9, 1873	293	99	4	621
Car, Railway.....	C. W. Saladee.....	145,366	Dec. 9, 1873	294	99	4	621
Car, Railway.....	K. Thompson and S. D. Beer-brower.	145,255	Dec. 2, 1873	194	67	4	600
Car, Railway.....	J. C. Wands.....	142,062	Aug. 19, 1873	603	199	4	301
Car, Railway freight.....	R. H. Gordon, sr.....	139,243	May 27, 1873	725	{ 222 229 }	3	587
Car, Railway freight.....	B. P. Lamason.....	135,717	Feb. 11, 1873	309	88	3	164
Car-replacer.....	J. T. Baxter.....	138,311	Apr. 29, 1873	977	307	3	478
Car-replacer.....	J. G. Burkhardt.....	144,188	Nov. 4, 1873	13	4	4	479
Car-replacer.....	H. Voth.....	137,965	Mar. 25, 1873	833	273	3	341
Car-replacer.....	A. Whittemore.....	142,135	Aug. 26, 1873	683	225	4	217
Car, Reversible street.....	W. T. Jenks.....	139,063	May 20, 1873	543	171	3	565
Car-roof.....	J. B. Slichter.....	142,129	Aug. 26, 1873	678	223	4	217
Car-seat.....	J. C. Wands.....	136,569	Mar. 4, 1873	195	64, 65	3	261
Car-seat.....	F. Farrell.....	139,561	June 3, 1873	102	34	3	617
Car-seat.....	P. W. Nolan.....	145,929	Dec. 2, 1873	172	59	4	599
Car seat and desk combined, Railway.....	W. C. Huffman.....	135,557	Feb. 4, 1873	151	48	3	139
Car seat, Railway.....	A. Barney.....	134,627	Jan. 7, 1873	119	39	3	16
Car seat, Railway.....	B. J. La Mothe.....	138,899	May 13, 1873	392	123	3	540
Car seat, Reversible.....	P. F. Duchemin.....	136,822	Mar. 18, 1873	434	144	3	298
Car, Sleeping.....	J. T. and D. R. Leighton.....	139,587	June 3, 1873	124	41	3	619
Car, Sleeping.....	J. T. and D. R. Leighton.....	142,923	Sept. 16, 1873	531	182	4	308
Car, Sleeping.....	J. T. and D. R. Leighton.....	145,664	Dec. 16, 1873	564	{ 185 186 }	4	655
Car, Sleeping.....	G. H. Lindner.....	145,113	Dec. 2, 1873	66	21	4	590
Car-spring.....	A. Bridges.....	139,862	June 17, 1873	400	125	3	664
Car-spring.....	E. T. Bussell.....	144,600	Nov. 18, 1873	376	127	4	532
Car-spring.....	J. W. Culmer.....	134,646	Jan. 7, 1873	139	44	3	18
Car-spring.....	D. G. Daniels.....	137,295	Apr. 1, 1873	14	5	3	358
Car-spring.....	G. Franklin.....	135,792	Feb. 11, 1873	376	{ 120 121 }	3	169
Car-spring.....	G. F. Godley.....	137,300	Apr. 1, 1873	19	6	3	358
Car-spring.....	A. Middleton, jr.....	138,675	May 6, 1873	186	59	3	512
Car-spring.....	A. W. Moses.....	143,175	Sept. 23, 1873	742	256	4	335
Car-spring.....	E. Myers.....	138,920	May 13, 1873	407	128	3	541
Car-spring.....	J. B. Quirk.....	138,433	Apr. 29, 1873	1,081	341	3	486
Car spring, Railway.....	J. W. Culmer.....	134,645	Jan. 7, 1873	138	44	3	17
Car spring, Railway.....	G. F. Godley.....	140,192	June 24, 1873	705	222	3	697
Car spring, Railway.....	W. Slicer.....	140,084	June 17, 1873	592	187	3	680
Car-springs, Manufacture of.....	N. and A. Middleton, jr.....	135,929	Feb. 18, 1873	506	165	3	193
Car-stake supporter.....	W. H. Masterman and W. T. Hooper.	135,436	Feb. 4, 1873	41	12	3	131
Car-starter.....	P. Bates, jr.....	135,193	Jan. 28, 1873	653	211	3	100
Car-starter.....	L. D. Benner.....	134,840	Jan. 14, 1873	321	103	3	46
Car-starter.....	S. R. and A. C. Bradley.....	138,848	May 13, 1873	351	109	3	536
Car-starter.....	T. Cooper.....	138,233	Apr. 29, 1873	899	284	3	472
Car-starter.....	J. Corbell.....	141,326	July 29, 1873	923	301	4	119
Car-starter.....	A. H. Crozier.....	144,260	Nov. 4, 1873	78	25	4	484
Car-starter.....	G. Fetter.....	139,134	May 20, 1873	611	191	3	570
Car-starter.....	G. W. Field and J. Steger.....	139,563	June 3, 1873	103	35	3	647
Car-starter.....	T. W. Johnson.....	140,781	July 15, 1873	391	134	4	59
Car-starter.....	J. B. Jones.....	135,920	Feb. 18, 1873	499	162	3	192
Car-starter.....	W. A. Jordan.....	144,546	Nov. 11, 1873	325	109	4	516
Car-starter.....	W. W. Lamberton and D. R. Lemman.	135,564	Feb. 4, 1873	156	50, 51	3	140
Car-starter.....	G. Lowden.....	139,721	June 10, 1873	965	83	3	646
Car-starter.....	C. J. Moore.....	141,159	July 23, 1873	753	248	4	98
Car-starter.....	B. F. Oakes.....	143,837	Oct. 21, 1873	493	141	4	433
Car-starter.....	L. C. Rodier and F. G. Bates.....	138,440	Apr. 29, 1873	1,068	344	3	487
Car-starter.....	J. G. Thompson.....	145,600	Dec. 16, 1873	510	168	4	651
Car-starter.....	I. C. Wallace and J. W. Andrews.	146,112	Dec. 30, 1873	990	320	4	712
Car-starter.....	N. J. Wilkinson.....	136,398	Mar. 4, 1873	41	14, 15	3	249
Car-starter.....	V. Wirrick.....	145,076	Dec. 2, 1873	34	11	4	588
Car-starter.....	J. J. Wheeler.....	135,167	Jan. 21, 1873	622	205	3	86
Car-starter.....	A. Whittemore.....	140,229	June 24, 1873	732	231	3	699
Car-starter.....	A. Whittemore.....	143,948	Oct. 21, 1873	513	173	4	440
Car-starter.....	A. Whittemore.....	145,468	Dec. 9, 1873	481	126	4	628
Car starter, Street railway.....	M. Toulmin.....	141,474	Aug. 5, 1873	59	18	4	139
Car, Stock.....	G. A. Egan.....	135,532	Feb. 4, 1873	126	40	3	137
Car, Stock.....	T. J. McCarty.....	143,414	Oct. 7, 1873	18	7	4	382
Car, Stock.....	O. Severance.....	144,798	Nov. 18, 1873	543	185	4	545
Car strap, Street.....	M. Warner.....	137,397	Apr. 1, 1873	105	34	3	365
Car, Street.....	W. T. Jenks.....	135,277	Jan. 28, 1873	736	237	3	107
Car, Street railway.....	S. H. Little.....	140,052	June 17, 1873	563	177	3	678
Car, Trussed-spring bolster for railway.....	J. Anderson.....	141,618	Aug. 12, 1873	200	63	4	159
Car unloader, Grain.....	M. W. Boesworth.....	145,780	Dec. 23, 1873	678	222	4	676
Car, Ventilating railway.....	J. G. Allen.....	141,617	Aug. 12, 1873	199	63	4	159
Car-ventilator.....	J. J. Crowley.....	135,971	Feb. 18, 1873	539	178	3	196
Car-ventilator.....	C. C. Gerhardt.....	136,502	Mar. 4, 1873	130	42	3	256
Car-ventilator.....	M. T. Hitchcock.....	145,871	Dec. 23, 1873	754	246	4	682
Car-ventilator.....	S. C. Maine.....	142,799	Sept. 16, 1873	432	146	4	299
Car-ventilator.....	A. J. Morrison.....	142,807	Sept. 16, 1873	438	148	4	300
Car-ventilator and dust-screen, Pocket.....	J. B. Timberlake.....	139,278	May 27, 1873	759	240	3	590
Car ventilator, Railway.....	D. W. Noyes.....	136,756	Mar. 11, 1873	365	121	3	284
Car ventilator, Railway.....	J. D. Simmons.....	145,760	Dec. 23, 1873	663	216	4	675
Car-wheel.....	A. Atwood.....	140,339	July 1, 1873	3	1	4	8
Car-wheel.....	J. E. Atwood.....	144,495	Nov. 11, 1873	280	94	4	513
Car-wheel.....	A. F. Cooper.....	143,560	Oct. 14, 1873	154	52	4	401
Car-wheel.....	G. Elmalie.....	144,195	Nov. 4, 1873	22	6	4	480
Car-wheel.....	A. C. Fletcher.....	145,856	Dec. 23, 1873	740	242	4	681
Car-wheel.....	F. A. Fouts.....	138,798	May 13, 1873	306	94	3	533
Car-wheel.....	J. W. Kern.....	136,068	Feb. 18, 1873	625	205	3	292
Car-wheel.....	H. Merrill.....	138,036	Apr. 22, 1873	706	223	3	448

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Car-wheel	R. Ramsey	134,929	Jan. 14, 1873	398	137	3	52
Car-wheel	J. K. Sax and G. W. Kear	142,587	Sept. 9, 1873	945	80	4	273
Car-wheel	G. W. and L. W. Snyder	136,392	Mar. 4, 1873	35	13	3	248
Car-wheel	J. and N. Tiranoff and A. Kon-sakoff	142,968	Sept. 16, 1873	574	194	4	311
Car-wheel	A. B. Wakofield and B. A. Berry-man	137,266	Mar. 25, 1873	833	274	3	341
Car-wheel	W. Wilmington	135,870	Feb. 11, 1873	441	144	3	173
Car-wheel, Lubricating	J. H. Murray	143,370	Sept. 30, 1873	925	313	4	366
Car-wheel lubricator	W. A. Bullard	145,395	Dec. 9, 1873	319	108	4	623
Car-wheel, Railway	W. H. Paige	141,011	July 22, 1873	619	209	4	87
Car-wheels, &c., Manufacture of cast-iron for	C. Burgess	143,874	Oct. 21, 1873	454	.....	4	435
Car-wheels, Mold for casting	J. B. Tarr	142,821	Sept. 16, 1873	449	152	4	301
Car, Wheelbarrow dumping	H. J. Peters	137,892	Apr. 15, 1873	536	167	3	425
Car window-screen, Railway	J. E. Earle	146,053	Dec. 30, 1873	938	302	4	708
Car-window shield	H. S. Hale	146,066	Dec. 30, 1873	948	306	4	709
Car-window spring-attachment	G. Cornwall	135,088	Jan. 21, 1873	545	177	3	79
Car-window stop, Adjustable	C. Page	141,165	July 22, 1873	759	250	4	98
Car-window, Ventilating	C. B. Knevals	145,805	Dec. 23, 1873	697	229	4	678
Car-windows, Dust guard for	O. C. Rife	135,385	Jan. 28, 1873	816	263	3	113
Car-windows, Ventilator and cinder and dust-guard for	O. C. Rife	140,531	July 1, 1873	169	57	4	22
Cars, Apparatus for loading and unloading baggage and freight from	O. C. Brown	138,557	May 6, 1873	81	26	3	504
Cars, Brake-beam for	D. Wellington	145,605	Dec. 16, 1873	514	169	4	651
Cars, Combined brake and starter for street	C. L. Irving	143,909	Oct. 21, 1873	481	162	4	437
Cars, Draw-head for railway	H. C. Lowrie	145,881	Dec. 23, 1873	765	250	4	683
Cars, Dumping-platform for railway	J. W. Harrison	143,758	Oct. 21, 1873	354	118	4	427
Cars, Elevating and transferring apparatus of railway	W. T. Beekman	145,611	Dec. 16, 1873	520	170	4	652
Cars, Folding-seat for street-railway	K. Egan	138,321	Apr. 29, 1873	987	310	3	479
Cars, Hanging signal-cord of railway	J. F. Rice	139,262	May 27, 1873	740	235	3	588
Cars, Loading railway flat	G. W. Penniston	138,577	May 6, 1873	98	31	3	506
Cars, Machine for bending truck-side for railway	J. H. Helm	143,010	Sept. 23, 1873	613	208	4	324
Cars, Machine for unloading flat	G. S. Caldwell	138,476	May 6, 1873	10	3	3	498
Cars, Mechanism for stopping and starting street	J. M. Starr	144,484	Nov. 11, 1873	271	92	4	512
Cars, Plow for unloading	J. McMullin	135,351	Jan. 28, 1873	801	259	3	112
Cars, Propulsion of	R. De Leidi	135,972	Feb. 18, 1873	539	179	3	196
Cars, Running-gear for railway	J. S. Lester	143,516	Oct. 7, 1873	98	35	4	388
Cars, Safety-hatch for railway	R. Listou	135,923	Feb. 18, 1873	501	163	3	193
Cars, Safety-platform for	H. E. Marchand	138,669	May 6, 1873	179	57	3	512
Cars, Safety-platform for railway	R. Strode	144,804	Nov. 18, 1873	549	186	4	546
Carboys, Tilting-stand for	A. W. Caverly	144,442	Nov. 11, 1873	237	79	4	509
Carbureter	W. H. Elston	136,228	Feb. 25, 1873	774	250	3	226
Carbureter	F. A. Fisher	140,998	July 22, 1873	607	205	4	86
Carbureter	T. B. Fogarty	135,981	Feb. 18, 1873	547	181	3	196
Carbureter	T. B. Fogarty	135,982	Feb. 18, 1873	548	181	3	196
Carbureter	T. Judd and C. H. Pierson	140,711	July 8, 1873	328	111	4	46
Carbureter	J. F. G. Kromschroder	137,307	Apr. 1, 1873	94	8	3	359
Carbureter	J. F. and G. E. Lockwood	142,545	Sept. 2, 1873	200	65	4	252
Carbureter	J. B. Lyman	146,082	Dec. 30, 1873	959	310	4	709
Carbureter	W. T. McMillen	143,523	Oct. 7, 1873	105	37	4	389
Carbureter	J. Maugrave	144,858	Nov. 25, 1873	609	207	4	561
Carbureter	I. W. Shaler	143,534	Oct. 7, 1873	118	40	4	390
Carbureter	I. Shimmous	145,248	Dec. 2, 1873	187	64, 65	4	640
Carbureter	A. S. Wilkinson	140,105	June 17, 1873	610	192	3	681
Carbureter, Air	T. Judd and E. Doty	138,409	Apr. 29, 1873	1,057	332	3	484
Carbureter, Air	E. F. Van Houten	141,968	Aug. 19, 1873	512	169	4	194
Carbureter, Gas	A. W. Porter	144,863	Nov. 25, 1873	613	208	4	561
Carbureting air, Machine for	J. H. Van Houten	135,020	Jan. 21, 1873	494	158	3	75
Carbureting-apparatus	T. Holmes	135,806	Feb. 11, 1873	393	126	3	170
Card and other cylinders, Device for traversing	F. Herboth	139,466	June 3, 1873	20	6	3	610
Card-back	H. R. Van Eps	138,454	Apr. 29, 1873	1,100	347	3	488
Card-case	H. H. Miller and T. Bennett	139,513	June 3, 1873	60	20	3	613
Card case, Postal	C. H. Townsend, T. E. Hughes, and A. A. Keith	144,423	Nov. 11, 1873	223	74	4	508
Card-grinding machine	T. C. Kirkham	140,376	July 1, 1873	34	11	4	11
Card-rack	D. A. Danforth and F. M. Win-chester	139,298	May 27, 1873	774	245	3	591
Card-rack	J. J. Gray	135,272	Jan. 28, 1873	730	224	3	106
Card-mount	J. H. Caterson	143,878	Oct. 21, 1873	457	153	4	435
Card, Postal	H. M. Johnston	144,677	Nov. 18, 1873	440	.....	4	537
Card-stripping machine, Traversing-cam for	G. E. Taft	140,740	July 8, 1873	353	118	4	48
Cards, Evener for wool	C. F. Morrison	144,348	Nov. 4, 1873	146	49	4	490
Cards for social games	P. West and G. S. Lee	142,423	Sept. 2, 1873	88	29	4	249
Cards, Playing	H. Billings	142,075	Aug. 26, 1873	631	207	4	213
Carding-machine, Condenser for	N. Lucas	143,020	Sept. 23, 1873	622	211	4	325
Carding-machines, &c., Condensing tube for	A. W. Skinner	135,015	Jan. 21, 1873	490	157	3	74
Carding machine, Delivering-apparatus for wool	J. and J. Dobson	144,840	Nov. 25, 1873	589	201	4	559
Carding-machine, Mechanism for operating the doffer-comb of	J. K. Proctor	140,304	June 24, 1873	796	253	3	705
Carding-machines, Waste-removing device for	G. W. Craner	140,814	July 15, 1873	424	144	4	82
Carpenters' bench	J. Jones	135,342	Jan. 28, 1873	793	256	3	111
Carpenters' gage	M. C. Robichau	141,014	July 22, 1873	623	210	4	87
Carpenters' gage	E. Sahn	144,359	Nov. 4, 1873	157	52	4	491
Carpenters' gage	J. A. Traut	141,475	Aug. 5, 1873	60	18	4	140
Carpet	J. Dornan	142,681	Sept. 9, 1873	322	107	4	280
Carpet	G. Iskiyan	145,803	Dec. 23, 1873	695	228	4	678
Carpet	R. Scott	142,947	Sept. 16, 1873	554	188	4	310
Carpet-beater	W. H. Hankinson	139,145	May 20, 1873	621	194	3	571
Carpet-beater	J. Hotherhall	143,155	Sept. 23, 1873	727	250	4	334
Carpet-beater	W. G. Mowry and C. Pullis	140,525	July 1, 1873	158	54	4	21

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Carpet-cleaner.....	H. W. Bates.....	140,990	July 22, 1873	600	203	4	85
Carpet-cleaner.....	J. Spaulding.....	141,243	July 29, 1873	848	277	4	113
Carpet-fastener.....	C. B. Broune.....	135,884	Feb. 18, 1873	471	152	3	190
Carpet-fastener.....	C. Harting.....	143,238	Sept. 30, 1873	806	277	4	356
Carpet-fastener.....	B. D. Kested.....	143,784	Oct. 21, 1873	377	125	4	429
Carpet-fastener.....	A. J. Williams.....	137,118	Mar. 25, 1873	700	232	3	331
Carpet-lining machine.....	J. R. Harrington.....	141,270	July 29, 1873	874	286	4	115
Carpet-lining, Machine for manufacturing.....	E. H. Bailey.....	143,053	Sept. 23, 1873	653	283	4	327
Carpet, Manufacture of.....	H. A. Clarke.....	142,439	Sept. 2, 1873	102	34	4	251
Carpet, Printed piled.....	T. Crossley.....	139,706	June 10, 1873	252	.....	3	645
Carpet-rag looper.....	W. Clayton, jr.....	140,889	July 15, 1873	484	164	4	67
Carpet-rag looper.....	J. F. Cooper.....	145,094	Dec. 2, 1873	51	16	4	589
Carpet-rag looper.....	F. J. Egger.....	142,778	Sept. 16, 1873	418	141	4	298
Carpet-rag looper and button-hole cutter, Combined.....	G. W. Morris and W. Lenhart.....	144,472	Nov. 11, 1873	260	87	4	511
Carpet-rag looper, button-hole cutter, and press-board, Combined.....	S. M. Whitten.....	136,633	Mar. 11, 1873	265	89	3	276
Carpet-stretcher.....	W. A. Boles.....	141,418	Aug. 5, 1873	7	2	4	135
Carpet-stretcher.....	L. Faulkhauser.....	134,873	Jan. 14, 1873	350	111	3	48
Carpet-stretcher.....	J. S. Greene and T. D. Bradt.....	138,560	May 6, 1873	84	27	3	504
Carpet-stretcher.....	P. Kelly.....	138,333	Apr. 29, 1873	995	313	3	479
Carpet-stretcher.....	J. Lindsay.....	141,446	Aug. 5, 1873	32	10	4	137
Carpet-stretcher.....	J. Luther.....	144,464	Nov. 11, 1873	253	85	4	510
Carpet-stretcher.....	A. F. Michael and H. N. Duncan.....	140,522	July 1, 1873	154	52	4	21
Carpet-stretcher.....	H. Powelson.....	143,032	Sept. 23, 1873	633	216	4	326
Carpet-stretcher.....	N. K. Shelton.....	136,339	Feb. 25, 1873	874	282	3	233
Carpet-stretcher.....	C. Terry.....	138,450	Apr. 29, 1873	1,098	346	3	488
Carpet-stretcher.....	O. Vanorman.....	137,739	Apr. 8, 1873	494	130	3	403
Carpet-stretcher.....	D. White.....	137,522	Apr. 1, 1873	224	69	3	375
Carpet stretcher and tacker.....	Z. A. Ward.....	145,604	Dec. 16, 1873	514	169	4	651
Carpet-sweeper.....	W. Miller.....	140,293	June 24, 1873	788	250	3	704
Carpet-sweeper.....	H. A. Palmer and A. H. Spencer.....	146,016	Dec. 30, 1873	905	293	4	705
Carriage.....	H. E. Delessert.....	141,704	Aug. 12, 1873	271	88	4	165
Carriage.....	L. Glesenkamp.....	137,914	Apr. 15, 1873	580	182	3	429
Carriage.....	T. B. Patton.....	135,287	Jan. 28, 1873	742	239	3	107
Carriage.....	G. K. Tichenor.....	142,531	Sept. 2, 1873	188	61	4	257
Carriage.....	F. M. Watson.....	141,190	July 22, 1873	787	257	4	100
Carriage and wagon seat.....	C. K. Lehmann.....	143,515	Oct. 7, 1873	97	34	4	388
Carriage-axle.....	S. S. Cook.....	145,280	Dec. 9, 1873	220	75	4	616
Carriage-axle and axle-box.....	B. A. Berryman.....	135,068	Jan. 21, 1873	534	173	3	78
Carriage axle-tree, Gage for setting.....	L. D. Cross.....	136,819	Mar. 18, 1873	432	143	3	298
Carriage-axles, Machine for rolling.....	J. C. Richardson.....	136,620	Mar. 11, 1873	258	85	3	275
Carriage-axles, Machine for rolling.....	J. C. Richardson.....	145,526	Dec. 16, 1873	451	{ 147 } { 148 }	4	645
Carriage-axles, Machine for turning.....	H. E. Forrest.....	137,769	Apr. 15, 1873	459	143	3	418
Carriage-axles, Machine for turning.....	W. Jones.....	144,908	Nov. 25, 1873	643	219	4	564
Carriage-axles, Manufacture of.....	J. C. and J. Lones, C. Vernon, and E. Holden.....	145,510	Dec. 16, 1873	433	{ 141 } { 142 }	4	644
Carriage-axle, Manufacture of.....	A. and J. Schirck and J. Smith.....	136,460	Mar. 4, 1873	89	31	3	253
Carriage, Baby.....	C. H. Amidon.....	134,623	Jan. 7, 1873	114	37	3	16
Carriage, Baby.....	S. McIntire.....	136,607	Mar. 11, 1873	240	81	3	274
Carriage-bolt.....	I. Newton.....	141,661	Aug. 12, 1873	237	74	4	162
Carriage-bolts, Die for making.....	E. H. Plant.....	137,023	Mar. 18, 1873	602	199	3	312
Carriage, Child's.....	A. F. R. Arndt.....	143,803	Oct. 21, 1873	395	131	4	430
Carriage, Child's.....	J. A. Bechler.....	134,630	Jan. 7, 1873	121	39, 40	3	16
Carriage, Child's.....	R. G. Britton.....	135,764	Feb. 11, 1873	348	{ 111 } { 112 }	3	167
Carriage, Child's.....	J. A. Crandall.....	134,256	Jan. 14, 1873	334	107	3	47
Carriage, Child's.....	T. Galt.....	136,746	May 13, 1873	260	81	3	528
Carriage, Child's.....	T. Galt.....	143,818	Oct. 21, 1873	406	135	4	431
Carriage, Child's.....	L. Havasy.....	143,624	Oct. 14, 1873	210	71	4	406
Carriage, Child's.....	J. N. Hazelip.....	145,298	Dec. 9, 1873	237	80	4	617
Carriage, Child's.....	J. G. Kamphaus.....	143,628	Oct. 14, 1873	212	72	4	406
Carriage, Child's.....	H. M. Richardson.....	143,421	Oct. 7, 1873	23	9	4	582
Carriage, Child's.....	G. L. Shepard.....	140,598	July 8, 1873	235	79	4	39
Carriage, Child's.....	L. Snow and J. Haseltine.....	145,692	Dec. 16, 1873	589	193	4	657
Carriage, Child's.....	F. Snyder.....	139,978	June 17, 1873	485	156	3	672
Carriage, Child's.....	W. H. Towers.....	144,166	Oct. 28, 1873	723	241	4	467
Carriage, Child's.....	J. B. Wightman.....	134,576	Jan. 7, 1873	71	22	3	12
Carriage-clip die.....	E. Meeker.....	142,804	Sept. 16, 1873	436	147	4	289
Carriage-clip forming-machine.....	W. S. Ward.....	137,517	Apr. 1, 1873	218	67	3	374
Carriage-clip swaging-die.....	E. R. Miller.....	139,413	May 27, 1873	875	280	3	599
Carriage-cover.....	E. H. Elliott.....	144,193	Nov. 4, 1873	20	6	4	480
Carriage-curtain.....	H. Donnell.....	134,862	Jan. 14, 1873	340	108	3	47
Carriage-curtain fastener.....	H. Drake.....	139,663	June 10, 1873	204	67	3	642
Carriage-curtain fastener.....	W. M. Terry.....	139,438	May 27, 1873	895	288	3	601
Carriage-curtain fastening.....	F. Baumgartner.....	145,328	Dec. 9, 1873	266	89	4	619
Carriage-curtain fastening.....	J. H. Gleason.....	132,799	May 13, 1873	306	95	3	533
Carriage-curtain knob.....	C. M. Munson.....	140,723	July 8, 1873	338	114	4	47
Carriage, Dash-rail for.....	B. B. Noyes and O. G. Stratton.....	135,834	Feb. 11, 1873	414	134	3	171
Carriage, Dash-rail for child's.....	M. Hine.....	137,446	Apr. 1, 1873	149	48	3	369
Carriage-door.....	J. Carson.....	144,440	Nov. 11, 1873	236	79	4	509
Carriage-door.....	J. Cunningham.....	138,008	Apr. 22, 1873	675	214	3	446
Carriage foot-rail.....	T. W. and H. K. Porter.....	143,031	Sept. 23, 1873	633	216	4	326
Carriage for tramways, Steam.....	J. Grantham.....	142,459	Sept. 2, 1873	123	39	4	252
Carriage holdback.....	D. Terry.....	143,199	Sept. 23, 1873	763	263	4	337
Carriage-hook, Landau.....	O. S. Osborn.....	139,515	June 3, 1873	62	21	3	614
Carriage-iron.....	H. K. Porter.....	146,093	Dec. 30, 1873	972	314	4	711
Carriage-jack.....	D. Hiestand.....	137,202	Mar. 25, 1873	777	256	3	337
Carriage-jack.....	D. R. Wight.....	145,922	Dec. 23, 1873	801	262	4	686
Carriage-look plate-blanks, Machine for cutting.....	T. Insell and J. F. Dovey.....	142,854	Sept. 16, 1873	476	162	4	303
Carriage, Manufacture of rub-irons for.....	H. W. Oliver, jr.....	136,857	Mar. 18, 1873	461	153	3	301
Carriage-offsets or stay-ends, Die for forging.....	D. Wilcox.....	144,375	Nov. 4, 1873	169	56, 57	4	492
Carriage-pole tip.....	S. Mason.....	145,885	Dec. 23, 1873	768	251	4	684
Carriage-protector.....	G. B. Brown.....	139,364	May 27, 1873	823	263	3	595
Carriage running-gear.....	R. Kline and R. M. Jack.....	139,164	May 20, 1873	643	201	3	573

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Carriage running-gear	J. L. Ware	136, 570	Mar. 4, 1873	196	65	3	261
Carriage-seat	C. K. Mellinger	134, 692	Jan. 7, 1873	182	60	3	21
Carriage-seat	J. N. Miller	141, 065	July 22, 1873	665	224	4	91
Carriage-seat fastener	M. Brockway, jr.	140, 572	July 8, 1873	213	71	4	37
Carriage-seat, Shifting-rail for	H. Dressel	141, 335	July 29, 1873	930	303	4	120
Carriage-shaft-holding attachment	A. C. Maxfield	143, 582	Oct. 14, 1873	173	58	4	403
Carriage-spring	J. Bullock	145, 333	Dec. 9, 1873	270	90	4	619
Carriage-spring	J. Curtis	143, 514	Nov. 11, 1873	293	99	4	514
Carriage-spring	C. S. S. Griffing	137, 197	Mar. 25, 1873	772	255	3	336
Carriage-spring	C. F. Hall	138, 247	Apr. 29, 1873	915	288	3	473
Carriage-spring	G. W. Harlan	142, 627	Sept. 9, 1873	276	91	4	276
Carriage-spring	G. Hopson	143, 576	Oct. 14, 1873	168	56	4	403
Carriage-spring	T. Murgatroyd	139, 325	May 27, 1873	794	253	3	593
Carriage-spring	J. W. Post	134, 703	Jan. 7, 1873	192	62	3	22
Carriage-spring	J. D. Richardson	138, 438	Apr. 29, 1873	1,066	343	3	487
Carriage-spring	R. Walker	145, 374	Dec. 9, 1873	299	101	4	622
Carriage-spring	J. B. Whitcomb	136, 116	Feb. 18, 1873	666	218	3	205
Carriage-spring	T. H. Wood	139, 348	May 27, 1873	811	259	3	594
Carriage-spring clip	D. W. Baird	139, 648	June 10, 1873	193	63	3	641
Carriage-spring, Clip-plate for	N. C. Dean	134, 859	Jan. 14, 1873	336	108	3	47
Carriage-step	G. A. Keone	135, 815	Feb. 11, 1873	401	129	3	170
Carriage-step	C. H. Gould	137, 547	Apr. 8, 1873	252	77	3	389
Carriage-top	G. Bockstaller	139, 450	June 3, 1873	3	1	3	609
Carriage-top	C. A. Dearborn	144, 069	Oct. 28, 1873	644	212	4	461
Carriage-top	D. B. Dorsey	145, 730	Dec. 23, 1873	634	206	4	673
Carriage-top	J. N. Gill	144, 612	Nov. 18, 1873	388	130	4	533
Carriage-top	W. I. Peck	141, 377	July 29, 1873	976	317	4	183
Carriage-top	H. Saylor	144, 704	Nov. 18, 1873	464	157	4	539
Carriage-top	J. H. Snyder	142, 050	Aug. 19, 1873	594	195	4	200
Carriage-top	G. H. Young	139, 225	May 20, 1873	693	218	3	577
Carriage-top joint	J. H. Combs	143, 669	Oct. 14, 1873	246	83	4	409
Carriage-top joint	W. B. C. Stirling and J. W. Pohlman	145, 135	Dec. 2, 1873	93	30	4	593
Carriage-top prop	W. P. Elam	145, 935	Dec. 30, 1873	835	272	4	699
Carriage, Top-prop for	L. W. Blessing	142, 829	Sept. 16, 1873	504	172	4	305
Carriage-top setter	J. Poffenbarger	143, 183	Sept. 23, 1873	748	258 259	4	336
Carriage-tops, Concealed jointed brace for	D. W. Baird	143, 316	Sept. 30, 1873	871	298	4	362
Carriage-wheel	H. Gwynn	145, 646	Dec. 16, 1873	550	181	4	634
Carriage-wheel to axle, Securing	H. N. Fischer and D. Bruhn	135, 327	Jan. 28, 1873	778	252	3	110
Carriage-window	J. Hensgen and E. Kruger	142, 229	Aug. 26, 1873	761	250	4	223
Carrier:							
<i>See</i> Egg-carrier.							
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Cart, Dumping	B. G. Fitzhugh	138, 013	Apr. 22, 1873	680	215	3	446
Cart, Dumping	B. G. Fitzhugh	140, 025	June 17, 1873	536	169	3	675
Cart, Excavating	W. Harles	135, 546	Feb. 4, 1873	143	45	3	139
Cart-loading apparatus	B. G. Fitzhugh	137, 768	Apr. 15, 1873	456	142 143	3	418
Cart, Self-loading	R. B. Cantrell	138, 854	May 13, 1873	356	110	3	537
Cartridge	J. Logan and G. E. Hart	142, 924	Sept. 16, 1873	533	182	4	308
Cartridge-box	T. F. Brabson	138, 847	May 13, 1873	350	108	3	536
Cartridge-box	W. H. Elliott	139, 885	June 17, 1873	422	131	3	666
Cartridge-box	S. McKeever	139, 846	June 10, 1873	377	117	3	655
Cartridge-box	S. McKeever	139, 847	June 10, 1873	378	117	3	655
Cartridge-capping and uncapping device	G. S. Greene, jr.	137, 071	Mar. 25, 1873	657	218	3	328
Cartridge-capping and uncapping device	G. V. McGraw	140, 718	July 8, 1873	335	113	4	47
Cartridge-capping and uncapping device	J. F. Nettleton	138, 180	Apr. 22, 1873	828	263	3	458
Cartridge-capping implement	H. M. Bronson	144, 435	Nov. 11, 1873	231	78	4	509
Cartridge-capping tool	J. L. Raub	137, 720	Apr. 8, 1873	406	124	3	401
Cartridge-capping, uncapping, and charging implement	W. M. Fowler	142, 157	Aug. 26, 1873	701	231	4	219
Cartridge caps, &c., Forming metallic case for	S. W. Wood	144, 010	Oct. 28, 1873	585	197	4	457
Cartridge-case, Metallic	S. W. Wood	144, 012	Oct. 28, 1873	587	197	4	457
Cartridge-ejector for revolving fire-arm	J. T. and G. M. Smith, and J. J. Sweeney	136, 871	Mar. 18, 1873	470	156	3	301
Cartridge, Electrical gun	T. P. Mott and S. Gardiner, jr.	138, 679	May 6, 1873	189	60	3	513
Cartridge for fire-arms	T. T. S. Laidley	140, 144	June 24, 1873	664	208	3	694
Cartridge for fire-arms	S. W. Wood	144, 011	Oct. 28, 1873	586	197	4	457
Cartridge-holder	L. J. Gaines	136, 987	Mar. 18, 1873	570	190	3	309
Cartridge-loading device	T. L. Sturtevant	141, 185	July 22, 1873	782	256	4	100
Cartridge-loading machine	A. C. Hobbs	135, 913	Feb. 18, 1873	494	160	3	192
Cartridge-loading machine	T. L. Sturtevant	138, 294	Apr. 29, 1873	962	302	3	477
Cartridge-magazine blocks to fire-arms, Attaching	H. Metcalfe	143, 415	Oct. 7, 1873	19	8	4	382
Cartridge, Metallic	B. Burton	136, 130	Feb. 25, 1873	697	226	3	220
Cartridge, Metallic	L. M. Milbank	136, 168	Feb. 25, 1873	729	235	3	222
Cartridge of fusible metal, &c.	W. H. Tooth	136, 468	Mar. 4, 1873	100	.....	3	254
Cartridge-retractor for revolving fire-arm	W. Clews	136, 134	Feb. 25, 1873	702	227	3	220
Cartridge-shell with bullets, Machine for interlocking	A. C. Hobbs	143, 981	Oct. 28, 1873	565	188	4	454
Cartridge, Shot	S. W. Paine	136, 336	Feb. 25, 1873	871	281	3	233
Carving-machine	H. Cottrell	144, 745	Nov. 18, 1873	497	169	4	542
Carving-machine	H. Grubenbecher	137, 837	Apr. 15, 1873	517	161	3	423
Carving-machine	H. Thomas	139, 980	June 17, 1873	496	157	3	672
Case:							
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Casing-spear.....	V. Gretter.....	143, 141	Sept. 23, 1873	717	246	4	333
Cask, &c., Beer-drawing attachment for.....	S. Marks.....	144, 119	Oct. 23, 1873	623	226	4	464
Cask, Brewer's stocking.....	J. J. Baker.....	141, 354	July 29, 1873	956	311	4	121
Cask, Construction of metallic.....	J. L. Bard.....	137, 500	Apr. 8, 1873	288	89	3	392
Cask-pitching apparatus.....	F. Brenner.....	137, 173	Mar. 25, 1873	747	247	3	334
Casks, barrels, &c., Apparatus for pitching.....	G. Meyer and J. Dick.....	141, 449	Aug. 5, 1873	35	11	4	138
Cast ring, Mandrel for holding tapered.....	G. E. Brettell.....	140, 113	June 24, 1873	637	200	3	692
Caster.....	S. Curtis.....	143, 334	Sept. 30, 1873	806	303	4	363
Caster.....	J. Toler.....	139, 912	May 20, 1873	683	215	3	576
Caster.....	G. W. Wiatt.....	145, 769	Dec. 23, 1873	670	218	4	676
Caster-attachment for furniture.....	J. H. Travis.....	140, 097	June 17, 1873	603	190	3	681
Caster, Furniture.....	G. H. Glad.....	144, 530	Nov. 11, 1873	309	104	4	515
Caster, Furniture.....	J. Johnson.....	136, 522	Mar. 4, 1873	153	49	3	257
Caster, Furniture.....	J. Parry.....	135, 286	Jan. 22, 1873	742	239	3	107
Caster, Furniture.....	C. B. Sheldon.....	137, 949	Mar. 25, 1873	818	268	3	340
Caster, Furniture.....	C. B. Sheldon.....	137, 250	Mar. 25, 1873	819	269	3	340
Caster, Furniture.....	C. B. Sheldon.....	137, 251	Mar. 25, 1873	820	269	3	340
Caster, Furniture.....	C. B. Sheldon.....	137, 728	Apr. 8, 1873	412	126	3	402
Caster, Furniture.....	C. B. Sheldon.....	139, 619	June 3, 1873	151	50	3	621
Caster, Salt and pepper.....	J. Bird.....	142, 670	Sept. 9, 1873	314	104	4	279
Caster, Sewing-machine.....	E. R. Clark.....	142, 615	Sept. 9, 1873	268	82	4	275
Caster, Sewing-machine.....	J. B. Lincoln.....	137, 141	Mar. 25, 1873	717	238	3	332
Caster, Sewing-machine.....	J. H. Plank.....	138, 606	June 3, 1873	140	46	3	620
Caster, Sewing-machine.....	G. K. Proctor.....	139, 608	June 3, 1873	142	46, 47	3	620
Caster, Sewing-machine.....	J. K. Proctor.....	145, 011	Nov. 25, 1873	730	246	4	572
Caster, Sewing-machine.....	J. Robertson.....	141, 226	July 29, 1873	840	274	4	112
Caster, Sewing-machine.....	J. E. Smith.....	143, 387	Sept. 30, 1873	937	317	4	367
Caster-stand.....	G. D. Dudley.....	134, 738	Jan. 14, 1873	222	75	3	39
Caster, Table.....	H. Faehs.....	142, 905	Sept. 16, 1873	517	178	4	306
Caster, Table.....	T. Shaw.....	137, 248	Mar. 25, 1873	818	268	3	340
Caster, Table.....	C. B. Sheldon.....	141, 390	July 29, 1873	989	321	4	124
Caster, Wheel for furniture.....	C. B. Sheldon.....	140, 310	June 24, 1873	804	255	3	706
Caster, Wheel for furniture.....	C. B. Sheldon.....	140, 311	June 24, 1873	804	255	3	706
Castings, Tumbling-barrel for cleaning.....	J. S. Elliott.....	137, 901	Apr. 15, 1873	571	179	3	428
Caterpillars, Compound for destroying.....	F. N. Bixby.....	137, 409	Apr. 1, 1873	115	38	3	366
Cattle, Apparatus for supplying salt to.....	G. F. Whisenant.....	134, 959	Jan. 14, 1873	424	.....	3	54
Cattle-blinder.....	F. Staumberger.....	137, 390	Apr. 1, 1873	100	32	3	365
Cattle-guard, Railway.....	M. Backmayr.....	138, 224	Apr. 29, 1873	891	281	3	471
Cattle-stanchion.....	G. W. Newton.....	137, 021	Mar. 18, 1873	600	199	3	312
Ceiling and floor, Fire-proof.....	C. W. Sawley.....	144, 360	Nov. 4, 1873	158	52	4	491
Cellars, water-closets, &c., Apparatus for emptying.....	J. W. Bassett.....	138, 118	Apr. 22, 1873	773	247	3	454
Cement, Compound for hydraulic.....	R. Boeklen.....	142, 200	Aug. 26, 1873	737	243	4	221
Cement-lined pipe.....	A. Pfund.....	135, 582	Feb. 4, 1873	179	.....	3	141
Cement-lined pipe.....	M. Stephens.....	137, 970	Apr. 15, 1873	627	197	3	432
Cement, Manufacture of.....	M. Stephens.....	142, 528	Sept. 2, 1873	184	60	4	256
Cement, Manufacture of artificial hydraulic.....	J. E. Park.....	138, 924	May 13, 1873	412	.....	3	541
Cement, Rubber.....	W. B. Tucker.....	138, 770	May 13, 1873	281	.....	3	530
Center-board for vessel.....	W. Moshier.....	138, 917	May 13, 1873	406	.....	3	541
Center-board for vessel.....	J. Call.....	142, 677	Sept. 9, 1873	319	106	4	290
Center-board for vessel.....	J. Espalla.....	144, 968	Nov. 25, 1873	694	234	4	569
Centrifugal machine.....	E. J. M. Becker.....	139, 108	May 20, 1873	583	183	3	568
Centrifugal machine.....	C. T. Burchardt.....	136, 485	Mar. 4, 1873	115	38	3	255
Centrifugal machine.....	J. Sparrow.....	138, 705	May 6, 1873	211	66	3	514
Centrifugal machine for draining sugar.....	P. Cramer.....	144, 319	Nov. 4, 1873	122	41	4	488
Centrifugal machine for draining sugar.....	C. Fischer.....	144, 752	Nov. 18, 1873	503	171	4	542
Centrifugal machine for purifying sugar.....	H. Prieur.....	135, 727	Feb. 11, 1873	316	100	3	164
Cess-pool cleaning apparatus.....	W. C. McCarthy.....	138, 034	Apr. 22, 1873	704	222	3	448
Cess-pool, sink, &c., Apparatus for cleaning.....	J. P. F. Datchy.....	142, 840	Sept. 16, 1873	466	158	4	302
Chain, Box-slide for ornamental.....	O. J. Valentine.....	136, 946	Mar. 18, 1873	536	177	3	306
Chain for cart-saddle, Back.....	W. B. McClure.....	135, 235	Jan. 22, 1873	699	224	3	104
Chain-link, Machine for making ornamental.....	E. I. Levvasseur.....	138, 413	Apr. 29, 1873	1,061	334	3	485
Chain-link, Ornamental.....	J. J. Freeman.....	136, 594	Mar. 11, 1873	231	78	3	273
Chain-links, Machine for bending.....	C. B. Long.....	145, 511	Dec. 16, 1873	436	142	4	644
Chain-links, Machine for bending.....	D. Roy.....	145, 072	Dec. 2, 1873	29	10	4	588
Chain-machine.....	G. W. Binnix.....	137, 408	Apr. 1, 1873	114	38	3	366
Chain-machine.....	J. Daykin and W. B. Case.....	143, 968	Oct. 23, 1873	552	182	4	453
Chain-machine.....	B. Hershey.....	139, 151	May 20, 1873	626	196	3	571
Chain-machine.....	F. Leonard.....	140, 583	July 8, 1873	220	74	4	37
Chain-machine.....	F. Leonard.....	145, 063	Dec. 9, 1873	21	7, 8	4	587
Chain-making machine.....	L. Souther.....	141, 734	Aug. 12, 1873	224	90	4	167
Chain, Ornamental.....	W. F. Davis.....	142, 841	Sept. 16, 1873	467	152	4	302
Chains, Method of fastening blocks in triple.....	P. Kendrick.....	142, 110	Aug. 26, 1873	662	217	4	215
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Dental chair.							
Folding-chair.							
Harness-maker's chair.							
Invalid-chair.							
Knock-down chair.							
Ladder-chair.							
Oscillating-chair.							
Photograph-chair.							
Railway-chair.							
Reclining-chair.							
Rocking-chair.							
School-chair.							
Sewing-machine chair.							
Tilting-chair.							
Tip-chair.							
Chair.....	L. H. Baker.....	134, 894	Jan. 14, 1873	317	101	3	45
Chair.....	J. Baughman and B. R. Chalk.....	136, 956	Mar. 18, 1873	543	179	3	307
Chair.....	W. T. Doremus.....	139, 948	June 17, 1873	473	149	3	670
Chair.....	G. Feldkamp.....	144, 060	Oct. 28, 1873	652	214 215	4	462
Chair.....	W. Gardner.....	139, 568	June 3, 1873	107	36	3	617
Chair.....	H. S. Hale.....	146, 065	Dec. 30, 1873	947	305	4	708
Chair.....	L. Heywood.....	134, 545	Jan. 7, 1873	38	12	3	10
Chair.....	J. Morrison and H. M. Hutchinson.....	144, 349	Nov. 4, 1873	147	49	4	490
Chair.....	J. K. Rowley.....	138, 939	May 13, 1873	424	133	3	542
Chair and basket splint, Machine for making.....	J. B. Poe.....	141, 948	Aug. 19, 1873	498	164	4	193
Chair and secretary, Combined.....	G. C. Taylor.....	142, 418	Sept. 2, 1873	84	28	4	249
Chair and step-ladder, Combined.....	B. F. Green.....	140, 363	July 1, 1873	24	8	4	10
Chair, Attachable rocker for.....	P. J. & J. H. Welsh.....	138, 826	May 13, 1873	330	101	3	535
Chair-back, Bow for.....	C. Kilburn.....	134, 896	Jan. 14, 1873	370	117	3	50
Chair-brace.....	G. F. Ellis.....	136, 824	Mar. 18, 1873	435	144	3	299
Chair, Foot-rest for.....	E. Collins.....	134, 733	Jan. 14, 1873	229	73	3	39
Chair-frame.....	G. Gardner.....	142, 625	Sept. 9, 1873	275	90	4	276
Chair-frame.....	L. Heywood and E. E. Horton.....	134, 544	Jan. 7, 1873	38	12	3	10
Chair-rocker.....	M. Wilcox and C. Depledge.....	145, 036	Nov. 25, 1873	756	255	4	574
Chair-seat.....	J. P. Sinclair.....	141, 295	July 29, 1873	894	293	4	117
Chair seat and back.....	W. T. Doremus.....	134, 593	Jan. 7, 1873	89	28	3	14
Chair, &c., Seat for.....	W. T. Doremus.....	135, 973	Feb. 18, 1873	540	179	3	196
Chair seat or back.....	G. Gardner.....	142, 624	Sept. 9, 1873	274	90	4	276
Chair seat or back.....	R. W. Myers.....	141, 374	July 29, 1873	974	316	4	123
Chair-spring, &c.....	W. T. Doremus.....	144, 020	Oct. 28, 1873	603	199	4	457
Chair, &c., Spring.....	W. T. Doremus.....	144, 664	Nov. 18, 1873	430	145	4	536
Chair, table, and bureau, Combined.....	H. Martindale.....	134, 691	Jan. 7, 1873	182	59	3	21
Chair, table, and lounge, Combined.....	J. Croghan.....	137, 062	Mar. 25, 1873	647	215	3	327
Chandelier.....	N. L. Bradley.....	134, 585	Jan. 7, 1873	81	26	3	13
Chandelier.....	J. Kintz.....	139, 066	May 20, 1873	546	172	3	565
Chandelier center.....	J. Kintz.....	142, 165	Aug. 26, 1873	707	233	4	219
Chandelier, Extension.....	L. Hull.....	142, 107	Aug. 26, 1873	660	217	4	215
Chandelier, Lamp.....	J. Aulbach.....	142, 189	Aug. 26, 1873	726	240	4	221
Chandelier, Sliding.....	G. F. Blaise.....	140, 003	June 17, 1873	516	164	3	674
Chandelier, Sliding or extension.....	J. Brannen.....	140, 459	July 1, 1873	96	33	4	18
Change gate.....	A. W. Wood.....	140, 986	July 15, 1873	585	197	4	75
Channelling and edging tool.....	L. Bauer.....	137, 404	Apr. 1, 1873	110	36	3	366
Charcoal used in rectifying spirits, Revivifying.....	A. Ernst.....	136, 222	Feb. 25, 1873	775	.....	3	226
Charcoal used in rectifying spirits, Revivifying.....	C. L. Fleischmann.....	136, 147	Feb. 25, 1873	713	.....	3	221
Check, Baggage.....	M. Curless.....	141, 205	July 29, 1873	810	265	4	110
Check box, Conductor's.....	J. F. Gaunt.....	139, 780	June 10, 1873	322	100	3	650
Check-hook.....	H. W. Burruss.....	135, 075	Jan. 21, 1873	539	175	3	79
Check-hook.....	A. V. M. Sprague.....	140, 535	July 1, 1873	182	62	4	23
Check-runner.....	J. Haggerty.....	142, 160	Aug. 26, 1873	704	232	4	219
Cheese-cutter.....	J. Locke.....	138, 903	May 13, 1873	395	124	3	540
Cheese, fruit, &c., press.....	B. G. Martin.....	134, 910	Jan. 14, 1873	382	121 122	3	51
Cheese-hook.....	G. B. Boomer.....	135, 514	Feb. 4, 1873	108	34	3	136
Cheese, Process for making.....	H. O. Freeman.....	136, 051	Feb. 18, 1873	608	.....	3	201
Cheese skipper-extractor.....	C. Green.....	135, 542	Feb. 4, 1873	139	44	3	138
Cheese-vat.....	D. F. Barclay.....	140, 670	July 8, 1873	293	99	4	43
Cherry-stoner.....	E. Buck and E. W. Kirk.....	144, 887	Nov. 25, 1873	629	214	4	563
Cherry-stoner.....	J. S. Lash.....	141, 649	Aug. 12, 1873	225	71	4	161
Cherry-stoner.....	D. C. Warner.....	135, 050	Jan. 21, 1873	521	168	3	77
Chest-protector.....	E. F. Wilder.....	137, 275	Mar. 25, 1873	840	276	3	342
Chest-protector and shirt-bosom support, Combined.....	J. A. Aston and C. C. McMurphy.....	142, 368	Sept. 2, 1873	40	14	4	245
Chevron.....	F. S. Johnston.....	135, 124	Jan. 21, 1873	576	187 188	3	81
Child's chair.....	R. Ardrey.....	145, 829	Dec. 23, 1873	716	235	4	690
Child's chair.....	J. F. Downing.....	138, 620	May 6, 1873	132	43	3	508
Child's chair.....	J. F. Downing.....	140, 900	July 15, 1873	497	167 168	4	68
Child's chair.....	J. F. Harris and E. D. Childs.....	137, 610	Apr. 8, 1873	305	94, 95	3	383
Chimney.....	J. Browell.....	137, 412	Apr. 1, 1873	118	39	3	366
Chimney and fire-place.....	J. Briggs.....	139, 111	May 20, 1873	586	184	3	568
Chimney-cap.....	T. Boyd.....	141, 107	July 22, 1873	704	236	4	94
Chimney-cowl.....	J. Burgy.....	141, 541	Aug. 5, 1873	114	36	4	144
Chimney-cowl.....	G. H. Gardnerwine.....	142, 909	Sept. 16, 1873	521	177	4	307
Chimney-cowl.....	W. H. Myers.....	137, 561	Apr. 8, 1873	263	81	3	380
Chimney-cowl.....	J. H. Richardson.....	139, 080	May 20, 1873	561	176	3	566
Chimney-furnace.....	L. White.....	143, 739	Oct. 14, 1873	319	106	4	414
Chimney or globe-holder.....	R. Wright and J. H. Race.....	141, 478	Aug. 5, 1873	61	19	4	140
Chimney-top.....	J. C. H. Brown.....	145, 621	Dec. 16, 1873	528	173	4	652
Chimney-top.....	J. Gorton.....	136, 234	Feb. 25, 1873	778	251	3	226
Chimney-top.....	H. Palmer.....	134, 700	Jan. 7, 1873	190	61	3	22
Chimney-top.....	G. Wingate.....	144, 586	Nov. 11, 1873	358	121	4	519
Chimney-top, revolving.....	C. L. Garfield.....	142, 225	Aug. 26, 1873	757	249	4	223

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Chimneys, guard for preventing leakage around	J. F. Schuyler	145,245	Dec. 2, 1873	184	63	4	600
Chimneys, means of operating steamboat	J. Christy	136,414	Mar. 4, 1873	53	19	3	250
Chimneys or flues, attachment to	J. E. Starnes	143,540	Oct. 7, 1873	123	41	4	390
Chisel	C. E. L. Jelliffe	143,413	Oct. 7, 1873	16	6	4	382
Chlorine, manufacture of	H. Deacon	141,333	July 29, 1873	929		4	130
Chocolate, manufacture of	J. M. O. Tamin	141,832	Aug. 12, 1873	386		4	174
Chocolate, soluble	J. Corell	138,007	Apr. 22, 1873	675		3	446
Chopper:							
<i>See</i> Cotton-chopper.							
Meat-chopper.							
Stalk-chopper.							
Chuck	T. R. Almond	141,978	Aug. 19, 1873	520	172	4	194
Chuck	E. Horton	142,163	Aug. 26, 1873	706	233	4	219
Chuck	L. Parmelee	144,128	Oct. 28, 1873	690	229	4	465
Chuck	J. H. Westcott	136,349	Feb. 25, 1873	885	284	3	234
Chuck, Centering	G. H. Miller	142,642	Sept. 9, 1873	288	94	4	277
Chuck, Drill	L. Parmelee	143,377	Sept. 30, 1873	930	315	4	366
Chuck for holding pipe-fittings	M. Walby	141,612	Aug. 5, 1873	177	56	4	149
Chuck for lathe and planer, Magnetic	J. A. Jaques, J. T. Oakley, and L. Sterne	137,875	Apr. 15, 1873	545	170	3	425
Chuck for sleigh-bells, Lathe	W. E. Barton	145,383	Dec. 9, 1873	307	103	4	623
Chuck-jaw for lathe	M. C. Johnson	142,239	Aug. 26, 1873	770	253	4	224
Chuck, Lathe	S. C. Goodsell	137,674	Apr. 8, 1873	361	112	3	398
Chuck, Lathe	W. Johnson	141,276	July 29, 1873	878	287	4	115
Chuck, Lathe	C. H. Reid	141,817	Aug. 12, 1873	373	122	4	173
Chuck, Watch-maker's lathe	J. Stark	141,824	Aug. 12, 1873	378	124	4	173
Chucks, Device for holding and carrying pipe-fittings	A. J. Peavey and F. B. Cotton	145,896	Dec. 23, 1873	777	254	4	684
Churn	E. Archer	141,480	Aug. 5, 1873	62	20	4	140
Churn	J. Beckley	138,604	May 6, 1873	118	39	3	507
Churn	J. Borton and W. H. Hartley	135,761	Feb. 11, 1873	345	111	3	167
Churn	J. L. and T. R. Britt	143,612	Oct. 14, 1873	199	67	4	405
Churn	G. G. Buchanan	144,437	Nov. 11, 1873	233	78	4	509
Churn	J. P. Friest	144,755	Nov. 18, 1873	507	172	4	542
Churn	A. W. Fuqua	141,709	Aug. 12, 1873	274	89	4	165
Churn	H. A. Hinchey	137,369	Apr. 1, 1873	81	27	3	363
Churn	W. H. Holdam	138,089	Apr. 22, 1873	752	238	3	452
Churn	J. Maaten	143,919	Oct. 21, 1873	489	165	4	438
Churn-dash	A. J. Hudson	145,107	Dec. 2, 1873	62	20	4	590
Churn-dasher	G. W. Barker	145,272	Dec. 9, 1873	215	74	4	615
Churn-dasher	D. Boyd	145,985	Dec. 30, 1873	878	284	4	703
Churn-dasher	W. M. Combes	136,035	Feb. 18, 1873	595	195	3	200
Churn-dasher	L. B. Compton	143,559	Oct. 14, 1873	154	52	4	401
Churn-dasher	G. W. McCormick	139,406	May 27, 1873	870	278	3	599
Churn-dasher	G. Ridler	144,390	Nov. 4, 1873	99	33	4	486
Churn-dasher	H. B. Robinson	145,592	Dec. 16, 1873	504	166	4	650
Churn-dasher, Reciprocating	T. Earle	142,607	Aug. 19, 1873	547	181	4	197
Churn-motor	J. B. Sweetland	139,208	May 20, 1873	680	213	3	576
Churn-power	W. A. Lewis	136,925	Mar. 18, 1873	518	158	4	66
Churn, Reciprocating	E. Barrett and G. W. Fennimore	140,871	July 15, 1873	468	161	4	66
Churn, Reciprocating	L. I. Bodenhamer	140,880	July 15, 1873	476	161	4	66
Churn, Reciprocating	G. B. Coan	139,658	June 10, 1873	201	66	3	641
Churn, Reciprocating	H. Hatch	142,102	Aug. 26, 1873	655	215	4	215
Churn, Reciprocating	G. M. Helm	138,888	May 13, 1873	384	130	3	539
Churn, Reciprocating	A. D. Huntley	143,906	Oct. 21, 1873	479	161	4	437
Churn, Reciprocating	L. B. Keeler	140,280	June 24, 1873	779	247	3	703
Churn, Reciprocating	M. Litty	138,168	Apr. 22, 1873	815	259	3	457
Churn, Reciprocating	M. W. Staples	140,796	July 15, 1873	405	138	4	60
Churn, Reciprocating	W. M. Thompson and J. L. Mahurin	140,445	July 1, 1873	85	30	4	15
Churn, Reciprocating	E. T. Wheeler	143,800	Oct. 21, 1873	393	129	4	430
Churn, Rotary	W. Brand and G. Puder	140,112	June 24, 1873	636	200	3	692
Churn, Rotary	W. H. Bunch	141,692	Aug. 12, 1873	262	85	4	164
Churn, Rotary	F. E. Clarkson	138,229	Apr. 29, 1873	896	283	3	472
Churn, Rotary	B. Eason	136,226	Feb. 25, 1873	772	250	3	226
Churn, Rotary	E. A. Hewitt	141,348	July 29, 1873	949	308	4	121
Churn, Rotary	W. McClure	135,281	Jan. 28, 1873	738	238	3	107
Churn, Rotary	G. Walker	139,345	May 27, 1873	809	258	3	594
Chute, Lumber	W. Van Name and J. A. Wakefield	135,302	Jan. 28, 1873	754	243	3	108
Cider and wine mill	A. McCreight and R. W. Glasgow	136,847	Mar. 18, 1873	454	150	3	300
Cider, Article of food from	S. W. Mahan	143,918	Oct. 21, 1873	488		4	438
Cider-mill	N. E. Miller	141,582	Aug. 5, 1873	146	47	4	147
Cider-mill	W. Rice	139,615	June 3, 1873	149	49	3	621
Cider-mill	L. O. Rockwood	139,975	June 17, 1873	492	156	3	672
Cider-mill	J. E. Sangi	135,370	Jan. 28, 1873	819	265	3	113
Cider-mill	M. P. Schenck	138,533	May 6, 1873	59	20	3	502
Cider-mill grater	W. Barr	139,105	May 20, 1873	581	182	3	568
Cider-press lever	H. Peters	138,280	Apr. 29, 1873	945	298	3	476
Cider, Putting up and preserving	M. Halstead and J. L. Wheeler	136,914	Mar. 18, 1873	508	168	3	304
Cigar	E. B. Mead	140,153	June 24, 1873	672	211	3	694
Cigar-box	H. Fowler	145,290	Dec. 9, 1873	230	78	4	616
Cigar-box	E. C. Patterson	144,129	Oct. 28, 1873	691	229	4	465
Cigar-box from redwood, Manufacture of	C. A. Hooper	145,735	Dec. 23, 1873	640		4	673
Cigar-bunch, Machine for pressing	G. Pierce	134,768	Jan. 14, 1873	256	84	3	41
Cigar-bunch, Machine for pressing and molding	W. D. Brewer	135,030	Jan. 21, 1873	501	161	3	75
Cigar-bunch, Retainer for pressed and molded	W. D. Brewer	135,031	Jan. 21, 1873	502	162	3	75
Cigar-bunches, Machine for making	S. Schofield	140,848	July 15, 1873	449	153	4	64
Cigar-bunches, Machine for making	D. A. Wightman	140,860	July 15, 1873	450	156	4	65
Cigar-bunches, Machine for making	D. A. Wightman	140,861	July 15, 1873	461	156	4	65
Cigar-bunching machine	H. B. Bunster	136,411	Mar. 4, 1873	51	18	3	249
Cigar-cutting and perforating machine	J. T. and A. Levy	137,850	Apr. 15, 1873	527	164	3	424
Cigar-drying mold	N. W. Palmer	139,517	June 3, 1873	63	21	3	614
Cigar-filler, Machine for pressing and shaping	C. H. Palmer	135,243	Jan. 28, 1873	707	227	3	104
Cigar-filler, Apparatus for arranging	S. Schofield	140,650	July 15, 1873	453	153	4	4

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Cigar-holder	T. J. Lewis	138, 032	Apr. 22, 1873	709	292	3	448
Cigar-machine	C. J. Delbridge	140, 896	July 15, 1873	491	166	4	68
Cigar-machine	T. Ernst	140, 906	July 15, 1873	504	169 170	4	68
Cigar-machine	J. T. Hennaman	140, 501	July 1, 1873	135	46	4	19
Cigar-machine	S. Scholfield	140, 845	July 15, 1873	446	152	4	64
Cigar-machine	S. Scholfield	140, 846	July 15, 1873	447	152	4	64
Cigar-machine	H. E. Tylander	139, 280	May 27, 1873	760	241	3	590
Cigar-machine roll	D. A. Wightman	140, 859	July 15, 1873	458	156	4	65
Cigar-mold	N. Du Brul	142, 683	Sept. 9, 1873	323	108	4	280
Cigar-mold	T. D. McGuire	138, 672	May 6, 1873	183	58	3	512
Cigar-mold	F. C. Miller	135, 572	Feb. 4, 1873	165	53	3	140
Cigar-mold	C. H. Palmer	136, 615	Mar. 11, 1873	246	83	3	274
Cigar-mold clamp	S. Wilmot	136, 399	Mar. 4, 1873	42	15	3	249
Cigar-molding apparatus	T. J. Winship	137, 749	Apr. 8, 1873	434	134	3	403
Cigar-point splitter	A. Sickenberger	144, 570	Nov. 11, 1873	344	116	4	517
Cigar, Process of treating and drying	J. Cuddy	136, 490	Mar. 4, 1873	120	3	3	255
Cigar-shaped pipe	S. N. Buynitzky	136, 487	Mar. 4, 1873	117	38	3	255
Cigar-tip	W. M. Herron	136, 514	Mar. 4, 1873	144	46	3	257
Cigar-tip cutter	F. Timm and T. Fantini	136, 285	Feb. 25, 1873	827	267	3	230
Cigar-trimmer	A. Cramer	140, 117	June 24, 1873	641	201	3	692
Cigar-trimmer	A. Hettinger	139, 152	May 20, 1873	628	196	3	572
Cigar-trimmer	S. Scholfield	140, 847	July 15, 1873	448	153	4	64
Cigar-wrappers, Apparatus for cutting	R. Appleby	137, 524	Apr. 8, 1873	231	71	3	367
Cigar-wrapping machine	S. Scholfield	140, 849	July 15, 1873	451	153	4	64
Cigarette-machine	J. D. S. Ruiseco	144, 478	Nov. 11, 1873	264	89, 90	4	511
Cigarettes, Device for making	H. Gerike	135, 110	Jan. 21, 1873	564	183	3	81
Cistern, Construction of	L. Howe	145, 802	Dec. 23, 1873	694	228	4	678
Cistern, Device for building	J. Kruger	142, 345	Sept. 2, 1873	90	7	4	244
Cisterns, &c., Rain-water switch and reversible valve for.	L. Goudreau	135, 035	Jan. 21, 1873	507	164	3	76
Clamp							
<i>See</i> Bale-tie clamp.							
Belt-clamp.							
Billiard-cue clamp							
Book-clamp.							
Book and paper clamp.							
Cigar-mold clamp.							
Clothes-clamp.							
Crimping-clamp.							
Dental-clamp.							
Floor-clamp.							
Joiner's-clamp.							
Pole-clamp.							
Rope-clamp.							
Sash and door clamp.							
Scaffold-pole clamp.							
Thill-coupling clamp.							
Watchmaker's-chain clamp.							
Clamp	C. S. Bonney	135, 882	Feb. 18, 1873	471	151	3	190
Clamp	L. Feely	142, 010	Aug. 19, 1873	549	181 182	4	197
Clamp	F. M. Holmes	142, 697	Sept. 9, 1873	335	112	4	281
Clamp	N. J. Holt and J. Leach	140, 136	June 24, 1873	657	206	3	693
Clamp	W. H. Payne and H. Imhof	142, 938	Sept. 16, 1873	549	186	4	309
Clamp	J. E. Sinclair	140, 852	July 15, 1873	454	154	4	64
Clamping-device	C. Stout	139, 931	June 17, 1873	461	144	3	669
Clapboard-sawing machine	H. A. Holmes	142, 339	Sept. 2, 1873	15	6	4	243
Clasp							
<i>See</i> Belt-clasp.							
Colter-clasp.							
Corset-clasp.							
Harness-clasp.							
Metallic clasp.							
Pocket-book clasp.							
Suspenders-clasp.							
Clasp	J. H. Eastman	145, 097	Dec. 2, 1873	55	17	4	590
Claw-bar	W. S. Terhune	137, 333	Apr. 1, 1873	54	16	3	361
Clay and cement, Pipe-mold	J. Sharpe	140, 734	July 8, 1873	346	117	4	48
Clay articles, Mold for forming	C. A. Fischer	140, 910	July 15, 1873	509	171	4	69
Clay-mill	J. A. Vaughn, H. B. Camp, and H. E. and C. J. Merrill	145, 373	Dec. 9, 1873	298	101	4	622
Clay to form a plastic material, Mixing mineral and fossil substances with bitumenized.	P. Lea	144, 397	Nov. 11, 1873	198	.....	4	506
Cleaner							
<i>See</i> Boiler-fine cleaner.							
Carpet-cleaner.							
Cotton-cleaner.							
Grain-cleaner.							
Grain and malt cleaner.							
Gun-cleaner.							
Knife-cleaner.							
Knife and fork cleaner.							
Lamp-chimney cleaner.							
Rice-cleaner.							
Sewer-cleaner.							
Slate-cleaner.							
Track-cleaner.							
Clevis bar and hook	R. Gibbs	139, 381	May 27, 1873	839	268	3	597
Clip							
<i>See</i> Axle-clip.							
Carriage-clip.							
Carriage-spring clip.							
Curtain-tassel clip.							
Letter-clip.							

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Clock, Alarm	D. M. Charter	143, 881	Oct. 21, 1873	460	154	4	436
Clock, Calendar	C. M. Clinton and L. Mood	144, 384	Nov. 11, 1873	188	64	4	505
Clock, Calendar	A. Frankfeld	143, 618	Oct. 14, 1873	206	69	4	406
Clock, Calendar	N. T. Worthley	142, 975	Sept. 16, 1873	580	196	4	312
Clock, Calendar movement	G. R. Williams	142, 829	Sept. 16, 1873	457	155	4	301
Clock, Electric	F. J. Ritchie	143, 847	Oct. 21, 1873	432	144	4	434
Clock, Escapement	C. Fasoldt	137, 603	Apr. 8, 1873	300	93	3	393
Clock, Escapement	A. Platt	144, 267	Nov. 4, 1873	97	32	4	416
Clock, Illuminated	E. Wade	139, 639	June 10, 1873	372	115	3	654
Clock, Programme	S. F. Estell	143, 230	Sept. 30, 1873	798	275	4	355
Clock-work globe	L. J. N. Mouret	140, 065	June 17, 1873	575	182	3	679
Clocks, Striking works of	G. H. Leeds and C. N. Thorpe	139, 166	May 20, 1873	644	201	3	573
Clod-crusher and harrow combined	W. Young and J. Wortham	142, 755	Sept. 9, 1873	387	130	4	285
Clod-fender	A. L. Dirst	135, 296	Feb. 18, 1873	481	155	3	191
Closest: <i>See</i> Earth-closet. Water-closet.							
Cloth cover, Painted	W. D. Richardson	142, 868	Sept. 16, 1873	488	166	4	304
Cloth-cutting machine	I. Fenno	134, 793	Jan. 14, 1873	278	90	3	42
Cloth-cutting machine	N. C. Fluck	144, 023	Oct. 28, 1873	604	200	4	458
Cloth-cutting machine	J. Kent	136, 602	Mar. 11, 1873	236	80	3	273
Cloth-finishing machine, Tray for	A. Woolson	141, 192	July 22, 1873	787	256	4	100
Cloth folding and measuring machine	A. M. Cheney	136, 967	Mar. 18, 1873	552	183	3	308
Cloth for cutting, Gage for marking	E. E. Emery	143, 681	Oct. 14, 1873	262	87	4	410
Cloth, Machinery for finishing the nap of woolen	J. Dobson	144, 839	Nov. 25, 1873	569	201	4	559
Cloth, Manufacture of felt	J. E. Pollard	143, 528	Oct. 7, 1873	110	.....	4	389
Cloth-press, Steam	J. Dennis and C. H. Weston	142, 006	Aug. 19, 1873	546	180	4	197
Cloth-steaming machine	H. S. Green	135, 543	Feb. 4, 1873	140	44	3	138
Cloth-steaming machine	C. H. Weston	134, 956	Jan. 14, 1873	421	135	3	54
Cloth stretching and drying machine	W. Bailey	139, 038	May 20, 1873	517	163	3	563
Clothes-clamp	W. Tunnstill	140, 659	July 8, 1873	284	96	4	43
Clothes-drier	J. Burch and B. Webb	144, 951	Nov. 25, 1873	680	230	4	567
Clothes-drier	E. S. French	135, 107	Jan. 21, 1873	562	183	3	40
Clothes-drier	E. B. Gildersleeve	136, 831	Mar. 18, 1873	441	146	3	299
Clothes-drier	A. Graves	140, 193	June 24, 1873	706	222	3	697
Clothes-drier	A. S. Miller	142, 714	Sept. 9, 1873	348	117	4	282
Clothes-drier	D. R. Watson	134, 228	Jan. 14, 1873	313	99	3	45
Clothes-frame	J. C. Miller	146, 087	Dec. 30, 1873	965	311	4	710
Clothes-line fastener	J. G. and P. A. Ames	140, 234	June 24, 1873	738	233	3	700
Clothes-line fastening device	A. E. Schatz	136, 768	Mar. 11, 1873	374	124	3	284
Clothes-line holder	W. Cooke	141, 921	Aug. 19, 1873	477	157	4	191
Clothes-line pole	C. B. Brown	136, 641	Mar. 11, 1873	271	91	3	276
Clothes-line reel	J. Briscoe	139, 785	May 13, 1873	294	90	3	531
Clothes-line reel	G. F. Corlies	144, 387	Nov. 11, 1873	191	65	4	505
Clothes-line reel	C. Rosenthal	141, 015	July 22, 1873	623	210	4	87
Clothes-line sliding support	M. Busser	134, 849	Jan. 14, 1873	329	105	3	46
Clothes-line support	J. E. Roache	142, 278	Aug. 26, 1873	800	264	4	227
Clothes-mangle	S. Short	145, 910	Dec. 23, 1873	790	259	4	685
Clothes-pin	H. Mellish	143, 024	Sept. 23, 1873	636	213	4	325
Clothes-pin	V. D. Urso and B. Charles	141, 740	Aug. 12, 1873	300	98	4	167
Clothes-pin	W. Wellington	135, 501	Feb. 4, 1873	98	31	3	135
Clothes-pins, Machine for making	B. B. and A. J. Ockington	145, 567	Dec. 16, 1873	500	164	4	650
Clothes-pins, Machinery for making	J. B. Smith	144, 152	Oct. 28, 1873	708	236	4	486
Clothes-pounder	S. F. Hawley	143, 901	Oct. 21, 1873	475	160	4	477
Clothes-pounder	S. Hinkel	138, 024	Apr. 22, 1873	690	218	3	447
Clothes-pounder	D. W. Rawson	138, 044	Apr. 22, 1873	713	225	3	449
Clothes-pounder	E. S. Saxton	141, 082	July 22, 1873	622	229	4	92
Clothes-pressing machine	H. E. Smith	139, 901	May 20, 1873	674	211	3	575
Clothes-reel	D. L. Huff	142, 631	Sept. 9, 1873	279	92	4	276
Clothes-reel	J. McMahon	141, 064	July 22, 1873	664	223	4	91
Clothes-washer	W. R. Brooks	139, 494	June 3, 1873	46	14	3	612
Clothes-washer	H. D. Crooker	136, 038	Feb. 18, 1873	597	196	3	200
Clothes-washer	G. J. Terrell	139, 979	June 17, 1873	495	157	3	672
Clothes-wringer	T. O. Bogert	134, 633	Jan. 7, 1873	125	40	3	17
Clothes-wringer	W. P. Brooks and J. D. Hartzell	140, 344	July 1, 1873	9	3	4	8
Clothes-wringer	H. J. Burr	143, 220	Sept. 30, 1873	788	272	4	355
Clothes-wringer	R. S. Cathcart	134, 641	Jan. 7, 1873	132	42	3	17
Clothes-wringer	D. M. Cole	139, 545	June 3, 1873	85	29	3	616
Clothes-wringer	E. A. Corbin and H. Albrecht	140, 249	June 24, 1873	749	237	3	701
Clothes-wringer	G. E. Gault and A. W. Winall	134, 658	Jan. 7, 1873	149	47	3	18
Clothes-wringer	C. E. Haynes	138, 803	May 13, 1873	309	96	3	533
Clothes-wringer	T. E. McDonald	135, 237	Jan. 28, 1873	701	224	3	104
Clothes-wringer	T. E. McDonald	144, 627	Nov. 18, 1873	400	134	4	533
Clothes-wringer	G. S. Prindle	135, 585	Feb. 4, 1873	182	57	3	142
Clothes-wringer	C. Robinson	140, 592	July 8, 1873	229	77	4	38
Clothes-wringer	J. Seaman	144, 705	Nov. 18, 1873	465	157	4	539
Clothes-wringer	H. E. Smith	139, 200	May 20, 1873	673	211	3	575
Clothes-wringer, Centrifugal	A. Rosamyer, jr.	142, 045	Aug. 19, 1873	589	193	4	200
Clothes-wringer roller	E. P. H. Capron	141, 424	Aug. 5, 1873	13	3	4	136
Clover-separator	C. L. Allen	136, 805	Mar. 18, 1873	418	139	3	297
Clutch	W. Knight and N. W. Lewis	140, 142	June 24, 1873	661	208	3	693
Clutch for machinery	W. B. Duckworth	138, 139	Apr. 22, 1873	790	252	3	455
Clutch, Friction	S. B. Alger	137, 335	Apr. 1, 1873	55	16	3	361
Clutch, Friction	E. Allen	138, 980	May 20, 1873	468	147	3	559
Clutch, Friction	J. J. Grant	142, 227	Aug. 26, 1873	759	250	4	223
Clutch, Friction	J. J. Grant	142, 564	Sept. 9, 1873	226	74	4	272
Clutch mechanism, Friction	J. J. Coburn	138, 075	Apr. 22, 1873	741	234	3	451
Coach and car truss	G. F. Challender	143, 498	Oct. 7, 1873	85	29	4	387
Coach bodies, &c., Trestle for painting	W. M. Knapp	144, 339	Nov. 4, 1873	138	46	4	489
Coach or carriage	J. Allgair	139, 753	June 10, 1873	297	92	3	648
Coach or carriage	J. Allgair	140, 666	July 8, 1873	289	98	4	43

Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Coal and ore washing apparatus	M. Evrard	142, 221	Aug. 26, 1873	753	248	4	223
Coal and ore separator, Feeding device for	H. Bradford	143, 323	Sept. 30, 1873	877	300	4	362
Coal and rock cutting machine	H. F. Brown	142, 696	Sept. 16, 1873	510	174	4	306
Coal-barge, Unloading	W. A. Wright	138, 727	May 6, 1873	233	73	3	516
Coal, &c., Bit for boring	S. Hipkins, Jr	134, 605	Jan. 14, 1873	291	94	3	43
Coal-boring machine	S. Hipkins, Jr	134, 804	Jan. 14, 1873	287	93, 94	3	43
Coal-boring machine	D. Shoemaker	142, 950	Sept. 16, 1873	557	189	4	310
Coal-breaker	H. Bradford	143, 745	Oct. 21, 1873	344	115	4	426
Coal-breaker	R. A. Wilder	142, 426	Sept. 2, 1873	91	30	4	250
Coal, &c., breaking machine	R. A. Wilder	136, 887	Mar. 18, 1873	486	161	3	303
Coal-cutting machine	S. Firth	137, 669	Apr. 8, 1873	356	110	3	397
Coal-cutting machine	J. Gillott and P. Copley	144, 529	Nov. 11, 1873	309	104	4	515
Coal-delivering sack	W. S. Shackleton	142, 741	Sept. 9, 1873	374	125	4	284
Coal-dust, small fuel, &c., Furnace for burning	J. Tissot	135, 298	Jan. 28, 1873	751	242	3	108
Coal-hod	J. H. Brown	141, 485	Aug. 5, 1873	66	21	4	140
Coal-hod	H. B. Safford	142, 734	Sept. 9, 1873	366	123	4	283
Coal, Machine for mining	G. Elbreg	134, 870	Jan. 14, 1873	347	110	3	48
Coal-mining machinery	J. Alexander	135, 874	Feb. 18, 1873	463	149	3	190
Coal-mining machine	W. Case	139, 541	June 3, 1873	81	28	3	615
Coal-mining machine	C. L. Drienslein	136, 712	Mar. 11, 1873	328	108	3	281
Coal-mining machine	F. M. W. Price	142, 582	Sept. 9, 1873	240	79	4	273
Coal, ore, &c., Separator for	H. Bradford	143, 219	Sept. 30, 1873	785	271	4	354
Coal-screen	S. W. Woodward	138, 355	Apr. 29, 1873	1, 012	318	3	461
Coal screen and chute	M. R. Roberts	140, 077	June 17, 1873	584	185	3	679
Coal-scuttle	G. Howland	135, 554	Feb. 4, 1873	149	47, 48	3	139
Coal-scuttle	A. S. Thompson	143, 311	Sept. 30, 1873	868	297	4	361
Coal-scuttle	J. J. White	143, 208	Sept. 23, 1873	772	296	4	337
Coal-separator	J. B. Wilford	143, 395	Sept. 30, 1873	945	319	4	367
Coating metal with copper	O. Gauduin, J. B. J. Mignon, and S. H. Rouart	141, 132	July 22, 1873	727	227	4	95
Cock	A. S. Deventorff	140, 685	July 8, 1873	306	103	4	44
Cock	J. W. Faxon	143, 683	Oct. 14, 1873	265	87	4	410
Cock	H. S. Ross	142, 122	Aug. 26, 1873	673	221	4	216
Cock and check-valve combined, Stop	A. T. Waldron	138, 963	May 13, 1873	443	139	3	544
Cock and regulator for gas-burner, Stop	A. E. Delonest	135, 895	Feb. 18, 1873	480	155	3	191
Cock, Automatic lubricating water and gas	E. F. Brooks	144, 735	Nov. 18, 1873	489	166	4	541
Cock, check valve and blow-off, Combined stop	W. H. Graham	143, 978	Oct. 28, 1873	563	187	4	454
Cock, Compression	E. G. Cushing	138, 077	Apr. 22, 1873	742	235	3	451
Cock, Cylinder	E. Alt	140, 337	July 1, 1873	2	1	4	8
Cock for controlling discharge through two pipes	D. B. Dennison	136, 221	Feb. 25, 1873	768	248	3	225
Cock for drawing beer	J. and T. D. Richardson	142, 120	Aug. 26, 1873	671	221	4	216
Cock for locomotive, Cylinder	J. Moffet	142, 860	Sept. 16, 1873	481	164	4	303
Cock for outlet valve, Waste	C. H. Hopkins	136, 724	Mar. 11, 1873	338	112	3	291
Cock for water and gas service pipe, Securing cover on box for stop.	S. J. Olason	143, 995	Oct. 28, 1873	580	193	4	476
Cock, Valve	F. H. Laforgo	135, 822	Feb. 11, 1873	406	131	3	171
Cock, Gauge	H. J. Bailey	141, 416	Aug. 5, 1873	5	2	4	135
Cock, Gauge	J. F. Bellemere and F. R. Flee	141, 104	July 22, 1873	702	235	4	94
Cock, Gauge	A. A. Murray	143, 923	Oct. 21, 1873	492	166	4	438
Cock, Gas	E. M. Morris	145, 442	Dec. 9, 1873	360	120	4	626
Cock, Racking	A. Ross	144, 565	Nov. 11, 1873	339	115	4	517
Cock, Regulating	C. E. Seal	142, 521	Sept. 2, 1873	178	58	4	256
Cock, Self-closing	M. S. Clark	141, 630	Aug. 12, 1873	210	66	4	160
Cock, Self-closing stop	J. Pigot	138, 580	May 6, 1873	100	32	3	506
Cock, Soda-fountain draft	W. P. Clark	138, 615	May 6, 1873	127	42	3	508
Cock, Soda-water and sirup	W. Gee	138, 143	Apr. 22, 1873	793	253	3	455
Cock, Stop	J. W. Birkett	142, 763	Sept. 16, 1873	403	136	4	297
Cock, Stop	W. S. Cooper	140, 248	June 24, 1873	748	236	3	701
Cock, Stop	G. W. Eddy	139, 559	June 3, 1873	100	34	3	617
Cock, Stop	C. W. Laurio	143, 167	Sept. 23, 1873	735	253	4	334
Cock, Stop	J. P. Mern	137, 144	Mar. 25, 1873	719	239	3	332
Cock, Stop	J. Register and W. H. Bowen	142, 350	Sept. 2, 1873	25	10	4	244
Cock, Stop	L. C. Rodier and F. G. Bates	144, 700	Nov. 18, 1873	461	156	4	539
Cock, Stop	E. F. Spaulding	141, 471	Aug. 5, 1873	56	17	4	139
Cock, Valve	J. Walsh	141, 839	Aug. 12, 1873	391	128	4	174
Cock, Weighted gage	S. P. M. Tasker and W. H. Mc-Millan	137, 259	Mar. 25, 1873	826	272	3	340
Cock with safety-plug, Apparatus or	P. A. Chambeaux	146, 045	Dec. 30, 1873	930	300	4	707
Cocks, Machine for dressing metal	H. Essex	144, 524	Nov. 11, 1873	363	102	4	514
Cocoa-nut for use in pies, cakes, &c.	N. A. Classon	145, 722	Dec. 23, 1873	627	200	4	672
Cocoa-nut, Machine for granulating	T. and G. M. Mills	139, 804	June 10, 1873	343	106	3	652
Coffee-mill	S. C. Jantzen	139, 960	June 17, 1873	481	151	3	671
Coffee-mill	L. Schultz	139, 824	June 10, 1873	361	111	3	653
Coffee-package	H. C. Lockwood	142, 248	Aug. 26, 1873	777	256	4	225
Coffee-pot	W. S. Blaisdell and E. Estabrook	142, 195	Aug. 26, 1873	733	241	4	221
Coffee-pot	H. J. Childs	134, 514	Jan. 7, 1873	12	4	3	8
Coffee-pot	H. J. Childs	134, 515	Jan. 7, 1873	12	5	3	8
Coffee-pot	H. J. Childs	136, 703	Mar. 11, 1873	320	106	3	280
Coffee-pot	R. Grigby and T. C. Braselton	135, 544	Feb. 4, 1873	141	45	3	138
Coffee-pot	E. H. Huch	134, 603	Jan. 7, 1873	99	32	3	15
Coffee-pot	M. J. Stabbings	143, 102	Sept. 23, 1873	689	237	4	330
Coffee-pot	J. E. Weber and P. Knutson	144, 936	Nov. 25, 1873	667	226	4	566
Coffee-roaster	G. W. Dodson	139, 377	May 27, 1873	834	267	3	596
Coffee-roaster	J. Hart	137, 839	Apr. 15, 1873	519	162	3	483
Coffee-roaster	T. Heermans	141, 789	Aug. 12, 1873	349	115	4	171
Coffee-roaster	W. J. Lane	145, 576	Dec. 16, 1873	491	161	4	649
Coffee-roaster	H. C. Lockwood	145, 860	Dec. 23, 1873	763	249	4	683
Coffee-roaster	W. H. Welch	139, 984	June 17, 1873	499	158	3	672
Coffee-roaster, Cover for	A. W. Weyburn	136, 292	Feb. 25, 1873	834	269	3	230
Coffee-steepers	L. J. Dyke	136, 980	Mar. 18, 1873	563	187	3	309
Coffee substitute	J. D. Adney	139, 645	June 10, 1873	191	63	3	640
Coffee substitute	E. Dugdale	143, 889	Oct. 21, 1873	466	150	4	436

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Coffee substitute.	E. Dugdale	143,880	Oct. 21, 1873	467	4	436
Coffee, Treating damaged.	F. Evans	134,791	Jan. 14, 1873	278	3	42
Coffee, Treating damaged.	F. Evans	134,792	Jan. 14, 1873	278	.....	3	42
Coffee-urn	C. Hitchcock	145,653	Dec. 16, 1873	554	183	4	654
Collu	P. E. Ober	135,006	Jan. 21, 1873	481	154	3	74
Coffin	F. Tighe	143,204	Sept. 23, 1873	770	265	4	337
Coffin-fastening	W. S. Crane	143,748	Oct. 21, 1873	346	115	4	436
Coffin, Glass	J. N. and T. Wallis	139,095	May 20, 1873	573	180	3	567
Coffin-handle	J. S. Ray	137,958	Apr. 15, 1873	615	194	3	431
Coffin-handle	H. Rogers, jr.	138,696	May 6, 1873	203	64	3	514
Coffin-handle	C. Strong	138,768	May 13, 1873	280	87	3	530
Coffin-plate	G. Brabrook	140,457	July 1, 1873	95	32	4	16
Coffin-plate	G. B. Ransom	135,155	Jan. 21, 1873	603	196	3	84
Coffin, Sheet-metal	J. D. Farrington, jr., and T. P. Austin	144,604	Nov. 18, 1873	379	128	4	532
Coffin-sides, Apparatus for bending	J. P. Albin	145,827	Dec. 23, 1873	714	235	4	679
Coil-holder for wire, &c.	I. E. Palmer	143,376	Sept. 30, 1873	930	315	4	366
Coil-springs, Manufacture of.	W. H. Ward	136,473	Mar. 4, 1873	105	35	3	254
Coin-counting implement	A. Whittemore	134,962	Jan. 14, 1873	426	136	3	54
Coke from lignites, Process for making	H. Engelmann	136,592	Mar. 11, 1873	230	77	3	273
Coking-furnace	H. Engelmann	141,778	Aug. 12, 1873	335	110	4	170
Coking-furnace	H. Engelmann	141,779	Aug. 12, 1873	338	111	4	171
Collar	J. T. Bruen	134,638	Jan. 7, 1873	130	42	3	17
Collar	A. Flatley	137,353	Apr. 1, 1873	70	92	3	362
Collar	G. F. Rice	137,096	Mar. 25, 1873	678	225	3	329
Collar and cravat, Combined	F. D. James	139,959	June 17, 1873	481	151	3	671
Collar and cuff	E. P. Furlong	144,611	Nov. 18, 1873	387	130	4	533
Collar and cuff drier	D. W. De Forrest	144,838	Nov. 25, 1873	588	201	4	559
Collar and tag cutting-machine	S. S. Gray	145,941	Dec. 16, 1873	640	273	4	700
Collar cap, Horse	R. J. Algoe	136,804	Mar. 18, 1873	418	139	3	297
Collar fastener, Shirt	G. W. Briennall	141,484	Aug. 5, 1873	65	21	4	140
Collar fastening, Horse	E. H. Sprague	137,105	Mar. 25, 1873	687	228	3	350
Collar fastening, Shirt	G. Straeger	145,974	Dec. 30, 1873	870	282	4	702
Collar gage, Horse	J. M. Everett	139,949	June 17, 1873	474	149	3	670
Collar, Harness breast	H. B. Morrison	138,039	Apr. 22, 1873	708	224	3	448
Collar, Horse	E. Batwell	137,879	Apr. 15, 1873	549	171	3	426
Collar, Horse	W. Guilfoyle	137,608	Apr. 8, 1873	304	94	3	393
Collar, Horse	O. Lafreniere	140,714	July 8, 1873	331	1-2	4	46
Collar, Horse	J. N. Schmitz	139,822	June 10, 1873	359	111	3	653
Collar, &c., Lining for horse	I. Lindley and J. Mackintosh	143,987	Oct. 28, 1873	570	190	4	455
Collar lining, Horse	D. Curtis	138,383	Apr. 29, 1873	1,034	326	3	483
Collar-pad	P. H. Beaver	137,049	Mar. 25, 1873	636	210	3	326
Collar-pad, Metallic sweat and	J. M. C. Bennett	138,990	May 20, 1873	478	151	3	560
Collar, Shirt	O. P. Dorman	137,537	Apr. 8, 1873	242	74	3	388
Collodion compound	J. A. McClelland	143,772	Oct. 21, 1873	365	121	4	428
Collodion, Preparing soluble cotton for the manufacture of.	H. T. Anthony	143,865	Oct. 21, 1873	447	.....	4	435
Coloring-matter from vegetable substances, Producing	L. M. F. Bretonniere	142,892	Sept. 16, 1873	506	.....	4	305
Colors, Preparing and packing water	E. L. Mollineux	138,915	May 13, 1873	404	127	3	541
Colter	R. Emerson	136,647	Mar. 11, 1873	276	92	3	276
Colter-clasp	C. H. Thomas	141,675	Aug. 12, 1873	248	79	4	163
Column, Fire-proof	T. Hyatt	145,180	Dec. 2, 1873	133	43	4	596
Column, Metallic	S. Brandeis	142,201	Aug. 26, 1873	738	243	4	222
Column, Metallic	J. L. Piper	138,817	May 13, 1873	322	99	3	534
Column, Metallic	J. L. Piper	141,665	Aug. 12, 1873	240	76	4	162
Column, wrought-iron	L. Herman	134,987	Jan. 21, 1873	460	147	3	72
Comb:							
See Band-comb.							
Curry-comb.							
Toilet-comb.							
Comb-frame	W. Rasey	143,383	Sept. 30, 1873	935	317	4	366
Comb-holder	E. E. Wheeler	144,242	Nov. 4, 1873	65	20	4	423
Combining-machine	I. B. and H. Smith, and C. Bradley	137,326	Apr. 1, 1873	47	14	3	361
Combination-lock	H. Clarke	135,523	Feb. 4, 1873	117	37	3	137
Combination-lock	P. W. Hall	140,500	July 1, 1873	133	46	4	19
Combination-lock	A. D. Hoffman	141,876	Aug. 19, 1873	441	144	4	188
Combination-lock	W. C. McGill	136,606	Mar. 11, 1873	239	81	3	274
Comminuting various substances, Apparatus for	G. B. Canning	136,700	Mar. 11, 1873	317	105	3	280
Commode	J. D. A. verell	143,488	Oct. 7, 1873	76	26	4	327
Compass, Beam	M. Toulmin	142,823	Sept. 16, 1873	451	152	4	301
Compass, Solar	H. O. Cook	141,766	Aug. 12, 1873	325	106	4	189
Compound engine	W. Wright	144,617	Nov. 18, 1873	557	189	4	546
Compound steam-engine	W. W. Crane	139,549	June 3, 1873	89	31	3	616
Compound steam-engine	C. E. Emery	139,052	May 20, 1873	528	167	3	564
Compound steam-engine	L. Huntown	135,223	Jan. 28, 1873	684	221	3	103
Composlug-stick	L. Buschmann	143,875	Oct. 21, 1873	455	152	4	435
Compositor's stand	F. Vallee	137,639	Apr. 8, 1873	329	101	3	395
Condenser	H. A. Towne	142,060	Aug. 19, 1873	601	192	4	201
Condenser and feeder, Steam-boiler	F. A. Fischer	139,136	May 20, 1873	612	191	3	570
Condenser and feed-water apparatus, Combined	J. S. Gibson	144,331	Nov. 4, 1873	131	44	4	489
Condenser and refiner for spirituous liquors	W. Neil	138,517	May 6, 1873	46	16	3	501
Condenser for manufacture of illuminating gas	P. T. Burtis	141,543	Aug. 5, 1873	117	36	4	144
Condenser for marine steam-engines	J. Houpt	144,203	Nov. 4, 1873	28	8, 9	4	480
Condenser for steam-pumps	D. Stoddart	145,538	Dec. 16, 1873	462	151	4	646
Condenser, Marine	B. T. Babbitt	142,665	Sept. 9, 1873	310	103	4	279
Condenser, Steam	J. L. Alberger	139,102	May 20, 1873	578	181	3	568
Condenser, Steam	J. L. Alberger	140,232	June 24, 1873	735	232	3	700
Condenser, Steam	E. Korting	134,900	Jan. 14, 1873	374	118	3	50
Condenser, Steam	E. Korting	141,361	July 29, 1873	962	313	4	122
Condenser, Steam-engine	S. A. Goodwin	135,906	Feb. 18, 1873	488	158	3	192
Condenser, Steam-engine	J. Houpt	136,917	Mar. 18, 1873	511	169	3	305
Condenser, Steam-engine	G. Wales	135,180	Jan. 21, 1873	623	203	3	84

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Condenser, Steam-engine jet	J. Hompt	136, 918	Mar. 18, 1873	513	169	3	304
Condenser-tube fastening	S. Archbold	143, 314	Sept. 30, 1873	869	298	4	362
Condensers, Device for cleaning surface	H. C. Bucknam	142, 766	Sept. 16, 1873	406	137	4	297
Confectionery, Apparatus for making	W. H. Seidenstricker	138, 587	May 6, 1873	106	34	3	506
Connecting-rod	T. T. Prosser	145, 752	Dec. 23, 1873	652	214	4	674
Connecting-rod	W. L. Switzer	145, 917	Dec. 23, 1873	797	261	4	685
Connecting-rod	B. F. Wilson	141, 191	July 22, 1873	787	258	4	100
Cooker, Steam	J. Bentz	145, 981	Dec. 30, 1873	875	284	4	703
Cooking-apparatus	C. Hood	137, 843	Apr. 15, 1873	521	162 163	3	424
Cooking-apparatus	M. J. De Leon	140, 253	June 24, 1873	752	238	3	701
Cooking-apparatus, Portable	G. Yinger	135, 682	Feb. 11, 1873	282	88	3	162
Cooking-apparatus, Steam	J. Lundgren	143, 171	Sept. 23, 1873	739	255	4	335
Cooking-utensil	J. Mansfield	135, 483	Feb. 4, 1873	84	26	3	134
Cooking-utensil	E. J. Sprague	139, 433	May 27, 1873	891	287	3	601
Cooking-vessel	L. P. and J. S. Bodkin	138, 846	May 13, 1873	349	108	3	536
Cooking-vessel	W. Y. Thomson	136, 467	Mar. 4, 1873	99	33	3	353
Cooler:							
<i>See</i> Beer-cooler.							
Corpse-cooler.							
Liquid-cooler.							
Liquor-cooler.							
Milk-cooler.							
Soda-water cooler.							
Water-cooler.							
Water and beer cooler.							
Wine-cooler.							
Cooling air and making ice, Apparatus for	T. D. Kingan	145, 659	Dec. 16, 1873	560	184	4	655
Cooling and purifying air in breweries, packing-houses, &c.	L. Schulze	142, 046	Aug. 19, 1873	590	193 194	4	201
Cooling rooms and buildings, Apparatus for	T. D. Kingan	138, 411	Apr. 29, 1873	1,059	333	3	485
Cooling rooms, Apparatus for	A. M. Lesley	139, 470	June 3, 1873	23	7	3	611
Cooling storage-rooms, Apparatus for	J. Ring	140, 792	July 15, 1873	402	137	4	60
Coop, Chicken	W. J. H. Kappe	140, 277	June 24, 1873	774	245	3	703
Coop, Folding	E. P. Lawrence	145, 302	Dec. 9, 1873	240	81	4	617
Cooper's croze and howel	W. R. Davis	142, 995	Sept. 23, 1873	602	204	4	324
Copper and other ores, Process for the reduction of	H. Stull	146, 031	Dec. 30, 1873	916		4	706
Copper balls, Apparatus for hardening	A. Weldon	141, 247	July 29, 1873	854	278	4	113
Copper, &c., vessel, Metal-lined	J. Matthews	137, 236	Mar. 25, 1873	797		3	338
Cop-winding machine	W. Chadwick and S. Lownds	143, 497	Oct. 7, 1873	84	29	4	387
Copy-holder	W. R. Carter	143, 616	Oct. 14, 1873	203	68	4	406
Copy-holder	S. French and R. D. Chase	138, 877	May 13, 1873	376	117	3	538
Copying and folding press	S. W. Odell	145, 306	Dec. 9, 1873	244	82	4	617
Cord-covering machine	B. Brower	141, 422	Aug. 5, 1873	12	3	4	136
Cord, Machine for making	J. E. Gillespie and T. Kohn	137, 360	Apr. 1, 1873	75	24	3	363
Cord, Machine for making	E. Otis	145, 747	Dec. 23, 1873	649	213	4	674
Core-bar for castings	D. Gallagher	143, 005	Sept. 23, 1873	610	207	4	324
Core-barrel for castings	J. B. Aston	142, 662	Sept. 9, 1873	307	102	4	279
Core-barrel for castings	W. Smith	142, 746	Sept. 9, 1873	378	127	4	284
Core for casting metals	O. D. Hunter	142, 790	Sept. 16, 1873	426		4	299
Core, Sectional	W. A. Butler	138, 853	May 13, 1873	355	110	3	536
Core, Device for forming	H. Parker	145, 748	Dec. 23, 1873	650	213	4	674
Cork, Bottle	I. B. Sampson	138, 820	May 13, 1873	324	100	3	534
Cork-cutting machine	T. S. Disston	134, 982	Jan. 21, 1873	455	146	3	72
Cork-extractor	C. F. Hunt	140, 706	July 8, 1873	325	110	4	46
Cork or stopper holder	G. H. Plummer	145, 235	Dec. 2, 1873	177	61	4	599
Corn-coverer	J. A. Moore	144, 918	Nov. 25, 1873	633	221	4	565
Corn-coverer	J. Tweedy	135, 301	Jan. 28, 1873	753	243	3	108
Corn-crib	J. M. Hughes and A. J. Mapes	138, 332	Apr. 29, 1873	994	313	3	479
Corn-dropper	R. M. and W. H. Bowman	145, 552	Dec. 16, 1873	474	155	4	647
Corn for grinding, Process of preparing	W. Standing	139, 743	June 10, 1873	287		3	648
Corn-husker	J. M. Carlisle	134, 590	Jan. 7, 1873	86	27	3	14
Corn-husker	G. W. Carr	143, 667	Oct. 14, 1873	245	82	4	409
Corn-husker	C. A. Lang	139, 586	June 3, 1873	123	41	3	619
Corn-husker	P. Phillip	135, 840	Feb. 11, 1873	419	136	3	172
Corn-husker	P. Phillip	135, 841	Feb. 11, 1873	419	136	3	172
Corn-husker	J. Ure	143, 797	Oct. 21, 1873	386	128	4	430
Corn-husker, Hand	H. L. Hall	136, 157	Feb. 25, 1873	721	233	3	221
Corn-husking implement	O. J. Warren	136, 194	Feb. 25, 1873	750	242	3	224
Corn-husking machine	L. A. Aspinwall	144, 590	Nov. 18, 1873	369	125	4	531
Corn-husking thimble	G. W. Gash and C. L. Owens	137, 771	Apr. 15, 1873	460	144	3	419
Corn-knife	G. Stevenson	138, 447	Apr. 29, 1873	1,094	345	3	487
Corn-meal for shipment, Preparing	L. S. Chichester	136, 306	Feb. 25, 1873	844		3	231
Corn-sheller	A. Adams	135, 306	Jan. 28, 1873	756	244	3	108
Corn-sheller	F. E. Brown and J. R. Shangle	138, 125	Apr. 22, 1873	778	248	3	454
Corn-sheller	F. Hollen and A. C. Hollaud	137, 842	Apr. 15, 1873	521	162	3	423
Corn-sheller	E. L. Hutchinson	141, 559	Aug. 5, 1873	130	41	4	146
Corn-sheller	J. B. Johnson	141, 795	Aug. 12, 1873	355	117	4	172
Corn-sheller	J. Marshall	145, 356	Dec. 9, 1873	287	96	4	621
Corn-sheller	R. M. McGrath	137, 942	Apr. 15, 1873	602	189	3	430
Corn-sheller	J. Rankin	135, 362	Jan. 28, 1873	810	261 262	3	113
Corn-sheller case	A. Borneman	135, 029	Jan. 21, 1873	500	161	3	75
Corn-sheller, Cob-carrier for	H. H. Eby	134, 790	Jan. 14, 1873	277	90	3	42
Corn-sheller, Feeding elevator for	P. Kaufman	141, 717	Aug. 12, 1873	281	92	4	165
Corn-sheller, Hand	J. M. Hawley	135, 709	Feb. 11, 1873	304	96	3	164
Corn-shocker	G. E. Johnson	145, 423	Dec. 9, 1873	346	116	4	625
Corn-stalk knife	J. M. Brick	138, 069	Apr. 22, 1873	737	233	3	451
Cornice and gutter, Metallic	J. B. Cruell	144, 259	Nov. 4, 1873	77	25	4	484
Cornice, Stucco	A. Derron	139, 049	May 20, 1873	526	166	3	564
Corpse-cooler	S. H. Crump	141, 331	July 29, 1873	927	302	4	119
Corpse-cooler	E. S. Earley	135, 210	Jan. 28, 1873	672	217	3	102
Corpse-cooler	J. Hoffman	142, 393	Sept. 2, 1873	65	22	4	247
Corpse-cooler	F. N. Troll	142, 533	Sept. 2, 1873	189	61	4	257

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Corpse-preserver	H. Kersten	142,919	Sept. 16, 1873	528	181	4	307
Corpse-preserver	C. O. Peck	145,307	Dec. 9, 1873	245	82	4	617
Corpse-preserver	P. Taltavull	138,449	Apr. 29, 1873	097	346	3	488
Corpse-preserving composition	J. M. Gallagher	144,085	Oct. 28, 1873	657		4	462
Corrugating and beading sheet-metal pipes, Machine for.	J. Sargent	142,945	Sept. 16, 1873	553	187	4	309
Corrugating sheet-iron, Machine for	A. and J. Reese	136,267	Feb. 25, 1873	813	262	3	229
Corrugating sheet-metal, Machine for	F. Roys	139,490	June 3, 1873	33	11	3	611
Corset	M. Cohn	137,893	Apr. 15, 1873	561	176	3	427
Corset	S. Dixon	135,097	Jan. 21, 1873	553	180	3	80
Corset	T. S. Gilbert	141,134	July 22, 1873	728	241 242	4	96
Corset	T. F. Hamilton	136,320	Feb. 25, 1873	857	276	3	232
Corset	J. W. Lane	134,902	Jan. 14, 1873	376	113	3	50
Corset	L. H. and A. F. Loomer and L. M. Smith.	145,665	Dec. 16, 1873	566	186	4	655
Corset	M. Russell	137,724	Apr. 8, 1873	408	125	3	402
Corset	J. Waterman	143,479	Oct. 7, 1873	67	23	4	386
Corset	A. M. Weber	137,985	Apr. 15, 1873	639	201	3	433
Corset-clasp	J. Burke	143,403	Oct. 7, 1873	5	2	4	381
Corset-clasp	P. Lippmann	143,359	Sept. 30, 1873	916	311	4	365
Corset-clasp	J. P. McLean	144,689	Nov. 18, 1873	452	153	4	538
Corset-clasp	J. B. Roby	142,279	Aug. 26, 1873	601	265	4	227
Corset-fastening	G. O. Schnell	139,424	May 27, 1873	885	285	3	600
Corset-spring	G. Schnell	140,733	July 8, 1873	345	117	4	48
Corset-steel	C. S. Chaffee	135,079	Jan. 21, 1873	541	176	3	79
Corset, Woven	J. Ottenheimer	144,921	Nov. 25, 1873	655	222	4	565
Cot, Spring	T. J. Griffin	137,675	Apr. 8, 1873	362	112	3	398
Cotton and hay press	E. S. Collins	145,629	Dec. 16, 1873	535	175 176	4	653
Cotton and hay press	D. Reynolds	143,641	Oct. 14, 1873	224	75	4	407
Cotton-bales, Band or hoop-tie for	E. J. Beard	140,873	July 15, 1873	470	159	4	66
Cotton, Borer for sampling	E. A. Clark	141,998	Aug. 19, 1873	540	178	4	196
Cotton-chopper	C. Bailey and G. K. Bagby	138,363	Apr. 29, 1873	018	320	3	481
Cotton-chopper	J. Coston	145,849	Dec. 23, 1873	734	240	4	681
Cotton-chopper	J. M. Garrett	146,061	Dec. 30, 1873	945	304	4	708
Cotton-chopper	W. Price	137,715	Apr. 8, 1873	400	123	3	401
Cotton-chopper	W. C. Tilton	138,596	May 6, 1873	112	37	3	507
Cotton-chopper and cultivator	M. L. Nearn	144,281	Nov. 4, 1873	93	31	4	485
Cotton-chopper and cultivator combined	A. F. Roberts	143,997	Oct. 28, 1873	582	193	4	456
Cotton-chopper and cultivator combined	J. B. Underwood	140,746	July 8, 1873	360	122	4	142
Cotton-cleaner	J. Ralston	135,586	Feb. 4, 1873	183	57	3	49
Cotton-gin	N. W. Gaddy	144,668	Nov. 18, 1873	432	146	4	536
Cotton-gin	B. D. Gullett	140,365	July 1, 1873	25	9	4	10
Cotton-gin	B. Hempstead	143,074	Sept. 23, 1873	667	229	4	322
Cotton-gin	O. Murray	135,485	Feb. 4, 1873	85	27	3	134
Cotton-gin	M. E. Pratt	140,791	July 15, 1873	401	136	4	60
Cotton-gin	P. C. Sawyer	139,820	June 10, 1873	357	110	3	653
Cotton-gin knife-roller	T. H. Rushton and W. Dobson	140,218	June 24, 1873	725	228	3	699
Cotton-gin saw, Teeth for	T. B. Oglesby	138,575	May 6, 1873	97	31	3	505
Cotton, hay, &c., Compressing-apparatus for	F. Weldon	137,160	Mar. 25, 1873	732	243 244	3	333
Cotton-laps, Machine for making	T. C. Craven	135,528	Feb. 4, 1873	122	38, 39	3	137
Cotton-lint room, Fire-proof	R. R. Warren	142,065	Aug. 19, 1873	605	199	4	201
Cotton-lint room, Revolving	W. T. Crenshaw	138,865	May 13, 1873	364	113	3	537
Cotton-opener	R. Kitson	144,394	Nov. 11, 1873	196	67	4	506
Cotton-opener, &c., Feed-mechanism for	W. Noton	136,173	Feb. 25, 1873	733	236	3	222
Cotton-opener, &c., Feed-regulator for	D. Harding	142,101	Aug. 26, 1873	654	215	4	215
Cotton-opener, Feed-regulator for	R. Kitson	145,300	Dec. 9, 1873	239	80	4	617
Cotton or woolen can	H. W. Shepard	135,853	Feb. 11, 1873	429	139	3	173
Cotton or woolen can	H. W. Shepard	135,854	Feb. 11, 1873	430	140	3	173
Cotton-press	J. M. Brooks, jr.	136,697	Mar. 11, 1873	315	104	3	279
Cotton-press	P. K. Dederick	134,592	Jan. 7, 1873	88	27	3	14
Cotton-press	J. P. Derden	136,422	Mar. 4, 1873	59	21	3	250
Cotton-press	C. C. Howard	136,725	Mar. 11, 1873	339	112	3	281
Cotton-press	T. R. Jackson	143,349	Sept. 30, 1873	906	308	4	364
Cotton-press	T. D. Leonard	144,775	Nov. 18, 1873	523	178	4	544
Cotton-press	R. Lewis	136,841	Mar. 18, 1873	448	148	3	300
Cotton-press	B. G. Martin	136,246	Mar. 18, 1873	453	150	3	300
Cotton-press	W. W. Patrick	139,970	June 17, 1873	489	154	3	671
Cotton-press	R. Powers	135,496	Feb. 4, 1873	87	27	3	134
Cotton-press	J. P. Pridgeon	140,841	July 15, 1873	443	151	4	64
Cotton-press	W. H. Reynolds	138,583	May 6, 1873	103	33	3	506
Cotton-press	M. M. Scherer	142,517	Sept. 2, 1873	175	57	4	256
Cotton-press	T. S. Smith	141,393	July 29, 1873	991	322	4	124
Cotton-press	P. and R. A. Williams	142,882	Sept. 16, 1873	498	170	4	305
Cotton-press	D. H. Woodridge	139,845	June 10, 1873	376	117	3	655
Cotton-scraper	W. Jarrel	141,355	July 29, 1873	957	311 312	4	121
Cotton-stalk knocker	M. M. Carruth	137,825	Apr. 15, 1873	504	157	3	422
Cotton-waste, Cleaning	G. Sagar	139,921	June 17, 1873	455		3	668
Couch, Accouchement	E. L. Moore	136,663	Mar. 11, 1873	288	96	3	277
Counter-shears	N. Stow	136,558	Mar. 4, 1873	186	60	3	260
Counters, Machine for skiving	C. Keniston	134,551	Jan. 7, 1873	45	14	3	11
Counting-register	R. P. Hinds	135,336	Jan. 28, 1873	788	255	3	111
Counting-register	G. H. Van Vleck	137,262	Mar. 25, 1873	830	273	3	341
Coupling:							
See Anger-shaft coupling.							
Brace-coupling.							
Brake-coupling.							
Car-coupling.							
Drill-rod coupling.							
Gas and water main coupling.							
Gas and water pipe coupling.							
Hose-coupling.							

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Coverlet	C. K. Pevey	140,949	July 15, 1873	547	183	4	72
Cowl: See Chimney-cowl.							
Cows from kicking, Device for preventing	H. J. Sadler and S. H. Spencer	140,594	July 8, 1873	231	77	4	38
Cows' tails, Fetter for	C. F. Tolles	143,943	Oct. 21, 1873	508	171	4	440
Cracker-machine	J. Fox	143,686	Oct. 14, 1873	267	88	4	410
Cracker-machine	G. J. Kingsbury	143,579	Oct. 14, 1873	171	58	4	403
Cracker-machine	L. A. Rockwell	139,920	June 17, 1873	453	141 142	3	668
Cradle	F. Chichester	141,033	July 22, 1873	637	214	4	88
Cradle	W. T. Doremus	138,320	Apr. 29, 1873	986	310	3	479
Cradle	C. A. Fenner	144,391	Nov. 11, 1873	193	66	4	506
Cradle	M. Griffin	134,661	Jan. 7, 1873	155	51	3	19
Cradle	L. Heywood	135,117	Jan. 21, 1873	569	185	3	81
Cradle	D. Souder	137,868	Apr. 15, 1873	541	168	3	425
Cradle and rocking-chair, Combined	E. Hamburjer	135,425	Feb. 4, 1873	30	9	3	130
Cradle, Automatic	L. S. Goldman	138,144	Apr. 22, 1873	794	253	3	455
Cradle, Automatic	W. V. Van Dervort and R. B. Walker	139,638	June 10, 1873	372	115	3	654
Cradle or crib, Folding	M. McNamara	135,138	Jan. 21, 1873	590	192	3	82
Cradle, Portable	W. S. Harris	146,069	Dec. 30, 1873	950	307	4	709
Cradle, Self-rocking	C. Holtz	139,247	May 27, 1873	729	230	3	587
Cradle, Spring	F. Chichester	141,032	July 22, 1873	637	214	4	88
Cradle to rocking-chair, Coupling for connecting	J. Reeves	142,583	Sept. 9, 1873	241	79	4	273
Cranberry-picker	J. Weston	145,979	Dec. 30, 1873	873	283	4	702
Crane	R. Briggs	140,882	July 15, 1873	478	162	4	66
Crane	F. Farrel	138,876	May 13, 1873	375	117	3	538
Crane	J. L. Pennock	145,234	Dec. 2, 1873	176	61	4	599
Crane, Steam	D. Tillson	137,737	Apr. 8, 1873	419	129	3	402
Crank-heating apparatus	J. Miller	137,944	Apr. 15, 1873	603	190	3	431
Crank, Movement	H. C. Bradford	135,073	Jan. 21, 1873	537	174	3	78
Crank-shaft, Eccentric	J. F. Haskins	137,441	Apr. 1, 1873	145	47	3	269
Crayon-holder	A. F. Howard	137,844	Apr. 15, 1873	522	163	3	424
Crib	W. B. Carpenter	141,918	Aug. 19, 1873	475	156	4	191
Crib, Child's	J. D. Lewis	145,218	Dec. 2, 1873	161	56	4	598
Crib, Folding	C. Kilburn	134,895	Jan. 14, 1873	370	117	3	50
Crib or hammock, Swinging	D. O'Grady	137,235	Mar. 25, 1873	804	265	3	339
Crimping and fluting-machine	R. Werner	134,621	Jan. 7, 1873	112	37	3	16
Crimping and fluting-machine	R. Werner	140,326	June 24, 1873	821	261	3	707
Crimping-clamp	P. A. Schoellhorn	141,956	Aug. 19, 1873	504	166	4	193
Crimping-machine	L. P. Lum	145,303	Dec. 2, 1873	241	81	4	617
Croquet-mallet	E. A. Rose	136,388	Mar. 4, 1873	32	12	3	248
Croquet-wicket-driver	E. A. Barker	142,072	Aug. 26, 1873	628	207	4	213
Crow and tamping-bar	A. Wright and A. F. Tew	139,599	May 6, 1873	115	38	3	507
Croze, Coopers'	J. Bailey	139,852	June 17, 1873	390	122	3	663
Crusher: See Crane-crusher. Clod-crusher. Culinary-crusher. Ice-crusher. Meat-crusher. Rock and ore crusher. Stone-crusher.							
Crushing-mill	J. W. Smith	137,035	Mar. 18, 1873	612	203	3	313
Cuff	E. E. Mack	145,957	Dec. 30, 1873	854	278	4	701
Cuff	I. M. Post	136,760	Mar. 11, 1873	368	122	3	284
Cuff-holder	G. W. James	144,101	Oct. 28, 1873	670	221	4	463
Cuff, Reversible	L. H. Foy	137,907	Apr. 15, 1873	576	181	3	428
Culinary apparatus	R. H. Cazier	141,114	July 22, 1873	710	237	4	94
Culinary boiler	J. H. Corey	143,673	Oct. 14, 1873	249	84	4	409
Culinary boiler	S. S. Fitch	137,604	Apr. 8, 1873	301	93	3	393
Culinary boiler	R. B. Lewis	137,140	Mar. 25, 1873	716	238	3	332
Culinary crusher and press	G. B. Fowler	136,498	Mar. 4, 1873	127	41	3	256
Culinary utensil	H. G. Dunkelberger	144,518	Nov. 11, 1873	298	100	4	514
Culinary vessel	W. A. Barlow	145,550	Dec. 16, 1873	473	154	4	647
Cultivating implement, Garden	D. Mack	144,912	Nov. 25, 1873	647	220	4	565
Cultivating-plow	W. Bagnall	144,247	Nov. 4, 1873	69	22	4	483
Cultivator	D. C. Baker	138,838	May 13, 1873	342	105 106	3	535
Cultivator	L. Baldwin	137,649	Apr. 8, 1873	336	104	3	396
Cultivator	J. Behel	135,964	Feb. 18, 1873	533	176	3	195
Cultivator	C. Billups	135,070	Jan. 21, 1873	535	174	3	78
Cultivator	B. C. Bradley	135,401	Feb. 4, 1873	6	2	3	128
Cultivator	B. F. Brate	136,409	Mar. 4, 1873	49	17	3	249
Cultivator	E. Briggs	141,199	July 29, 1873	802	262	4	109
Cultivator	S. S. Bushnell	134,728	Jan. 14, 1873	226	72	3	39
Cultivator	I. N. Canthorn	134,732	Jan. 14, 1873	228	73	3	39
Cultivator	R. S. Cavett	144,740	Nov. 18, 1873	492	167	4	541
Cultivator	J. Caylor	140,885	July 15, 1873	482	163	4	67

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Cultivator	A. B. Colver and J. Priest	135,264	Jan. 28, 1873	794	232	3	106
Cultivator	A. Cooper	145,848	Dec. 23, 1873	734	240	4	681
Cultivator	S. Crutcher	144,321	Nov. 4, 1873	124	41	4	488
Cultivator	W. P. Dale	136,708	Mar. 11, 1873	324	107	3	280
Cultivator	J. W. Doud	140,484	July 1, 1873	119	41	4	18
Cultivator	D. B. Eberly	145,636	Dec. 16, 1873	541	177 178	4	653
Cultivator	D. Edwards	136,047	Feb. 18, 1873	604	199	3	201
Cultivator	R. Ellwood and R. L. Pitcher	140,353	July 1, 1873	17	5, 6	4	9
Cultivator	R. A. Fish	141,707	Aug. 12, 1873	273	89	4	165
Cultivator	J. H. Frank	143,338	Sept. 30, 1873	890	304	4	363
Cultivator	L. M. Ganong	136,500	Mar. 4, 1873	128	41	3	256
Cultivator	E. M. Graham	139,001	May 20, 1873	488	154	3	561
Cultivator	J. M. Gustin	141,786	Aug. 12, 1873	348	114	4	171
Cultivator	W. G. Halbert	134,662	Jan. 7, 1873	155	51	3	19
Cultivator	L. Haverstick	144,846	Nov. 25, 1873	597	203	4	560
Cultivator	J. M. Heiges	134,665	Jan. 7, 1873	158	52	3	19
Cultivator	J. Helm	138,085	Apr. 22, 1873	749	217	3	452
Cultivator	J. B. Hinckley	135,914	Feb. 18, 1873	493	159	3	192
Cultivator	J. M. Knox	137,933	Apr. 15, 1873	595	187	3	430
Cultivator	H. K. Kriebel	136,249	Feb. 25, 1873	792	257	3	227
Cultivator	O. Kugler	141,145	July 22, 1873	739	244	4	96
Cultivator	O. Kugler	141,146	July 22, 1873	740	245	4	97
Cultivator	A. Leonard	137,782	Apr. 15, 1873	469	147	3	419
Cultivator	M. Lewellin	137,221	Mar. 25, 1873	792	262	3	338
Cultivator	W. Lewis	143,019	Sept. 23, 1873	621	211	4	325
Cultivator	P. Long	139,320	May 27, 1873	791	252	3	592
Cultivator	E. P. Lynch	143,172	Sept. 23, 1873	740	253	4	335
Cultivator	J. P. Manny	139,471	June 3, 1873	24	7, 8	3	611
Cultivator	J. R. McDonald	137,703	Apr. 8, 1873	387	120	3	400
Cultivator	A. S. McDonnell	144,346	Nov. 4, 1873	144	48	4	490
Cultivator	K. McKinnon	136,254	Feb. 25, 1873	798	239	3	228
Cultivator	J. Mills	135,997	Feb. 18, 1873	562	185	3	197
Cultivator	B. F. Muschert	140,724	July 8, 1873	338	114	4	47
Cultivator	W. T. Parker	135,726	Feb. 11, 1873	315	100	3	164
Cultivator	J. H. Pattee	135,148	Jan. 21, 1873	598	195	3	83
Cultivator	F. Perez	143,380	Sept. 30, 1873	933	316	4	366
Cultivator	H. H. Perkins	137,478	Apr. 1, 1873	179	57	3	372
Cultivator	W. H. Platt	137,024	Mar. 18, 1873	602	200	3	312
Cultivator	O. M. Pond	137,094	Mar. 25, 1873	676	225	3	329
Cultivator	G. R. Richardson and J. Behel	139,478	June 3, 1873	31	10	3	611
Cultivator	R. B. Robbins	141,462	Aug. 5, 1873	47	15	4	139
Cultivator	A. Roden	145,901	Dec. 23, 1873	783	256	4	685
Cultivator	R. Rusat	139,193	May 20, 1873	668	209	3	575
Cultivator	J. Sherrill	134,615	Jan. 7, 1873	107	35	3	15
Cultivator	M. P. Simpson and J. P. Ellacott	140,437	July 1, 1873	78	28	4	14
Cultivator	Z. B. Sims	135,165	Jan. 21, 1873	610	199	3	84
Cultivator	J. E. Sisson	145,545	Dec. 16, 1873	460	150	4	646
Cultivator	G. Slusser	145,690	Dec. 16, 1873	587	192	4	657
Cultivator	A. C. Smith	145,691	Dec. 16, 1873	588	193	4	657
Cultivator	J. W. Swickard	136,108	Feb. 18, 1873	660	216	3	205
Cultivator	W. Taylor	135,736	Feb. 11, 1873	323	103	3	165
Cultivator	C. Theide	138,451	Apr. 29, 1873	1,098	347	3	488
Cultivator	A. C. Tower	134,824	Jan. 14, 1873	309	98, 99	3	45
Cultivator	G. Waggoner	134,949	Jan. 14, 1873	416	133	3	53
Cultivator	W. T. Walker	139,964	May 13, 1873	443	139	3	544
Cultivator	P. F. Wells	139,985	June 17, 1873	500	158	3	672
Cultivator	E. Wiard	136,574	Mar. 4, 1873	200	66	3	261
Cultivator	W. Willerton	136,477	Mar. 4, 1873	107	36	3	254
Cultivator	B. W. Wingo	145,038	Nov. 25, 1873	757	256	4	574
Cultivator	B. Witter	135,872	Feb. 11, 1873	443	144	3	174
Cultivator	S. L. Young	136,297	Feb. 4, 1873	839	271	3	931
Cultivator, Corn	L. Emrick	135,414	Feb. 25, 1873	19	6	3	129
Cultivator, Corn	N. G. Blausier	141,988	Aug. 19, 1873	529	175	4	195
Cultivator, Cotton	F. L. Bates	138,555	May 6, 1873	79	26	3	504
Cultivator, Cotton	N. Bell and H. Winfield	134,632	Jan. 7, 1873	124	40	3	16
Cultivator, Cotton	E. H. Nelson	142,501	Sept. 2, 1873	169	52	4	255
Cultivator, Cotton	C. F. Reams	137,959	Apr. 15, 1873	618	194	3	431
Cultivator, Cotton	C. Zoehner	139,750	June 10, 1873	295	91	3	648
Cultivator draft-hook	A. Adams	139,752	June 10, 1873	297	91	3	648
Cultivator, Hand	S. A. Conrad	145,153	Dec. 2, 1873	106	35	4	594
Cultivator, Hand	L. J. Dawdy	136,220	Feb. 25, 1873	768	248	3	225
Cultivator, Hand	A. W. Ross	144,927	Nov. 25, 1873	661	224	4	566
Cultivator, Hand	G. W. Rue	137,098	Mar. 25, 1873	679	226	3	329
Cultivator plow	K. McKinnon	145,222	Dec. 2, 1873	165	57	4	588
Cultivator, Rotary	R. McKinley	139,013	May 20, 1873	498	157	3	561
Cultivator, Rotary	J. W. Millroy	135,002	Jan. 21, 1873	476	152	3	73
Cultivator, Rotary	C. N. Poundstone	135,664	Feb. 11, 1873	262	83	3	160
Cultivator, Rotary	J. D. Starritt	144,419	Nov. 11, 1873	220	73	4	508
Cultivator, Sugar-cane	A. Trouard	135,174	Jan. 21, 1873	618	201	3	85
Cultivator-teeth	G. F. Stroud	141,400	July 29, 1873	998	324	4	124
Cultivator-teeth, Manufacture of	J. Behel	139,535	June 3, 1873	77	26	3	615
Cultivator, Tobacco	Z. D. Blakistone	136,898	Mar. 18, 1873	496	164	3	303
Cultivator, Wheel	G. Bradley	145,331	Dec. 9, 1873	268	90	4	619
Cultivator, Wheel	J. F. Matchet and P. W. Smith	143,631	Oct. 14, 1873	215	72	4	407
Cultivator, Wheel	J. H. Randolph, jr.	138,931	May 13, 1873	417	131	3	542
Cultivator, Wheel	W. H. Strong	146,030	Dec. 30, 1873	915	297	4	706
Cup:							
See Breast-cup.							
Drinking-cup.							
Lubricating-cup.							
Mucilage-cup.							
Oil-cup.							
Sponge-cup.							
Cupboard and extension-table combined	B. F. Partridge	135,440	Feb. 4, 1873	44	13	3	131

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Capboard, Refrigerating.....	J. H. Polhamus.....	135, 442	Feb. 4, 1873	45	14	3	131
Cupola and other furnaces.....	L. Quinke.....	143, 463	Oct. 7, 1873	56	19	4	385
Cupola and other metallurgic furnaces.....	O. Bolton, jr.....	137, 125	Mar. 25, 1873	705	234	3	331
Cupola-furnace.....	P. W. Mackenzie.....	138, 510	May 6, 1873	37	12	3	500
Cupola-furnace.....	J. B. Pearse.....	138, 184	Apr. 22, 1873	833	264	3	458
Curling-iron.....	J. S. Morgan.....	144, 471	Nov. 11, 1873	259	87	4	511
Curia, Artificial.....	L. Rosenstein and S. Feder.....	141, 079	July 22, 1873	679	228	3	82
Current and postage-stamp holder.....	J. Graham.....	136, 720	Mar. 11, 1873	335	111	3	281
Current, Means of creating artificial.....	S. V. Beckwith.....	139, 492	June 3, 1873	45	14	3	612
Current-wheel.....	E. Bantz.....	139, 854	June 17, 1873	391	122	3	663
Carrier's tool.....	C. Weeke.....	141, 301	July 29, 1873	900	295	4	117
Curry-comb.....	C. A. Gardner and J. A. Enos.....	137, 671	Apr. 8, 1873	358	111	3	397
Curry-comb.....	S. A. Morton.....	145, 891	Dec. 23, 1873	772	252	4	664
Curry-comb.....	A. H. Reid.....	145, 242	Dec. 2, 1873	182	63	4	600
Curry-comb.....	J. W. Trussell.....	145, 033	Nov. 25, 1873	753	254	4	574
Curtain-cord fastener.....	J. P. Arnold.....	139, 228	May 27, 1873	708	223	3	586
Curtain-cord fastener.....	C. Gammel.....	138, 878	May 13, 1873	377	118	3	538
Curtain-cord fastener.....	H. Lull.....	139, 404	May 27, 1873	869	278	3	599
Curtain-cord rack.....	W. D. Ludlow.....	134, 812	Jan. 14, 1873	296	95	3	44
Curtain-fastener.....	J. F. A. Blätterlein.....	141, 313	July 29, 1873	909	298	4	118
Curtain-fixture.....	G. W. Beers.....	137, 405	Apr. 1, 1873	111	36	3	366
Curtain-fixture.....	C. Buckley.....	136, 030	Feb. 18, 1873	590	194	3	200
Curtain-fixture.....	H. H. Burritt.....	143, 494	Oct. 7, 1873	82	28	4	387
Curtain-fixture.....	H. H. Burritt.....	145, 785	Dec. 23, 1873	681	223	4	677
Curtain-fixture.....	G. B. Cowles.....	134, 980	Jan. 21, 1873	453	145	3	72
Curtain-fixture.....	L. J. Earle.....	140, 901	July 15, 1873	499	168	4	68
Curtain-fixture.....	C. E. Fritts.....	138, 493	May 6, 1873	21	8	3	499
Curtain-fixture.....	S. and M. Henry.....	145, 868	Dec. 23, 1873	752	245	4	682
Curtain-fixture.....	A. D. and E. M. Judd.....	137, 450	Apr. 1, 1873	152	49	3	369
Curtain-fixture.....	S. Ker.....	135, 562	Feb. 4, 1873	155	50	3	140
Curtain-fixture.....	A. E. Lazell.....	139, 719	June 10, 1873	263	82	3	646
Curtain-fixture.....	H. E. Marchand.....	144, 342	Nov. 4, 1873	141	47	4	490
Curtain-fixture.....	W. W. Massey.....	145, 669	Dec. 16, 1873	569	187	4	655
Curtain-fixture.....	C. C. Moore.....	145, 359	Dec. 9, 1873	290	97	4	621
Curtain-fixture.....	P. W. Phillips.....	137, 480	Apr. 1, 1873	181	57	3	372
Curtain-fixture.....	T. Symonds.....	138, 054	Apr. 22, 1873	733	229	3	449
Curtain-fixture.....	H. L. Traphagen.....	135, 950	Feb. 18, 1873	523	171	3	194
Curtain-fixture.....	F. Walker.....	140, 976	July 15, 1873	574	193	4	74
Curtain-fixture.....	H. K. Warner and C. E. Smith.....	145, 821	Dec. 23, 1873	709	233	4	679
Curtain-fixture.....	W. A. Wheelon.....	136, 195	Feb. 25, 1873	750	242	3	224
Curtain-fixture.....	J. F. Wollensak.....	145, 040	Nov. 25, 1873	759	256	4	574
Curtain-fixture, Cord-tightener for.....	H. L. Judd.....	135, 561	Feb. 4, 1873	154	49	3	140
Curtain-fixture rack.....	J. Pusey.....	137, 320	Apr. 1, 1873	38	12	3	360
Curtain-hook.....	H. L. Judd.....	139, 676	June 10, 1873	218	70	3	642
Curtain, Roller for window.....	W. W. Grier.....	138, 749	May 13, 1873	262	82	3	529
Curtain-roller holder.....	B. G. Fitzhugh.....	138, 014	Apr. 22, 1873	682	215	3	446
Curtain-tassel clip.....	F. Müller.....	140, 295	June 24, 1873	789	250	3	704
Cushion:							
<i>See</i> Billiard-cushion.							
Billiard-table cushion.							
Needle-cushion.							
Spring-cushion.							
Cutlery, &c., Metallic compound for coating.....	J. Zimmer.....	135, 028	Jan. 21, 1873	500	.....	3	75
Cutlery, Table.....	C. McDonald.....	135, 136	Jan. 21, 1873	589	191	3	82
Cut-off and regulating cock for gas.....	C. E. Seal.....	140, 549	July 1, 1873	176	60	4	23
Cut-off and reversing valve-gear for engine.....	R. M. Fryer.....	135, 794	Feb. 11, 1873	377	{ 121 122 }	3	169
Cut-off for cistern.....	G. W. Howell.....	142, 569	Sept. 9, 1873	230	75	4	272
Cut-off for cistern.....	C. Wuerz.....	142, 832	Sept. 16, 1873	459	156	4	301
Cut-off for fire-plug system.....	F. W. Eames.....	135, 976	Feb. 18, 1873	541	180	3	196
Cut-off for steam-engine, Variable.....	W. Wright.....	139, 224	May 20, 1873	692	218	3	577
Cut-off, Rain-water.....	J. W. Wetmore.....	137, 268	Mar. 25, 1873	835	274	3	341
Cut-off valve, Rotary balanced.....	P. Shellenback and F. Brillmayer.....	136, 622	Mar. 11, 1873	257	86	3	975
Cutter:							
<i>See</i> Angle-iron cutter.							
Bolt-cutter.							
Bolt and rivet cutter.							
Bolt and rod cutter.							
Butter-cutter.							
Button-hole cutter.							
Cake-cutter.							
Candy-cutter.							
Cheese-cutter.							
Cigar-tip cutter.							
Feed-cutter.							
Harvester-cutter.							
Hoop-lock cutter.							
Meat and vegetable cutter.							
Paper-cutter.							
Peach-cutter.							
Peg-cutter.							
Potato-cutter.							
Relisher and wedge cutter.							
Rotary-cutter.							
Sausage-cutter.							
Sewing-machine cutter.							
Sewing-machine thread-cutter.							
Sod-cutter.							
Stalk-cutter.							
Stone-cutter.							
Straw-cutter.							
Thread-cutter.							
Tobacco-cutter.							
Tobacco-plant cutter.							
Tube-cutter.							

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See Twine-cutter.							
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Washer-cutter.							
Wrench and bolt cutter.							
Cutter-bar in grinding, Device for holding	W. H. Daniels	138, 136	Apr. 22, 1873	787	251	3	455
Cutter-head	D. C. Allen	141, 744	Aug. 12, 1873	303	99	4	168
Cutter-head	E. Benjamin	142, 669	Sept. 9, 1873	314	104	4	279
Cutter-head	J. F. W. Erdmann	140, 905	July 15, 1873	503	189	4	68
Cutter-head	H. Fletcher	143, 565	Oct. 14, 1873	158	53	4	402
Cutter-head	A. H. Shipman	142, 048	Aug. 19, 1873	592	195	4	200
Cylinder boring and facing machine	J. McDonald	143, 917	Oct. 21, 1873	487	164	4	438
Cylinder-engine, Triple	P. Brotherhood	145, 719	Dec. 23, 1873	624	205	4	672
Cylinder-facing-machine	T. M. Henderson and F. L. McDonald.	145, 103	Dec. 2, 1873	59	19	4	590
Cylinder-heads, Machine for grinding	J. Shirell	142, 874	Sept. 16, 1873	443	168	4	304
Cylinder-lubricator, Steam	L. F. Smith	140, 958	July 15, 1873	555	186	4	72
Cylinder-press, Fan-fly attachment for	P. A. Cotter	137, 597	Apr. 8, 1873	284	91	3	392
Dam, Self-acting	H. Werner	135, 023	Jan. 21, 1873	496	159	3	75
Damper and ventilator	J. L. Skinner	141, 601	Aug. 5, 1873	165	53	4	148
Damper for windows, Fire	M. J. Barwick	139, 999	June 17, 1873	513	163	3	673
Damper, Hot-air furnace	A. C. Warren	136, 291	Feb. 25, 1873	833	269	3	230
Damper-regulator	B. Fitts	135, 103	Jan. 21, 1873	557	182	3	60
Damper, Stove	E. F. Cook	145, 989	Dec. 30, 1873	881	285	4	703
Damper, Stove	H. H. Huntley	144, 676	Nov. 18, 1873	439	148	4	537
Damper, Stove	J. D. Willoughby	135, 611	Feb. 4, 1873	209	65	3	143
Damper, Stove	R. Worster	144, 043	Oct. 28, 1873	620	205	4	459
Damper, Stove-pipe	E. C. Chapman	144, 192	Nov. 4, 1873	19	5	4	480
Damper, Stove-pipe	E. K. Dean	136, 042	Feb. 18, 1873	600	197	3	200
Damper, Stove-pipe	J. Emmert	138, 997	May 20, 1873	985	153	3	560
Damper, Stove-pipe	J. M. Read	144, 634	Nov. 18, 1873	405	136	4	534
Dash-board	J. S. Campbell	141, 758	Aug. 12, 1873	317	104	4	169
Dash-board bag	S. Hipkiss	140, 416	July 1, 1873	63	22	4	13
Deck-light	L. M. Bearse	136, 299	Feb. 25, 1873	840	272	3	231
Dental-chair stool	T. B. Downs and W. D. Morris	138, 796	May 13, 1873	305	94	3	532
Dental clamp	C. E. Blake	138, 370	Apr. 29, 1873	1,025	323	3	482
Dental drill	J. W. Baxter	139, 039	May 20, 1873	519	164	3	563
Dental drill, Automatic	M. I. Gallagher	135, 109	Jan. 21, 1873	563	183	3	81
Dental drilling-machine	C. E. Edwards	145, 098	Dec. 2, 1873	56	17	4	590
Dental engine	C. M. Curtis	138, 318	Apr. 29, 1873	983	309	3	498
Dental filling	C. E. Blake	145, 275	Dec. 9, 1873	217	74	4	615
Dental filling, Porcelain block for	C. H. Mack	139, 012	May 20, 1873	498	157	3	561
Dental foil	C. E. Blake	145, 274	Dec. 9, 1873	217	74	4	615
Dental forceps	C. G. French	145, 058	Dec. 2, 1873	17	6	4	587
Dental gold, Manufacture of	R. S. Williams	140, 984	July 15, 1873	582	196	4	75
Dental plugger	J. T. Codman	145, 051	Dec. 2, 1873	9	3	4	586
Dental tool-rack	G. E. Hays	144, 539	Nov. 11, 1873	318	108	4	515
Dentist's drill, Diamond-pointed	J. P. Gillespie	137, 434	Apr. 1, 1873	139	45	3	368
Dentist's flask	C. Bailey	137, 569	Apr. 8, 1873	287	89	3	392
Dentist's, Preparing gold for	R. S. Williams	137, 747	Apr. 8, 1873	439	133	3	403
Dentist's stool	I. W. Lyon	135, 435	Feb. 4, 1873	40	12	3	130
Dentist's tool	C. P. Grout	138, 150	Apr. 22, 1873	798	255	3	456
Deodorizing animal matters for fertilizers, &c.	E. C. C. Stanford	137, 969	Apr. 15, 1873	626	200	3	432
Deodorizing oil obtained from acid tar of oil refineries	R. Gaggin	138, 629	May 6, 1873	142	47	3	509
Derrick	F. Donald and G. S. Newton	135, 785	Feb. 11, 1873	364	117	3	168
Derrick	A. K. Richmond	145, 899	Dec. 23, 1873	780	255	4	684
Derrick	J. E. Serrall	142, 740	Sept. 9, 1873	372	125	4	284
Derrick	J. E. Walsh	138, 215	Apr. 22, 1873	659	272	3	460
Derrick and crane	J. W. Kennedy	134, 677	Jan. 7, 1873	169	56	3	20
Desk	G. and J. A. Schaaf	136, 565	May 6, 1873	105	33	3	506
Desk and book-case	J. A. Payne	139, 419	May 27, 1873	880	282	3	600
Desk and seat, School	A. E. Roberts	138, 045	Apr. 22, 1873	714	225	3	449
Desk and seat, School	J. B. Sherwood	137, 866	Apr. 15, 1873	540	168	3	425
Desk-cover	J. Heymann	144, 027	Oct. 28, 1873	608	201	4	458
Desk, School	J. W. Childs	139, 543	June 3, 1873	84	29	3	616
Desk, School	S. Cox and W. W. Fanning	135, 089	Jan. 21, 1873	547	178	3	79
Desk, School	C. J. Higgins	143, 760	Oct. 21, 1873	355	118	4	427
Desk, School	C. H. Presbrey	135, 154	Jan. 21, 1873	602	196	3	83
Desk, School	M. C. Stebbins and E. J. Piper	137, 732	Apr. 8, 1873	415	128	3	402
Desk, School	D. G. Venable	137, 263	Mar. 25, 1873	831	273	3	341
Desk, School	F. A. Wilber	140, 979	July 15, 1873	576	194	4	74
Desk, Seat for school	J. Cooley	145, 930	Dec. 30, 1873	828	270	4	699
Desk, &c., Writing	D. Schafer	144, 636	Nov. 18, 1873	407	137	4	534
Desulphurizing furnace, Ore	E. C. Hegeler and F. W. Matthiessen.	144, 904	Nov. 25, 1873	640	218	4	564
Dials, Transmitting time-movements to distant	H. J. Wenzel	140, 661	July 8, 1873	286	97	4	43
Diamond-gage	W. Shumard	135, 249	Jan. 28, 1873	714	228	3	105
Diamond into blocks or saw-teeth, Mode of fastening	T. Smith	139, 337	May 27, 1873	801	256	3	594
Diamond, Method of setting black	T. W. Baxter	134, 968	Jan. 21, 1873	442	142	3	71
Diamonds or carbon-points in face of metal tools. Setting.	W. McKenna	143, 021	Sept. 23, 1873	622	212	4	325
Dice-box	J. Twamly	143, 599	Oct. 14, 1873	185	63	4	404
Die:							
See Carriage-clip die.							
Flower-die.							
Hammer-die.							
Hat-pressing die.							
King-bolt die.							
Punching-die.							
Screw-capping die.							
Screw-cutting die.							
Screw-threading die.							
Wrench-bar die.							
Wrench-head die.							

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Die-plate	F. D. Bliss	135,314	Jan. 28, 1873	763	247	3	169
Die-rolling machine	H. Waters	137,984	Apr. 15, 1873	637	201	3	433
Digger: See Post-hole, Potato.							
Dinner-can	A. A. Arnold	139,851	June 17, 1873	389	191	3	663
Dining-table	A. Land	137,779	Apr. 15, 1873	466	146	3	419
Dining-table	G. L. Motter	136,381	Mar. 4, 1873	27	10	3	247
Dip-pipe in gas-works, Sealing	H. H. Edgerton	137,425	Apr. 1, 1873	199	42	3	367
Dip-pipe of gas-works, Sealing	E. Jones	144,619	Nov. 18, 1873	394	132	4	533
Direct-acting steam-engine	J. Bailey	136,806	Mar. 18, 1873	419	139	3	297
Dish-cover	A. J. Ohmer	136,856	Mar. 18, 1873	460	153	3	301
Dish-drainer	W. H. Gould	141,643	Aug. 12, 1873	220	69	4	161
Dish-heater	S. S. Fitch	140,769	July 15, 1873	381	131	4	59
Dish-pan	S. Lafferty	139,252	May 27, 1873	733	231	3	589
Dish-stand, Table	F. Grosjean	140,623	July 8, 1873	256	87	4	40
Dish-washer	C. Bartlett	145,042	Dec. 2, 1873	1	1	4	586
Dish-washing machine	J. Usher	135,176	Jan. 21, 1873	619	202	3	85
Dish-washing machine	C. H. Williams	143,484	Oct. 7, 1873	73	25	4	396
Disinfectant compound	J. Hilton	141,274	July 29, 1873	877	.....	4	115
Disinfectant package	W. P. Tanny	142,963	Sept. 16, 1873	569	192	4	311
Disinfecting and deodorizing apparatus for water-closets	J. M. E. Baker	141,100	July 22, 1873	698	234	4	93
Disinfecting compound	J. W. Lee and J. W. Davis	145,433	Dec. 9, 1873	353	.....	4	626
Disinfecting powder	H. G. Dayton	141,546	Aug. 5, 1873	119	.....	4	145
Disinfecting soap-boiling establishment	S. Strunz	136,954	May 13, 1873	435	137	3	543
Disintegrating fabric, Machine for	M. Marshall	143,990	Sept. 30, 1873	846	291	4	360
Distillation, Apparatus for treating grain for	A. Woolner	139,749	June 10, 1873	294	91	3	648
Distilling apparatus	G. Hunziker	136,921	Mar. 18, 1873	515	170	3	305
Distilling heavy oils, Apparatus for	H. Ryder	142,515	Sept. 2, 1873	173	56	4	255
Distilling petroleum	A. W. Wilkinson	145,707	Dec. 16, 1873	605	.....	4	658
Distilling pure alcoholic spirits	C. Andersen	143,654	Oct. 14, 1873	233	79	4	408
Distilling together spirits of turpentine and alcoholic liquid	W. Corfield	136,137	Feb. 23, 1873	706	.....	3	220
Ditching and grading machine	L. D. Noble	137,318	Apr. 1, 1873	36	11	3	360
Ditching-machine	C. M. Brown	139,765	June 10, 1873	309	96	3	649
Ditching-machine	J. W. Fauver	142,222	Aug. 26, 1873	754	249	4	223
Ditching-machine	H. Gonellaz	140,820	July 15, 1873	428	145	4	62
Ditching-machine	W. T. Hoskins	135,807	Feb. 11, 1873	393	127	3	170
Ditching-machine	J. W. Humphreys	134,991	Jan. 21, 1873	463	148	3	72
Ditching-machine	J. W. Humphreys	145,736	Dec. 23, 1873	641	209	4	673
Ditching-machine	G. W. Nevill	136,752	Mar. 11, 1873	362	119	3	283
Ditching-machine	R. Starbrick	135,605	Feb. 4, 1873	202	63	3	143
Dividers, Extension	G. C. Miller	144,468	Nov. 11, 1873	257	86	4	511
Dividers, Pencil-attachment for	W. Schollhorn	140,081	June 17, 1873	527	186	3	680
Dock, Building	A. W. Thompson and J. Pattison	136,560	Mar. 4, 1873	187	60	3	260
Doll	H. C. Work	140,605	July 8, 1873	242	82	4	39
Doll-joint	J. A. H. Ellis	139,130	May 20, 1873	607	190	3	570
Dolla, Manufacture of	I. F. Walker	144,373	Nov. 4, 1873	166	55	4	492
Domino	B. Louineau	143,703	Oct. 14, 1873	227	94	4	412
Domino	W. X. Stevens	139,928	June 17, 1873	459	143	3	689
Door, Air-enshon for	J. W. Wetmore	142,540	Sept. 2, 1873	195	63	4	257
Door and gate bolt	J. Smith	145,131	Dec. 2, 1873	90	29	4	592
Door and gate spring	S. L. Bean and L. Mills	136,482	Mar. 4, 1873	112	37	3	254
Door and gate spring	J. T. Foster	137,770	Apr. 15, 1873	460	143	3	418
Door and gate spring	C. N. Owen	137,619	Apr. 8, 1873	310	97	3	394
Door and window guard	J. W. White	145,772	Dec. 23, 1873	672	219	4	676
Door-bolt	S. D. Arnold	138,360	Apr. 29, 1873	1,016	320	3	481
Door-bolt	A. G. Hofstatter	137,841	Apr. 15, 1873	520	162	3	423
Door-bolt	J. Jones	137,211	Mar. 25, 1873	785	259	3	337
Door-bolt	A. Pelham	136,861	Mar. 18, 1873	463	154	3	301
Door-bolt	J. S. R. Wright	137,994	Apr. 15, 1873	647	204	3	434
Door-bolt mechanism, Prison	T. R. and J. Pullis	132,009	Apr. 22, 1873	759	241	3	452
Door-button	O. F. Fogelstrand	135,215	Jan. 28, 1873	677	219	3	102
Door-check	J. Bader	144,246	Nov. 4, 1873	68	22	4	483
Door-check	L. Goodyear	141,435	Aug. 5, 1873	33	7	4	137
Door-check	A. Hanna	135,115	Jan. 21, 1873	567	185	3	81
Door-check	G. C. Idly	136,731	Mar. 11, 1873	345	114	3	282
Door-check	J. P. Israel and D. W. McLane	140,139	June 24, 1873	659	207	3	693
Door-check	J. and A. Kolb	135,340	Jan. 28, 1873	797	257	3	111
Door-check	J. A. McNabb	141,577	Aug. 5, 1873	144	46	4	147
Door-check	M. R. Perkins	144,292	Nov. 4, 1873	46	14	4	482
Door-check	B. Poulson	137,237	Mar. 25, 1873	806	265	3	339
Door-check	G. E. Rittenhouse	139,082	May 20, 1873	563	178	3	566
Door-check	G. Rohrbaker	134,612	Jan. 7, 1873	105	34	3	15
Door-check and retainer	G. H. Worster	138,551	May 6, 1873	76	25	3	504
Door-closing apparatus	H. F. Shaw	141,896	Aug. 19, 1873	457	144	4	189
Door, Construction of	W. W. J. Toussaint	140,799	July 15, 1873	407	138	4	61
Door-fastener	H. Orcutt	141,724	Aug. 12, 1873	287	94	4	166
Door-fastening, Barn	A. D. Wright and A. Roys	135,027	Jan. 21, 1873	499	181	3	75
Door-fastening, Sliding	E. W. Staples, jr.	141,019	July 22, 1873	627	211	4	88
Door, gate, &c., spring	R. Espey	135,192	Jan. 21, 1873	632	206	3	96
Door-hanger	S. L. Bignall	143,557	Oct. 14, 1873	153	51	4	401
Door-hanger	A. K. Rider	141,382	July 22, 1873	980	318	4	123
Door, Hanging	G. Heegler	134,542	Jan. 7, 1873	36	12	3	10
Door, Illuminating	T. Hyatt	145,153	Dec. 2, 1873	136	44	4	596
Door-key	J. Collins	145,401	Dec. 9, 1873	325	110	4	624
Door-key, Folding	J. Seibert	135,600	Feb. 4, 1873	199	61	3	143
Door-lock	H. H. Elwell	136,049	Feb. 18, 1873	606	199	3	201
Door-lock	T. Kromer	140,377	July 1, 1873	35	12	4	11
Door-lock, Freight-car	W. S. Brewster	135,402	Feb. 4, 1873	6	3	3	128
Door-lock, Sliding	A. W. Cram	139,118	May 20, 1873	585	187	3	569
Door-lock strike or keeper	J. Scott	138,048	Apr. 22, 1873	718	226	3	449
Door, &c., Machine for relishing	F. D. Green	136,505	Mar. 4, 1873	133	43	3	256
Door-plate and indicator	T. M. and W. P. Tobin	137,508	Apr. 1, 1873	212	64	3	374
Door-plate and letter-chute, Combined	B. Morningstar	137,946	Apr. 15, 1873	605	190	3	431

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Door, safe, &c., Burglar-proof	G. Little	137,456	Apr. 1, 1873	159	50	3	370
Door-securer	W. H. Phipps	144,923	Nov. 4, 1873	46	14	4	482
Door-securer and key-ring, Combined	J. P. Tuck	144,642	Nov. 18, 1873	414	139	4	535
Door-spring	H. Cody	144,256	Nov. 4, 1873	74	24	4	484
Door-spring	S. Cutler	136,974	Mar. 18, 1873	557	185	3	308
Door-spring	D. Dick	139,458	June 3, 1873	14	4	3	610
Door-spring	G. Geer	136,371	Mar. 4, 1873	19	7	3	247
Door-spring	L. J. Higgins	137,367	Apr. 1, 1873	80	26	3	363
Door-spring	A. D. Hoffman	135,914	Feb. 18, 1873	495	160	3	192
Door-spring	W. M. Kellie	136,923	Mar. 18, 1873	516	170	3	305
Door-spring	C. W. Oldham	140,638	July 8, 1873	269	91	4	41
Door-spring	F. H. Richards	144,926	Nov. 25, 1873	660	224	4	566
Door-spring	W. T. Rossiter	145,244	Dec. 2, 1873	183	63	4	600
Door-spring	A. Tittman	140,446	July 1, 1873	86	30	4	15
Door-spring	M. L. Webster	139,037	May 20, 1873	516	163	3	563
Door-threshold	O. G. Thomas	138,300	Apr. 29, 1873	967	304	3	477
Doors, Automatic catch for sliding	A. W. Gibbs	145,644	Dec. 16, 1873	549	180	4	654
Doors, Rail for sliding	J. Collins	145,630	Dec. 16, 1873	536	176	4	633
Double-tree	W. Martin	143,173	Sept. 23, 1873	741	255	4	335
Doubling and twisting machine, Stopping-mechanism for.	W. Cockcroft and R. Ackroyd	142,374	Sept. 2, 1873	47	16	4	246
Dough kneading and mixing machine	E. Edwards	136,144	Feb. 25, 1873	711	229	3	221
Dough-machine	O. B. Fuller	140,695	July 8, 1873	315	107	4	45
Dough-sheeting machine	O. B. Fuller	144,666	Nov. 18, 1873	431	146	4	536
Doughnut-mold	G. Machlet	137,142	Mar. 25, 1873	718	238	3	332
Dovetail-cutting machinery	W. T. Hamilton	144,536	Nov. 11, 1873	314	106	4	515
Dovetail-machine	A. C. Van Alstine	141,096	July 22, 1873	694	233	4	93
Dovetailing-machine	T. Cullen	137,830	Apr. 15, 1873	508	159	3	422
Dovetailing-machine	A. Davis	139,299	May 27, 1873	775	246	3	591
Dovetailing-machine	F. D. Green	136,236	Feb. 25, 1873	780	252	3	226
Dovetailing-machine	J. E. Haskell	136,374	Mar. 4, 1873	21	7	3	247
Dovetailing-machine	W. F. Moody	137,315	Apr. 1, 1873	32	10	3	359
Dovetails, Device for marking	G. Ashby	145,477	Dec. 16, 1873	398	131	4	641
Dowel-pin, Machine for making	M. Everts	135,416	Feb. 4, 1873	22	6	3	129
Draft-equalizer	J. P. Beckenbaugh	144,052	Oct. 28, 1873	629	207	4	460
Draft-equalizer	E. H. Blake	145,983	Dec. 30, 1873	877	284	4	703
Draft-equalizer	O. N. Collins and P. B. Stiles	145,474	Dec. 9, 1873	390	128	4	629
Draft-equalizer	W. W. Hinman	143,696	Oct. 14, 1873	277	91	4	411
Draft-equalizer	W. McClelland, sr	146,011	Dec. 30, 1873	901	292	4	705
Draft-equalizer	J. Parker	141,813	Aug. 12, 1873	369	121	4	173
Draft-equalizer for wagons, Draw-bar in	J. M. Orput	144,694	Nov. 18, 1873	457	155	4	538
Draft-evener	R. Bunker	137,286	Apr. 1, 1873	6	9	3	357
Draft-regulator for stove and furnace, Automatic	A. W. Sprague and J. M. Osgood	137,632	Apr. 8, 1873	321	100	3	394
Drain	G. R. Moore	135,723	Feb. 11, 1873	313	99	3	164
Drain-pipe	W. G. Monk	135,721	Feb. 11, 1873	313	99	3	164
Drain-pipes, Machine for making	A. Müller	142,930	Sept. 16, 1873	538	184	4	308
Drain, Sediment	G. R. Moore	136,608	Mar. 11, 1873	241	81	3	274
Drain-tile laying apparatus	G. W. Nevill	136,751	Mar. 11, 1873	361	119	3	283
Draining basins, Means for	L. R. Comstock	140,577	July 8, 1873	216	72	4	37
Drawer-bolt blank	D. B. Oliver	136,757	Mar. 11, 1873	366	121	3	284
Drawer-lock	E. G. Gorey	138,148	Apr. 22, 1873	797	254	3	455
Drawer-locking device	L. Renker	141,461	Aug. 5, 1873	47	14	4	139
Drawer-pull	C. S. and E. A. Barnard	135,754	Feb. 11, 1873	340	109	3	166
Drawers	B. J. Greeley	138,017	Apr. 22, 1873	684	216	3	446
Drawers	F. Rose	136,869	Mar. 18, 1873	469	155	3	301
Drawers, Device for locking a series of	W. F. Daly	140,481	July 1, 1873	116	40	4	18
Drawers, Device for locking a series of	C. A. Stock	137,391	Apr. 1, 1873	101	33	3	365
Drawers, Men's	E. L. Ciose	142,000	Aug. 19, 1873	541	178	4	196
Drawers, Supporter for Men's	E. R. Cleaveland	137,761	Apr. 15, 1873	451	140	3	418
Drawing-board	A. Hitchcock	139,507	June 3, 1873	56	18	3	613
Drawing-board	T. H. Kane	134,550	Jan. 7, 1873	44	14	3	11
Drawing-board	W. Kenffel and H. Esser	138,896	May 13, 1873	390	122	3	539
Drawing-board	H. H. Meyer	139,411	May 27, 1873	874	280	3	599
Drawing-board trestle	J. H. Harden	145,174	Dec. 2, 1873	127	42	4	595
Drawing, Device for teaching	A. C. Covell	139,237	May 27, 1873	720	227	3	587
Drawing-frames, &c., Stop-motion for	A. I. Earle	138,868	May 13, 1873	366	114	3	537
Drawing-frames, Stop-motion for	P. J. Wright and J. Thompson	139,447	May 27, 1873	902	291	3	601
Drawing-frames, Stopping mechanism for	J. C. Taft	144,162	Oct. 28, 1873	720	240	4	467
Drawing-frames, &c., Top-roll for	H. T. Potter	142,509	Sept. 2, 1873	168	55	4	255
Drawing-knife	M. Brooks	145,485	Dec. 16, 1873	405	133	4	642
Drawing-knife	E. Parker	142,720	Sept. 9, 1873	353	119	4	282
Drawing-roll	H. T. Robbins	143,256	Sept. 30, 1873	821	221	4	357
Drawing-rolls, Instrument for	E. E. Stebbins	138,053	Apr. 22, 1873	722	228	3	449
Drawing-table and desk combined	J. A. Wilkins	145,378	Dec. 9, 1873	303	102	4	622
Dredge-box	T. Smith	135,048	Jan. 21, 1873	520	168	3	77
Dredge, Salt and pepper	D. C. Ripley	142,351	Sept. 2, 1873	26	10	4	244
Dredger	E. B. Bishop	137,998	Apr. 22, 1873	664	211	3	445
Dredger	A. C. Both	138,227	Apr. 29, 1873	893	282	3	472
Dredger	J. F. Morse	142,577	Sept. 9, 1873	237	77	4	273
Dredger	R. G. Packard	134,817	Jan. 14, 1873	300	97	3	44
Dredger	T. Synonds	136,187	Feb. 25, 1873	745	240	3	223
Dredger	T. Synonds	138,295	Apr. 29, 1873	964	303	3	477
Dredging apparatus	E. Bazin	143,269	Sept. 30, 1873	831	285	4	358
Dredging-machine	A. Boschke	141,752	Aug. 12, 1873	311	102	4	169
Dredging-machine	W. A. Collins	145,723	Dec. 23, 1873	628	206	4	672
Dredging-machine	H. Gonellaz	140,821	July 15, 1873	429	146	4	62
Dredging-machine dipper-handle, Mode of fastening the rack of.	R. R. Osgood	143,247	Sept. 30, 1873	813	279	4	357
Dress-elevator	M. Fox	135,703	Feb. 11, 1873	299	94	3	163
Dress-elevator	C. Tage	144,576	Nov. 11, 1873	349	118	4	518
Dress-facing	W. H. Gallup	138,326	Apr. 29, 1873	990	311	3	479
Dress, Ladies'	H. and E. S. Judson	139,677	June 10, 1873	219	70	3	643

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Dressmakers' marking and cutting gage	M. Blanvelt	141, 849	Aug. 19, 1873	408	133	4	186
Dress-pattern	E. P. Smith	137, 967	Apr. 15, 1873	623	197	3	432
Dress-protector	A. Herrmann	140, 415	July 1, 1873	63	92	4	13
Dress-protector, Fabric for	J. McMullen	137, 311	Apr. 1, 1873	99	9	3	359
Dress-shield	L. M. Post	140, 538	July 1, 1873	167	56	4	22
Drill:							
<i>See</i> Brace-drill.							
Dental drill.							
Dentists' drill.							
Grain-drill.							
Ratchet-drill.							
Rock-drill.							
Seed-drill.							
Twist-drill.							
Well-drill.							
Well-boring drill.							
Drill and bit-stock	C. H. Amidon	140, 451	July 1, 1873	89	31	4	15
Drill extractor	D. Kunkel	142, 244	Aug. 26, 1873	774	255	4	225
Drill-gage	A. C. Trafton	139, 487	June 3, 1873	41	13	3	612
Drill-jar	R. McMullen	137, 378	Apr. 1, 1873	88	29	3	364
Drill or other bit-stock	H. B. Williams	138, 973	May 13, 1873	449	141	3	545
Drill-rod coupling	R. A. Clark	141, 694	Aug. 12, 1873	264	85	4	164
Drill-teeth	S. Black	136, 408	Mar. 4, 1873	48	17	3	249
Drills, Machine for operating	J. W. Stockwell	137, 504	Apr. 1, 1873	208	63	3	374
Drilling and pumping machinery, Standard jack-post for	W. W. Eastman and W. H. H. Morris	142, 619	Sept. 9, 1873	271	89	4	276
Drilling-machine	P. Blaisdell	135, 313	Jan. 28, 1873	762	{ 246 } { 217 }	3	109
Drilling-machine	H. Martin	138, 570	May 6, 1873	94	30	3	505
Drilling-machine	W. H. Thorne	139, 629	June 3, 1873	158	53	3	622
Drilling-machine	W. H. Thorne and I. N. D. Haven	142, 966	Sept. 16, 1873	572	193	4	311
Drilling-machine	E. J. Worcester	135, 613	Feb. 4, 1873	211	66	3	143
Drilling-machine cutter-head	E. Weicke	142, 133	Aug. 26, 1873	682	224	4	217
Drilling-machine, Metal	J. C. Keller	140, 925	July 15, 1873	524	175	4	70
Drilling or tapping instrument, Stock for	G. Bunch	139, 042	May 20, 1873	520	164	3	563
Drinking-cups, Mustache-shield for	J. J. Greenough	144, 614	Nov. 18, 1873	389	130	4	533
Drip-collecting device	W. A. Harris	136, 597	Mar. 11, 1873	233	79	3	273
Drip-conductor	J. G. Widmann	139, 641	June 3, 1873	172	57	3	623
Drop-light and hanger	G. F. Blaisse and W. F. Crites	144, 309	Nov. 4, 1873	112	38	4	487
Drop-light and hanger	W. Staehlen	146, 104	Dec. 30, 1873	984	318	4	711
Drop-light, Center	C. Deaves	145, 632	Dec. 16, 1873	538	176	4	653
Drop-light, Center-slide	C. Deaves	139, 123	May 20, 1873	600	188	3	569
Drop-light, Chandelier	R. Cornelius	140, 347	July 1, 1873	13	4	4	9
Drop-light, Chandelier	R. Cornelius	140, 348	July 1, 1873	14	4	4	9
Drop-light for chandeliers	C. E. Cornelius	145, 053	Dec. 2, 1873	11	4	4	586
Drop-light for chandeliers	N. W. Williams	140, 565	July 1, 1873	192	64	4	24
Dropper:							
<i>See</i> Harvester.							
Seed.							
Drum, Heating	J. E. Bartlett	141, 621	Aug. 12, 1873	201	64	4	159
Drum, Heating	F. Proudfoot	145, 237	Dec. 2, 1873	178	61	4	599
Drum, Heating	O. D. Spalding	144, 573	Nov. 11, 1873	347	117	4	518
Drum, Heating	I. P. Tice	143, 795	Oct. 21, 1873	385	128	4	430
Drum, Stove-pipe	A. W. Foote	140, 999	July 22, 1873	608	205	4	86
Dryer:							
<i>See</i> Clothes-drier.							
Collar and cuff drier.							
Fruit-drier.							
Grain-drier.							
Lead-drier.							
Lumber-drier.							
Malt-drier.							
Offal-drier.							
Paper-drier.							
Poudrette-drier.							
Sugar-drier.							
Sugar and salt drier.							
Tan-drier.							
Tobacco-drier.							
Drier	J. Butterworth	138, 475	May 6, 1873	9	3	3	498
Drier	W. A. Gibbs & A. Borwick	134, 659	Jan. 7, 1873	150	{ 48 } { 49 } { 50 }	3	18
Dry-goods rack	C. N. Cawallader	137, 416	Apr. 1, 1873	121	40	3	367
Dry-goods stand	J. J. Bissel	138, 226	Apr. 29, 1873	693	282	3	471
Drying cylinder, Steam	W. C. Collier	134, 786	Jan. 14, 1873	273	89	3	42
Drying-frame for lace-curtains, &c	S. Short	145, 912	Dec. 23, 1873	792	{ 259 } { 260 }	4	685
Drying frame, Wool	E. Duffee	142, 561	Sept. 9, 1873	224	73	4	272
Drying kiln, Lumber	S. R. Kirby	143, 912	Oct. 21, 1873	483	163	4	438
Dummy-engine	J. Comly	137, 421	Apr. 1, 1873	126	41	3	367
Dummy-engine	M. H. Kollock	137, 216	Mar. 25, 1873	789	260	3	338
Dummy or traction engine	A. A. Wilder	136, 886	Mar. 18, 1873	485	161	3	302
Dumping apparatus	G. W. Reed	139, 613	June 3, 1873	147	49	3	621
Dumping platform	J. Atkinson	135, 683	Feb. 11, 1873	283	89	3	162
Dumping platform	W. W. Hinman	138, 400	Apr. 29, 1873	1,049	330	3	484
Dumping platform	F. Peteler	142, 724	Sept. 9, 1873	355	120	4	292
Dust-pan	O. C. Forsyth, jr.	145, 792	Dec. 23, 1873	686	225	4	677
Duster	G. M. Smith	135, 376	Jan. 28, 1873	825	266	3	114
Duster, Feather	C. L. W. Baker	141, 728	Nov. 18, 1873	483	163	4	540
Dyeing and washing fibrous materials, Apparatus for	C. G. Sargent	134, 935	Jan. 14, 1873	403	129	3	52
Dyeing fabrics	F. G. Graupner	139, 573	June 3, 1873	111	.....	3	618
Dyeing felt hats and caps	J. T. Waring	142, 064	Aug. 19, 1873	604	4	901
Dyeing madder-colors	F. A. Gatty	139, 056	May 20, 1873	535	3	564

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Dyeing, Mordant for.....	R. O. Burgess and S. La Rhett.	144,952	Nov. 25, 1873	680	4	568
Dyeing, Mordant for.....	G. A. Hagemann.....	143,449	Oct. 7, 1873	45	4	384
Dyeing with aniline black.....	J. Higgin.....	138,155	Apr. 22, 1873	803	.....	3	456
Dynamic machine.....	L. C. Errani and R. Anders.....	140,021	June 17, 1873	533	168	3	675
Dynamometer.....	G. W. Bigelow.....	144,945	Nov. 25, 1873	674	229	4	567
Ear-cover.....	M. Stone.....	139,831	June 10, 1873	365	113	3	654
Ear-muff.....	S. Goge.....	145,168	Dec. 2, 1873	120	39	4	595
Ear-protector.....	M. Isidor.....	138,894	May 13, 1873	389	122	3	539
Earth-boring machine.....	W. H. Bousier.....	139,761	June 10, 1873	304	94	3	649
Earth-boring machine.....	J. Burns.....	141,916	Aug. 19, 1873	474	155	4	190
Earth-boring machine.....	S. R. Owen.....	145,007	Nov. 25, 1873	727	245	4	572
Earth-boring machine.....	G. Wilson and G. H. Baisley.....	141,097	July 22, 1873	695	233	4	93
Earth-closet.....	C. C. Haskins.....	143,239	Sept. 30, 1873	806	277	4	356
Earth-closet.....	R. L. Kent.....	135,817	Feb. 11, 1873	402	129	3	171
Earth-closet.....	R. L. Mack.....	137,013	Mar. 18, 1873	594	197	3	311
Earth-closet.....	I. S. and H. R. Russell.....	137,099	Mar. 25, 1873	620	226	3	329
Earth-closet.....	I. S. and H. R. Russell.....	145,756	Dec. 23, 1873	658	215	4	675
Earth-closet.....	C. A. Wakefield.....	140,099	June 17, 1873	605	191	3	681
Earth-closet.....	R. S. Williams.....	135,026	Jan. 24, 1873	496	160	3	75
Earth-closet.....	J. L. Young.....	135,504	Feb. 4, 1873	101	32	3	135
Earth-closet.....	J. L. Young.....	146,119	Dec. 30, 1873	998	322	4	712
Earth-closet, Portable.....	A. Panyard.....	137,319	Apr. 1, 1873	37	19	3	360
Earthen pipe, Machine for making curved.....	R. Connable.....	143,670	Oct. 14, 1873	247	83	4	409
Earthen-ware pipe, Machine for making.....	J. Bingham.....	143,870	Oct. 21, 1873	451	150	4	435
Earthen-ware pipes, Process of making curved.....	R. Connable.....	143,671	Oct. 14, 1873	248	83	4	409
Earth-works, Machine for building.....	H. Morey.....	145,119	Dec. 2, 1873	74	93	4	501
Eaves-trough.....	P. F. Kiblinger.....	144,770	Nov. 18, 1873	520	176	4	543
Eaves-trough fastening.....	W. H. Hammond.....	142,016	Aug. 19, 1873	356	184	4	197
Eaves-trough hanger.....	J. P. Abbott.....	135,056	Jan. 21, 1873	526	170	3	77
Eaves-trough hanger.....	T. W. Bailey.....	142,758	Sept. 17, 1873	400	135	4	296
Eaves-trough hanger.....	T. F. Palm.....	143,375	Sept. 30, 1873	929	315	4	366
Eaves-trough hanger.....	H. B. Todd.....	136,109	Feb. 18, 1873	661	216	3	305
Eaves-trough hanger.....	T. G. Williams.....	144,299	Nov. 4, 1873	106	35	4	487
Eaves-trough support.....	T. F. Morrison.....	146,014	Dec. 30, 1873	904	293	4	705
Eccentric.....	J. C. Buttefield.....	142,898	Sept. 16, 1873	512	174	4	306
Eccentric rod, Steam-engine.....	J. F. McCutchen.....	137,227	Mar. 25, 1873	798	263	3	338
Edge burnishing-machine, Shoe.....	N. C. Stow.....	141,399	July 29, 1873	998	324	4	124
Edge burnishing-tool, Welt.....	M. J. Ferren.....	137,903	Apr. 15, 1873	573	180	3	428
Edge-plane for trimming soles and welts of boots and shoes.....	B. J. Tayman.....	139,034	May 20, 1873	514	162	3	563
Edge-plane, Shoemakers'.....	F. F. Baumann.....	135,308	Jan. 28, 1873	758	245	3	109
Edge trimmer, Sole.....	W. Webster.....	146,036	Dec. 30, 1873	919	286	4	706
Edge trimming and burnishing machine for boots and shoes.....	C. J. Addy.....	142,756	Sept. 16, 1873	399	135	4	286
Edge trimming and burnishing machine, Jack-center for.....	T. M. Orr and A. R. Sears.....	144,560	Nov. 11, 1873	336	113	4	517
Edge-trimming soles, Implement for.....	A. P. Hazard.....	143,923	Oct. 21, 1873	408	136	4	431
Edging-machine.....	O. H. Grouberg and W. M. Ferry.....	139,142	May 20, 1873	619	193	3	571
Edging-machine.....	E. H. Stearns.....	143,264	Sept. 30, 1873	827	284	4	358
Egg and cake beater.....	J. W. Condon.....	140,891	July 15, 1873	486	164	4	67
Egg-beater.....	E. Hadley.....	138,647	May 6, 1873	157	51	3	510
Egg-beater.....	N. C. Miller.....	138,094	Apr. 22, 1873	756	240	3	452
Egg-beater.....	D. Munson.....	140,067	June 17, 1873	577	192	3	679
Egg-beater.....	J. F. Rote.....	144,567	Nov. 11, 1873	342	115	4	517
Egg-beater.....	J. A. Beam.....	140,807	July 15, 1873	415	140	4	61
Egg-carrier.....	A. H. Bryant.....	139,540	June 3, 1873	81	28	3	615
Egg-carrier.....	G. M. Huston.....	140,579	July 8, 1873	217	73	4	37
Egg-carrier.....	G. M. Huston.....	140,580	July 8, 1873	218	73	4	37
Egg-carrier.....	W. A. Laverty.....	145,431	Dec. 9, 1873	352	118	4	626
Egg-carrier.....	E. L. Mueller.....	137,791	Apr. 15, 1873	476	149	3	420
Egg-carrier.....	C. J. Simmons.....	142,952	Sept. 16, 1873	560	180	4	310
Egg-carrier.....	S. H. Smith.....	139,431	May 27, 1873	890	227	3	600
Egg-carrier.....	F. M. Wade.....	145,137	Dec. 2, 1873	95	31	4	593
Egg-carrier.....	W. Weis.....	146,038	Dec. 30, 1873	920	298	4	706
Ejecting-apparatus for bottles.....	W. S. Ward.....	134,953	Jan. 14, 1873	419	134	3	54
Ejector.....	G. Hibberd.....	141,349	July 29, 1873	950	309	4	121
Ejector.....	W. R. Mack.....	139,799	June 10, 1873	337	105	3	652
Ejector, Air.....	J. Y. Smith.....	136,779	Mar. 11, 1873	212	64	3	374
Ejector, Sand.....	J. Thayer.....	137,507	Apr. 1, 1873	383	127	3	285
Ejector, Steam air.....	J. Y. Smith.....	136,780	Mar. 11, 1873	212	64	3	374
Ejector, Water.....	H. Coll.....	143,884	Oct. 21, 1873	463	155	4	436
Elastic bands, Clasp for.....	R. B. Staats.....	145,073	Dec. 2, 1873	30	10	4	588
Electrical-apparatus, Connecting-post for.....	T. Wishart.....	137,810	Apr. 15, 1873	493	154	3	421
Electrical-apparatus, Portable.....	F. H. Varley.....	138,455	Apr. 29, 1873	101	348	3	498
Electrical-apparatus, Screw-post for.....	S. D. Field.....	140,618	July 8, 1873	233	85	4	40
Electrical-regulator for transmitting-instrument.....	T. A. Edison.....	142,688	Sept. 9, 1873	327	109	4	280
Electro-magnet, Circuit for.....	J. E. Smith.....	137,730	Apr. 8, 1873	413	127	3	402
Electro-magnetic adjuster.....	T. A. Edison.....	134,868	Jan. 14, 1873	346	110	3	48
Electro-magnetic induction-coil.....	J. S. Camacho.....	132,316	Apr. 29, 1873	981	308	3	478
Electro-magnetic motor.....	S. C. Carter.....	138,855	May 13, 1873	358	111	3	537
Electrotyping, Etching-plates for.....	A. and H. T. Dawson.....	140,995	July 22, 1873	604	.....	4	86
Elevated way.....	H. W. Farley.....	145,638	Dec. 16, 1873	543	178	4	653
Elevating-apparatus.....	M. A. Blakley and J. Cakill.....	135,511	Feb. 4, 1873	105	34	3	136
Elevating-machine.....	G. A. Dupuis.....	140,485	July 1, 1873	119	41	4	18
Elevator:							
<i>See</i> Building-elevator.							
Car-elevator.							
Dress-elevator.							
Grain-elevator.							
Hod-elevator.							
Hydraulic elevator.							

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<i>See</i> Ice-elevator.							
Passenger and freight elevator.							
Portable elevator.							
Steam-elevator.							
Water-elevator.							
Elevator.....	J. S. Baldwin.....	138,965	May 20, 1873	473	149	3	559
Elevator.....	J. M. Bean.....	136,580	Mar. 11, 1873	220	73, 74	3	272
Elevator.....	J. H. Blohm.....	135,398	Feb. 4, 1873	2	1	3	128
Elevator.....	E. Boyden.....	142,555	Sept. 9, 1873	217	71	4	271
Elevator.....	C. W. Collyer.....	140,473	July 1, 1873	111	37	4	17
Elevator.....	A. W. Cram.....	140,017	June 17, 1873	528	167	3	674
Elevator.....	C. Du Bois.....	136,978	Mar. 18, 1873	560	186 } 187 } 187 }	3	309
Elevator.....	A. C. Herron.....	138,154	Apr. 22, 1873	802	256	3	456
Elevator.....	G. W. Hubbard.....	143,013	Sept. 23, 1873	616	209	4	325
Elevator.....	M. Mageean and G. W. Marks.....	138,337	Apr. 22, 1873	997	314	3	480
Elevator.....	J. F. Marah.....	137,940	Apr. 15, 1873	600	189	3	430
Elevator.....	P. W. Mellen.....	137,464	Apr. 1, 1873	165	52, 53	3	370
Elevator.....	W. A. Morrison.....	137,789	Apr. 15, 1873	474	148	3	420
Elevator.....	W. R. Rightor.....	140,076	June 17, 1873	563	185	3	679
Elevator.....	J. B. Sweetland.....	144,161	Oct. 28, 1873	719	240	4	467
Elevator.....	G. C. Timpe.....	135,454	Feb. 4, 1873	58	19	3	132
Elevator.....	O. Tufts.....	143,944	Oct. 21, 1873	509	179	4	440
Elevator, Automatic safety-lock for.....	G. C. Timpe.....	135,453	Feb. 4, 1873	57	18	3	132
Elevator-brake.....	F. P. Canfield.....	134,640	Jan. 7, 1873	131	42	3	17
Elevator-guide.....	C. R. Otis.....	134,698	Jan. 7, 1873	188	61	3	21
Elevator-hatchway protector.....	J. W. Meaker.....	139,014	May 20, 1873	499	157	3	561
Elevator-indicator, Electric.....	J. H. Corey.....	137,422	Apr. 1, 1873	127	41	3	367
Elevator, Safety-platform for.....	R. Dunbar.....	140,190	June 24, 1873	703	221	3	697
Embalming human bodies, Fluid compound for.....	W. E. Chenoweth.....	144,602	Nov. 18, 1873	378	.....	4	532
Embossing-press.....	G. Clisbee.....	138,130	Apr. 22, 1873	782	250	3	454
Embroidery-patterns, Apparatus for transferring.....	C. Bordas.....	143,873	Oct. 21, 1873	452	151	4	435
Emery-grinding machine.....	H. S. Lucas.....	135,462	Feb. 4, 1873	83	26	3	134
Emery-wheel.....	W. A. Johnston.....	140,630	July 8, 1873	261	89	4	41
Enamelled surfaces, Apparatus for printing and decorating.....	S. J. Hoggson.....	144,979	Nov. 25, 1873	702	237	4	569
Engine:							
<i>See</i> Air-engine.							
Air and gas engine.							
Ammoniacal engine.							
Caloric-engine.							
Compound-engine.							
Compound steam-engine.							
Cylinder-engine.							
Dental-engine.							
Direct-acting steam-engine.							
Dummy-engine.							
Explosive engine.							
Fire-engine.							
Hoisting-engine.							
Hydraulic-engine.							
Link-motion engine.							
Motive-power engine.							
Motor-engine.							
Paper-pulp engine.							
Pumping-engine.							
Rag or paper engine.							
Reciprocating-engine.							
Reciprocating steam-engine.							
Rotary-engine.							
Rotary steam-engine.							
Steam-engine.							
Traction-engine.							
Vapor-engine.							
Engine.....	T. C. Robinson and C. W. Clift.....	136,764	Mar. 11, 1873	371	123	3	284
Engine, Frame for horizontal.....	W. Wright.....	144,818	Nov. 18, 1873	558	189	4	547
Engines, Combined quarter-connection and parallel motion for.....	A. J. L. Loretz.....	144,852	Nov. 25, 1873	602	205	4	561
Engines, Mechanism for reversing.....	G. W. Bishop.....	144,731	Nov. 18, 1873	485	164	4	541
Engraving and carving machine.....	T. W. Minter.....	135,998	Feb. 18, 1873	569	186	3	197
Engraving bank-note plate, Method of.....	G. W. Casilear.....	138,613	May 6, 1873	125	41	3	508
Engraving bank-note plate, Method of.....	G. W. Casilear.....	138,614	May 6, 1873	126	42	3	508
Envelope.....	L. Giebrich.....	140,496	July 1, 1873	130	45	4	19
Envelope.....	L. Giebrich.....	143,136	Sept. 23, 1873	714	245	4	333
Envelope.....	S. Kuh.....	140,204	June 24, 1873	714	225	3	698
Envelope.....	R. K. Kuhn and T. O. Atkinson.....	135,819	Feb. 11, 1873	403	130	3	171
Envelope.....	C. Pink and M. Silverberg.....	139,475	June 3, 1873	28	9	3	611
Envelope, Letter.....	J. D. McAnulty.....	142,405	Sept. 2, 1873	76	25	4	248
Envelope-machine, Feed-box for.....	E. Allen.....	142,606	Sept. 9, 1873	260	85	4	275
Envelope-opener.....	G. S. Hastings, jr.....	139,312	May 27, 1873	786	250	3	592
Equalizer, Spring.....	H. Davis.....	143,966	Oct. 28, 1873	551	183	4	453
Equalizer, Three-horse.....	W. Halstings, sr.....	140,268	June 24, 1873	766	242	3	702
Equalizer, Three-horse.....	T. Hoadley.....	141,875	Aug. 19, 1873	440	144	4	188
Eraser, Rubber.....	E. W. Frost.....	137,299	Apr. 1, 1873	18	6	3	358
Eraser, Rubber.....	G. Stackpole.....	144,364	Nov. 4, 1873	160	53	4	491
Evaporator:							
<i>See</i> Sugar-evaporator.							
Evaporating-pan.....	G. W. Storer.....	139,625	June 3, 1873	156	52	3	691
Evaporating-pan.....	G. W. Storer.....	143,939	Oct. 21, 1873	505	170	4	430
Evaporating-pan.....	G. W. Storer.....	144,158	Oct. 23, 1873	714	238	4	467
Evaporating-pan.....	D. Watson.....	143,649	Oct. 14, 1873	230	77	4	408
Evaporating-pan and plant for salt manufacture.....	G. W. Storer.....	144,159	Oct. 28, 1873	716	238 } 239 }	4	467
Evaporating-pan, Salt, sugar, &c.....	L. R. Cornell.....	135,630	Feb. 11, 1873	233	73	3	158

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Evener, Three-horse	B. W. Sutherland	135,861	Feb. 11, 1873	434	141	3	173
Evener, Two-horse	J. Sturges	134,946	Jan. 14, 1873	413	132	3	53
Excavator	J. M. Curless	138,485	May 6, 1873	16	6	3	499
Excavator	J. T. Ham	135,475	Feb. 4, 1873	75	24	3	133
Excavator	D. Judd	144,679	Nov. 18, 1873	443	149	4	537
Excavator	A. P. Lomax	137,011	Mar. 18, 1873	592	196	3	311
Excavator	B. A. Oliver	136,936	Mar. 18, 1873	527	{ 174 175	3	306
Excavator	F. W. Shultz	135,162	Jan. 21, 1873	607	198	3	84
Excavator	A. B. Smith	138,539	May 6, 1873	63	21	3	503
Excavator, Carrier for	J. Williams	139,446	May 27, 1873	901	290	3	601
Excelsior machine	W. H. Mayo	136,529	Mar. 4, 1873	159	51	3	258
Exercising-apparatus	H. E. Eastman	134,527	Jan. 7, 1873	23	8	3	9
Exercising-device	J. E. Austin	140,237	June 24, 1873	740	233	3	700
Exercising-machine	S. M. Barnett	137,876	Apr. 15, 1873	547	171	3	496
Exercising-machine	C. Kolle	135,347	Jan. 28, 1873	798	258	3	111
Exercising-machine	R. Shaler	139,924	June 17, 1873	456	142	3	668
Exercising-machine	L. D. Tice	137,394	Apr. 1, 1873	104	33	3	365
Expansion-bolt	D. L. Bartlett	137,338	Apr. 1, 1873	57	17	3	361
Expansive-bit	W. A. Clark	141,324	July 29, 1873	920	301	4	119
Explosive compound	T. S. Beach	138,841	May 13, 1873	345	.....	3	536
Explosive compound	C. Dittmar	145,403	Dec. 9, 1873	327	.....	4	624
Explosive compound	A. Noble	141,455	Aug. 5, 1873	40	.....	4	138
Explosive compound	J. H. Norrbin and J. Ohlsson	141,585	Aug. 5, 1873	149	.....	4	147
Explosive compound	T. P. Shaffner	139,738	June 10, 1873	284	.....	3	648
Explosive compound	T. Varney	139,746	June 10, 1873	291	.....	3	648
Explosive compound, or giant-powder	E. Judson	139,468	June 3, 1873	22	.....	3	610
Explosive compound to render it safe for blasting and other purposes, Treating.	E. A. L. Roberts	139,192	May 20, 1873	667	.....	3	575
Explosive-engine	J. M. Welbourn	142,880	Sept. 16, 1873	496	169	4	305
Extension-table	A. F. Chubbuck	145,049	Dec. 2, 1873	6	2	4	586
Extension-table	M. Coleman	136,705	Mar. 11, 1873	321	106	3	280
Extension-table	E. Hambuger	137,917	Apr. 15, 1873	582	183	3	429
Extension-table	A. Herzog	136,243	Feb. 25, 1873	787	254	3	227
Extension-table	M. Hofman	135,274	Jan. 28, 1873	731	235	3	106
Extension-table	S. H. Martin	138,571	May 6, 1873	94	30	3	505
Extension-table	A. Reed	137,148	Mar. 25, 1873	722	240	3	333
Extension-table	C. Rieger	141,954	Aug. 19, 1873	503	166	4	193
Extension-table	J. M. Sackman	142,586	Sept. 9, 1873	244	80	4	273
Extension-table	W. Valentin	140,392	July 1, 1873	48	16	4	12
Extension-table	S. E. Wales	137,516	Apr. 1, 1873	217	66	3	374
Extension-table slide	G. Finkbeiner	135,418	Feb. 4, 1873	24	7	3	129
Extension-table slide	J. King	144,276	Nov. 4, 1873	89	29	4	485
Extension-table slide	G. W. Townsend	134,711	Jan. 7, 1873	198	64	3	92
Extension-table slide	A. Zeh, G. P. Livingston, and P. V. W. Cullings	143,554	Oct. 7, 1873	142	47	4	392
Extension-table top, Machine for making	R. G. Utley	136,193	Feb. 25, 1873	749	241	3	224
Extractor:							
<i>See</i> Cork-extractor.							
Drill-extractor.							
Nail-extractor.							
Oil-tool extractor.							
Spike-extractor.							
Stump-extractor.							
Eye and lung protector	G. A. Croft	145,337	Dec. 9, 1873	273	91	4	620
Eye, Apparatus for treating the	M. F. Potter	143,928	Oct. 21, 1873	496	167	4	439
Eye-glass	A. D. Ansell	139,353	May 27, 1873	814	260	3	595
Eye-glass	S. Greenen	140,912	July 15, 1873	510	173	4	69
Eye-glass	M. Risley	142,277	Aug. 26, 1873	800	264	4	227
Eye-glass, Suspension-hook for	W. S. Tappan	137,735	Apr. 8, 1873	417	128	3	402
Eye-wash	R. C. Fisher	140,768	July 15, 1873	380	.....	4	59
Eyelet	S. W. Young	138,221	Apr. 22, 1873	865	274	3	461
Eyelet-making machine	H. L. Churchill and J. D. Robinson	143,274	Sept. 30, 1873	834	287	4	359
Eyelet-setting machinery	A. B. Edmonds	141,211	July 29, 1873	815	267	4	110
Eyeletting-machine	A. Dawes	139,048	May 20, 1873	524	{ 165 166	3	563
Fabric:							
<i>See</i> Elastic fabric.							
Felted fabric.							
Fur-coated fabric.							
Knit-fabric.							
Metallic fabric.							
Textile fabric.							
Water-proof furze fabric.							
Wire-fabric.							
Woven fabric.							
Fabric opening, smoothing, and guiding machine	W. Birch	137,169	Mar. 25, 1873	741	246	3	334
Fabrics, Machine for disintegrating	M. Marshall	144,685	Nov. 18, 1873	448	152	4	537
Fabrics unflammable, Rendering	D. Nicoll	142,267	Aug. 26, 1873	791	.....	4	226
Fan	G. Brueck	137,413	Apr. 1, 1873	119	39	3	367
Fan	C. C. Lusoy	145,666	Dec. 16, 1873	567	186	4	655
Fan and parasol, Combined	C. St. John	144,575	Nov. 11, 1873	348	117	4	518
Fan-attachment, Chair	B. L. Jordan	140,047	June 17, 1873	557	176	3	677
Fan, Automatic	J. D. Bush	142,061	Aug. 26, 1873	636	209	4	213
Fan, Automatic	W. C. Campbell	144,505	Nov. 11, 1873	286	97	4	513
Fan, Automatic	C. H. Clark	135,524	Feb. 4, 1873	118	37	3	137
Fan, Automatic	E. Duffner	138,741	May 13, 1873	257	80	3	528
Fan, Automatic	W. Fay	137,189	Mar. 25, 1873	763	252	3	336
Fan, Automatic	W. D. Hall	136,044	Feb. 18, 1873	602	198	3	201
Fan, Automatic	A. P. Heidt	134,543	Jan. 7, 1873	37	12	3	10
Fan, Automatic	F. W. Jones	137,687	Apr. 8, 1873	379	115	3	398
Fan, Automatic	W. Lawrence and J. Sanders	134,605	Jan. 7, 1873	101	33	3	15
Fan, Automatic	J. Lehner	138,567	May 6, 1873	91	29	3	505
Fan, Automatic	H. T. McCormick	137,785	Apr. 15, 1873	471	147	3	419
Fan, Automatic	P. H. Reichhardt and M. Schnapp	138,345	Apr. 29, 1873	1,004	316	3	490

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Fan, Automatic.....	O. Vanorman.....	143,206	Sept. 23, 1873	771	265	4	337
Fan, Automatic.....	T. Welch.....	138,790	May 6, 1873	228	71	3	516
Fan for ventilating mine, Cross-paddle propeller.....	D. Risinger.....	139,330	May 27, 1873	797	254	3	593
Fan, Rocking-chair.....	O. Brueck.....	139,112	May 20, 1873	587	184	3	568
Fan, Rocking-chair.....	A. Nissle and J. Schoberl.....	135,282	Jan. 28, 1873	739	238	3	107
Fan, Rotary.....	L. S. Eastman.....	134,740	Jan. 14, 1873	233	75	3	39
Fanning-mill.....	L. M. Boardman.....	142,197	Aug. 26, 1873	734	242	4	221
Fanning-mill.....	G. E. Clarke.....	134,643	Jan. 7, 1873	135	43, 44	3	17
Fanning-mill.....	L. H. Decker.....	137,185	Mar. 25, 1873	758	251	3	335
Fanning-mill.....	L. H. Decker.....	143,127	Sept. 23, 1873	707	243	4	332
Fanning-mill.....	L. H. Decker.....	143,506	Oct. 7, 1873	91	31, 32	4	388
Fanning-mill.....	E. M. Gilbert.....	138,407	Apr. 29, 1873	1,054	332	3	484
Fare-box.....	J. W. Johnson.....	138,839	May 13, 1873	343	104	3	536
Fare-box.....	H. Baranger.....	140,669	July 8, 1873	292	98	4	43
Fare-box.....	H. Baranger.....	143,698	Oct. 14, 1873	278	92	4	411
Fare-box.....	T. L. Johnson.....	143,360	Sept. 30, 1873	917	311	4	305
Fare-box.....	Z. I. Pratt.....	136,865	Mar. 18, 1873	466	155	3	301
Fare-box.....	R. D. O. Smith.....	140,959	July 15, 1873	556	186, 187	4	73
Fare-box.....	J. F. Winchell.....	136,118	Feb. 18, 1873	667	218	3	205
Fare-box.....	J. F. Winchell.....	140,985	July 15, 1873	583	197	4	75
Farmer's boiler.....	P. Colvin.....	144,890	Nov. 25, 1873	631	214	4	563
Farmer's boiler.....	A. B. Nott.....	135,065	Jan. 21, 1873	480	154	3	74
Farm-gate.....	W. S. Brown.....	143,493	Oct. 7, 1873	82	28	4	387
Farm-gate.....	M. Burtless.....	140,612	July 8, 1873	249	84	4	40
Farm-gate.....	E. B. Decker.....	141,497	Aug. 5, 1873	79	25	4	141
Farm-gate.....	W. Lucas.....	145,994	Nov. 25, 1873	717	242	4	571
Farm-gate.....	H. W. Mullennex.....	138,918	May 13, 1873	406	128	3	541
Farm-gate.....	D. A. Neidig.....	146,015	Dec. 30, 1873	904	293	4	705
Farm-gate.....	J. C. Rohrer.....	144,291	Nov. 4, 1873	99	33	4	486
Farm-gate.....	T. Steers.....	140,960	July 15, 1873	558	187	4	73
Farm-gate.....	J. W. Westbrooks and A. J. Clemmons.....	139,219	May 20, 1873	688	216	3	577
Fats, Purifying and separating.....	A. Paraf.....	137,564	Apr. 8, 1873	265	.....	3	390
Fats, Treating animal.....	H. Mége.....	146,012	Dec. 30, 1873	902	.....	4	705
Fatty and coloring matter from waste wash-liquor, Recovering.....	J. Thom and J. Stenhouse.....	137,636	Apr. 8, 1873	325	.....	3	395
Faucet.....	A. Doll and C. Elling.....	144,516	Nov. 11, 1873	295	100	4	514
Faucet.....	P. Hille.....	144,097	Oct. 28, 1873	666	219	4	463
Faucet.....	A. D. and J. W. King.....	144,208	Nov. 4, 1873	35	10	4	481
Faucet.....	J. A. and T. McKenna.....	144,213	Nov. 4, 1873	39	12	4	481
Faucet.....	E. Scranage, jr.....	138,700	May 6, 1873	206	65	3	514
Faucet.....	S. R. Thompson.....	144,422	Nov. 11, 1873	222	74	4	508
Faucet.....	H. Varwig.....	137,981	Apr. 15, 1873	635	200	3	433
Faucet.....	J. White.....	144,175	Oct. 28, 1873	733	244	4	468
Faucet-attachment.....	J. Church.....	143,062	Sept. 23, 1873	661	226	4	328
Faucet-attachment.....	E. L. Dunbar.....	141,040	July 22, 1873	644	217	4	89
Faucet-attachment, Self-closing.....	R. McConnell, W. Truesdell, and F. Mertsheimer.....	143,291	Sept. 30, 1873	847	292	4	360
Faucet, Beer.....	O. T. Earle.....	142,090	Aug. 26, 1873	646	212	4	214
Faucet, Beer and ale.....	J. Deasey.....	144,447	Nov. 11, 1873	239	80	4	509
Faucet, Bung.....	G. D. Lee.....	145,432	Dec. 9, 1873	353	118	4	696
Faucet, Compound.....	W. S. Bate.....	141,102	July 22, 1873	700	225	4	93
Faucet, Compression-basin.....	W. Gordon.....	135,541	Feb. 4, 1873	138	44	3	138
Faucet for soda-water apparatus, Draught.....	J. Patterson.....	137,620	Apr. 8, 1873	311	97	3	394
Faucet-holes, Bushing for.....	S. R. Thompson.....	141,473	Aug. 5, 1873	58	18	4	139
Faucet, Measuring.....	J. Schalk, jr.....	143,850	Oct. 21, 1873	436	145	4	434
Faucet, Self-closing.....	W. H. Bate.....	142,192	Aug. 26, 1873	729	240	4	221
Faucet, Self-closing.....	A. Brinckmann.....	140,183	June 24, 1873	699	219	3	696
Faucet, Self-closing.....	A. and E. Buchman.....	138,127	Apr. 22, 1873	779	249	3	454
Faucet, Self-closing.....	M. S. Clark.....	135,407	Feb. 4, 1873	14	4	3	129
Faucet, Self-closing.....	J. W. Trafton.....	143,042	Sept. 23, 1873	642	220	4	327
Faucet, Tool for inserting and withdrawing.....	K. A. Wattendorf.....	139,443	May 27, 1873	699	290	3	601
Faucet, Wash-stand.....	W. S. Bate.....	145,609	Dec. 16, 1873	517	169	4	651
Feather-renovator.....	S. A. Boyett.....	135,516	Feb. 4, 1873	109	35	3	136
Feather-renovator.....	R. B. Cooper.....	143,437	Oct. 7, 1873	36	13	4	388
Feather-renovator.....	L. S. Enos.....	143,130	Sept. 23, 1873	709	243	4	332
Feather-renovator.....	W. S. Groff.....	138,327	Apr. 29, 1873	991	312	3	479
Feather-renovator.....	E. N. McKimm and J. R. Gearhart.....	134,914	Jan. 14, 1873	386	123	3	51
Feather-renovator.....	J. B. Riley.....	137,240	Mar. 25, 1873	809	266	3	339
Feather-renovator.....	J. E. Schooler.....	145,759	Dec. 23, 1873	662	216	4	675
Feather-renovator.....	S. G. Thanhauser.....	139,211	May 20, 1873	682	214	3	576
Feathers, Made.....	A. E. Woolf.....	136,691	Mar. 18, 1873	490	162	3	303
Feed and delivery apron.....	P. R. Mansfield.....	137,224	Mar. 25, 1873	795	262	3	338
Feed-box, Folding.....	J. L. Edwards.....	134,869	Jan. 14, 1873	346	110	3	48
Feed-cutter.....	W. S. Bartle and J. Garloch.....	137,168	Mar. 25, 1873	740	246	3	334
Feed-water apparatus for steam-boiler.....	R. Berryman.....	135,757	Feb. 11, 1873	342	110	3	166
Feed-water heater.....	J. V. Beckman.....	142,983	Sept. 23, 1873	592	201	4	323
Feed-water heater.....	H. F. Boody and E. P. Merrill.....	134,634	Jan. 7, 1873	120	41	3	17
Feed-water heater.....	C. E. Frazier.....	139,665	June 10, 1873	207	67	3	642
Feed-water heater.....	J. H. Hale and A. C. Whitney.....	145,059	Dec. 2, 1873	17	7	4	587
Feed-water heater.....	G. W. Richardson.....	145,591	Dec. 16, 1873	503	165	4	650
Feed-water heater.....	W. Sambrook.....	146,024	Dec. 30, 1873	911	295	4	705
Feed-water heater.....	G. Wales.....	135,181	Jan. 21, 1873	623	203	3	85
Feed-water heater and condenser.....	R. Berryman.....	135,756	Feb. 11, 1873	341	109	3	166
Feed-water heater and condenser.....	T. E. McNeill and R. N. Pratt.....	139,908	June 17, 1873	443	138	3	667
Feed-water heater and purifier.....	S. J. Sadler and H. Volmar.....	141,517	Aug. 5, 1873	95	29	4	142
Feed-water heater, Locomotive.....	E. Moyal.....	135,438	Feb. 4, 1873	43	13	3	131
Feed-water heater, Steam-boiler.....	S. T. Taylor.....	138,957	May 13, 1873	437	137	3	544
Feed-water regulator.....	E. C. Fermaid.....	137,541	Apr. 8, 1873	246	75	3	388
Feed-water regulator.....	J. B. Root.....	141,599	Aug. 5, 1873	155	50	4	148
Feeder, Portable stock.....	J. M. Spencer.....	138,351	Apr. 29, 1873	1,009	317	3	481
Feeder, Stock.....	U. Borel.....	145,984	Dec. 30, 1873	877	284	4	703
Feeder, Stock.....	C. M. Hall.....	138,801	May 13, 1873	308	95	3	533
Felly.....	W. L. Perry and A. J. Mathews.....	137,955	Apr. 15, 1873	613	193	3	431

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Felly-plate	C. D. Everett	138,624	May 6, 1873	137	45	3	509
Felly-plate	H. Sylvester	137,571	Apr. 8, 1873	273	84	3	390
Felt for weather-strips, packings, &c., Process of preparing.	F. Stiering	145,913	Dec. 23, 1873	793		4	685
Felt-shirts, &c., Ornamenting	J. W. Blackham	142,554	Sept. 9, 1873	216	70	4	271
Felted fabric, Removing vegetable fiber from	J. T. Waring	142,063	Aug. 19, 1873	604		4	201
Fence	G. Albro	141,532	Aug. 5, 1873	105	32	4	143
Fence	J. Gray	144,534	Nov. 11, 1873	312	105	4	515
Fence	W. F. King	143,161	Sept. 23, 1873	731	252	4	334
Fence, Adjustable picket	J. S. Anderson	134,624	Jan. 7, 1873	115	38	3	16
Fence, Farm	W. S. McKenzie	141,284	July 29, 1873	854	290	4	116
Fence, Flood	G. W. Duncan	145,493	Dec. 16, 1873	412	135	4	643
Fence, Flood	A. Orvis	139,418	May 27, 1873	880	262	3	600
Fence gate, Iron	C. T. Bush	138,071	Apr. 22, 1873	738	233	3	451
Fence, Iron	C. T. Bush	136,966	Mar. 18, 1873	551	183	3	308
Fence, Iron	B. G. Devoe	140,897	July 15, 1873	493	166	4	68
Fence, Iron	T. Rogers	145,902	Dec. 23, 1873	784	256	4	685
Fence, Iron	T. Rogers and B. G. Devoe	145,903	Dec. 23, 1873	785	257	4	686
Fence, Iron	J. B. Wickersham	135,188	Jan. 21, 1873	629	205	3	86
Fence, Iron post for wire	D. Kaufman	139,469	June 3, 1873	23	7	3	610
Fence-machine	J. H. Evans	145,996	Dec. 30, 1873	885	287	4	703
Fence, Picket	R. H. McGinty	143,632	Oct. 14, 1873	216	73	4	407
Fence, Picket	W. Most	138,573	May 6, 1873	96	30	3	505
Fence-pickets, Machine for cutting the heads of	A. Burnham	144,187	Nov. 4, 1873	13	3	4	479
Fence, Portable	G. F. Beecher	141,750	Aug. 12, 1873	309	101	4	168
Fence, Portable	S. G. Burke	141,202	July 29, 1873	808	264	4	409
Fence, Portable	H. M. Dake	136,217	Feb. 25, 1873	766	247	3	225
Fence, Portable	J. E. Garlington	126,969	Mar. 18, 1873	571	190	3	309
Fence, Portable	L. Gates	138,747	May 13, 1873	261	81	3	528
Fence, Portable	O. Huffmar	140,273	June 24, 1873	771	243	3	703
Fence, Portable	R. Johnson	145,875	Dec. 23, 1873	757	247	4	683
Fence, Portable	A. Mosher	141,584	Aug. 5, 1873	149	48	4	147
Fence, Portable	H. W. and R. P. Nichols	143,372	Sept. 30, 1873	927	314	4	366
Fence, Portable	A. W. Olds	137,949	Apr. 15, 1873	607	191	3	431
Fence, Portable	W. W. Potts	142,865	Sept. 16, 1873	485	166	4	304
Fence, Portable	G. Robinson	144,228	Nov. 4, 1873	53	16	4	482
Fence, Portable	B. L. Taylor	144,641	Nov. 18, 1873	413	139	4	534
Fence, Portable	C. A. Thomas	144,165	Oct. 28, 1873	732	241	4	467
Fence, Portable	D. S. Watts	136,630	Mar. 11, 1873	262	88	3	275
Fence, Portable	T. L. Wiswell	140,752	July 8, 1873	364	123	4	49
Fence, Portable extension	A. W. Overholser	135,837	Feb. 11, 1873	417	135	3	172
Fence-post	J. M. Beebe	136,406	Mar. 4, 1873	47	17	3	249
Fence-post	H. O. Elmer	141,499	Aug. 5, 1873	80	25	4	141
Fence-post	J. Gibbs	142,910	Sept. 16, 1873	521	177	4	307
Fence-post	E. King	142,795	Sept. 16, 1873	429	145	4	299
Fence-post	H. S. Ross	145,528	Dec. 16, 1873	453	148	4	646
Fence-post	J. Scott	144,035	Oct. 28, 1873	613	203	4	458
Fence-post socket	G. W. and J. B. Durant	142,687	Sept. 9, 1873	326	109	4	280
Fence-post stub	G. Lakins	141,362	July 29, 1873	963	313	4	122
Fence, Rail	J. W. Mathews	137,701	Apr. 8, 1873	385	119	3	400
Fence-rails, Splicing	D. W. Knowles	144,113	Oct. 28, 1873	679	224	4	464
Fence, Self-locking rail	A. Bagley	134,967	Jan. 21, 1873	442	141	3	71
Fence-stretching apparatus, Wire	J. T. Mangham	136,528	Mar. 4, 1873	159	51	3	258
Fence, Wire	G. and L. N. Lakins	142,246	Aug. 26, 1873	778	255	4	225
Fence, Wire	J. A. Little	140,147	June 24, 1873	667	209	3	694
Fence, Wire	J. W. Rappleye	136,094	Feb. 18, 1873	647	212	3	304
Fence, Wire	H. M. Rose	138,763	May 13, 1873	275	85	3	530
Fence, Wood	W. Riley	137,723	Apr. 8, 1873	407	125	3	401
Fence, Wood	D. G. Temple	136,679	Mar. 11, 1873	303	100	3	278
Fence, Wood	R. F. Ward	143,478	Oct. 7, 1873	67	23	4	386
Fender:							
See Clod-fender.							
Fire-fender.							
Fender	G. F. Filley	144,269	Nov. 4, 1873	84	28	4	485
Fender and ash-sifter combined	W. C. Dobbins	142,214	Aug. 26, 1873	748	247	4	222
Fermentation of saccharine solutions, Process for de-laying.	J. A. Morrell	141,068	July 22, 1873	668		4	91
Ferrule	C. E. Green and J. H. Bodwell	142,461	Sept. 2, 1873	124	40	4	252
Ferrule	S. E. Jerald	145,950	Dec. 30, 1873	849	276	4	700
Ferry-boat for trains of cars	F. Cass	143,808	Oct. 21, 1873	399	132	4	431
Ferry-track platform, Railway	W. P. Halliday	135,545	Feb. 4, 1873	141	45	3	138
Fertilizer	A. F. Andrews	141,848	Aug. 19, 1873	407		4	186
Fertilizer	J. McDougall	135,995	Feb. 18, 1873	560		3	197
Fertilizer	J. W. Stubbs	136,277	Feb. 25, 1873	821	265	3	229
Fertilizer	J. Whitehill	138,458	Apr. 29, 1873	1,104		3	478
Fertilizer	J. W. York	137,586	Apr. 8, 1873	285	88	3	391
Fertilizer-distributor	M. W. Faubion	142,454	Sept. 2, 1873	117	37	4	252
Fertilizer-distributor	D. F. Halliburton	138,398	Apr. 29, 1873	1,046	329	3	484
Fertilizer-distributor	J. Lytch	144,465	Nov. 11, 1873	254	85	4	510
Fertilizer distributing-machine	I. M. Reames	135,846	Feb. 11, 1873	424	138	3	172
Fertilizer from offal	J. J. Storer	143,310	Sept. 30, 1873	887		4	361
Fertilizer, Preparing blood for	W. D. Craven	136,036	Feb. 18, 1873	595		3	200
Fertilizer, &c., Process for treating sewage and ammoniacal waters for the production of.	T. Christy, jr., and A. Bobrow-nicki	137,059	Mar. 25, 1873	642		3	327
Fertilizer-spreader	J. W. Thornburg	137,736	Apr. 8, 1873	418	129	3	402
Fertilizers, Manufacture of	H. Stevens	144,877	Nov. 25, 1873	622		4	562
Fertilizing-distributor	H. M. Sweeney	137,734	Apr. 8, 1873	416	128	3	402
Fertilizing soil	J. B. Wilson	143,213	Sept. 23, 1873	777		4	338
Fiber-cleaning machine	S. T. Lamb	140,050	June 17, 1873	559	177	3	677
Fiber-disintegrator	A. Berthet and P. Laberie	145,613	Dec. 16, 1873	522	171	4	652
Fiber, Process of separating vegetable	W. E. Woodbridge	140,333	June 24, 1873	826	263	3	708
Fibrous material, Machine for working waste	J. K. Proctor	139,609	June 3, 1873	142	47, 48	3	620
Fifth-wheel, Carriage	H. A. Luttgens	134,907	Jan. 14, 1873	379	121	3	50
Fifth-wheel head, Die for manufacturing	F. Van Patton	141,692	Aug. 12, 1873	254	82	4	164
Fifth-wheel, Manufacture of carriage	D. Wilcox	137,274	Mar. 25, 1873	839	276	3	342

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Fifth-wheel of vehicle, Machine for milling	F. Van Patten	141,683	Aug. 12, 1873	256	22, 83	4	164
Fifth-wheel, Vehicle	G. A. Brice	140,676	July 8, 1873	289	100	4	44
Fifth-wheel, Vehicle	J. R. McGuire	145,959	Dec. 30, 1873	855	278	4	701
File	H. Disston	142,445	Sept. 2, 1873	111	36	4	251
File	J. B. Johnson	138,256	Apr. 29, 1873	924	291	4	474
File and binder, Letter	E. Buell and J. W. Lilley	140,610	July 8, 1873	246	83	4	40
File and binder, Paper	L. P. Keech	142,546	Sept. 2, 1873	200	65	4	258
File, Bill and letter	A. J. Marshall	134,554	Jan. 7, 1873	49	15	4	11
File, Bill and paper	W. H. Foye	145,497	Dec. 16, 1873	416	137	4	643
File, Bill and paper	T. Orton	145,230	Dec. 2, 1873	173	60	4	599
File, Bill and paper	G. T. Wolcott	140,177	June 24, 1873	693	217	3	696
File-box, Paper	J. H. Bentley	139,653	June 10, 1873	196	64	3	641
File-cutting machine	C. Vogel	135,179	Jan. 21, 1873	621	202	3	85
File-cutting machine	A. Weed	141,300	July 29, 1873	898	295	4	117
File-handle	H. K. Austin	135,684	Feb. 11, 1873	284	89	3	162
File-holder, Newspaper	W. Bright	134,974	Jan. 21, 1873	449	144	3	71
File, Paper	G. W. Billow	134,724	Jan. 14, 1873	223	71	3	38
File, Paper	M. Craft	144,512	Nov. 11, 1873	292	99	4	514
File, Paper	P. W. Durham	142,213	Aug. 26, 1873	747	246	4	222
File, Paper	R. Henning	138,086	Apr. 22, 1873	750	237	3	452
File, Paper	C. D. Lindsey	137,851	Apr. 15, 1873	528	165	3	424
File, Paper	C. Mason	139,592	June 3, 1873	128	43	3	619
File, Paper	E. Motz	135,144	Jan. 21, 1873	595	193	3	83
File, Paper	R. Rathbone	141,170	July 22, 1873	765	251	4	98
File, Paper	J. F. Winter	140,863	July 15, 1873	463	157	4	65
File, Prescription	A. D. Foster	138,300	Apr. 29, 1873	1,040	327	3	483
File, Tip for saw	H. Disston	142,900	Sept. 16, 1873	514	175	4	306
Filing and binding papers, Apparatus for	P. MacVicar	134,908	Jan. 14, 1873	380	121	3	50
Filing-case, Numerical	G. W. Bettesworth	144,593	Nov. 18, 1873	371	125	4	531
Filing papers, Safety-hook for	L. H. Beckwith	138,782	May 13, 1873	291	89	3	531
Filter	C. Andersen	143,113	Sept. 23, 1873	698	239	4	331
Filter	J. R. Brown and W. A. Foskett	137,653	Apr. 8, 1873	340	105	3	396
Filter	J. B. Ellis	142,217	Aug. 26, 1873	749	247	4	222
Filter	J. M. Everts	140,907	July 15, 1873	505	170	4	69
Filter	P. Huernie	135,222	Jan. 28, 1873	684	220	3	103
Filter	G. S. Neff	143,924	Oct. 21, 1873	492	166	4	438
Filter	C. C. Savery	139,922	June 17, 1873	455	142	3	668
Filter, Cane-juice, oil, &c.	A. K. Lee	137,849	Apr. 15, 1873	526	164	3	424
Filter for oils, acids, &c.	J. Jowitt	143,768	Oct. 21, 1873	363	120	4	428
Filter, Turpentine	F. G. Richardson	142,276	Aug. 26, 1873	799	264	4	227
Filter, Water	P. Ball and B. Fitts	138,466	May 6, 1873	1	1	3	498
Filter, Water	W. M. Conger	136,364	Mar. 4, 1873	10	4	3	246
Filter, Water	J. Pearson	142,732	Sept. 9, 1873	354	119	4	282
Filter, Water-cooler	C. Schneider	139,085	May 29, 1873	565	177	3	567
Filter, Wine	C. W. Farciot	145,288	Dec. 9, 1873	229	77	4	616
Filtering and rectifying spirits, Apparatus for	C. W. Ackermann	135,057	Jan. 21, 1873	536	170	3	77
Finger-ring, Die for enlarging and sizing plain	G. Kremenz	140,422	July 1, 1873	67	24	4	13
Finger-ring, Die for manufacturing plain	G. Kremenz	140,423	July 1, 1873	68	24	4	14
Fire-alarm	W. A. Barnes	138,467	May 6, 1873	3	1	3	498
Fire-alarm, and circuit therefor, Electrical and thermostatic.	J. H. Guest	143,691	Oct. 14, 1873	272	90	4	411
Fire-alarm, Automatic	H. L. Brown	139,292	May 27, 1873	770	244	3	591
Fire-alarm, Automatic	C. H. Lehmis	145,991	Nov. 25, 1873	714	241	4	571
Fire-alarm box, &c., Lock for	J. M. Fairchild	144,079	Oct. 28, 1873	651	214	4	471
Fire-alarm signal-box	F. Latta	134,552	Jan. 7, 1873	46	14	3	11
Fire-alarm signal-box	G. Wright, M. Y. Holley, and H. R. Miles	140,106	June 17, 1873	611	192	3	681
Fire and water proof composition for ceilings, walls, and floors.	L. A. Tartierè	138,956	May 13, 1873	437	.....	3	544
Fire-arm, Breech-loading	J. Aston	138,837	May 13, 1873	340	105	3	535
Fire-arm, Breech-loading	P. Bourdreaux	141,198	July 29, 1873	801	262	4	109
Fire-arm, Breech-loading	H. A. Castle	144,190	Nov. 4, 1873	16	5	4	479
Fire-arm, Breech-loading	M. J. Chamberlin	135,405	Feb. 4, 1873	17	4	3	128
Fire-arm, Breech-loading	L. Conroy	145,154	Dec. 2, 1873	106	35	4	594
Fire-arm, Breech-loading	J. Duval	145,494	Dec. 16, 1873	412	136	4	643
Fire-arm, Breech-loading	G. Gunderson	145,998	Dec. 30, 1873	887	288	4	703
Fire-arm, Breech-loading	J. S. Heath	138,887	May 13, 1873	383	120	3	539
Fire-arm, Breech-loading	A. Henry	145,944	Dec. 16, 1873	844	274	4	700
Fire-arm, Breech-loading	G. L. Holt and J. C. Marshall	138,157	Apr. 22, 1873	805	256	3	456
Fire-arm, Breech-loading	H. H. Hopkins	143,012	Sept. 23, 1873	615	209	4	325
Fire-arm, Breech-loading	H. Hoppenau	136,998	Mar. 18, 1873	580	193	3	310
Fire-arm, Breech-loading	D. Hug	142,396	Sept. 2, 1873	68	22	4	248
Fire-arm, Breech-loading	A. E. and P. J. Jarre	137,927	Apr. 15, 1873	589	186	3	429
Fire-arm, Breech-loading	A. Marelli	139,323	May 27, 1873	792	252	3	593
Fire-arm, Breech-loading	E. Maynard	135,928	Feb. 19, 1873	505	164	3	193
Fire-arm, Breech-loading	I. M. Miabank	136,850	Mar. 18, 1873	456	151	3	300
Fire-arm, Breech-loading	T. Restel	139,190	May 20, 1873	665	208	3	575
Fire-arm, Breech-loading	W. Richards	139,422	May 27, 1873	883	284	3	600
Fire-arm, Breech-loading	J. Rider	141,383	July 29, 1873	981	319	4	123
Fire-arm, Breech-loading	J. Rider	141,384	July 29, 1873	983	319	4	123
Fire-arm, Breech-loading	W. Scott and W. J. Matthews	144,870	Nov. 25, 1873	618	210	4	562
Fire-arm, Breech-loading	C. Sharp	137,625	Apr. 8, 1873	315	92	3	394
Fire-arm, Breech-loading	H. N. Sherman	144,872	Nov. 25, 1873	619	210	4	562
Fire-arm, Breech-loading	D. Smith	138,207	Apr. 22, 1873	853	270	3	460
Fire-arm, Breech-loading	D. Smith and J. C. Marshall	141,603	Aug. 5, 1873	167	53, 54	4	148
Fire-arm, Breech-loading	C. M. Spencer	135,671	Feb. 11, 1873	269	85	3	161
Fire-arm, Breech-loading	J. P. Taylor	138,711	May 6, 1873	217	68	3	515
Fire-arm, Breech-loading	G. Zeller	136,894	Mar. 18, 1873	492	163	3	303
Fire-arm, Frame and stock for revolving	C. F. Galand	140,028	June 17, 1873	538	170	3	676
Fire-arm, Hook-attachment to band of	I. Merrill	137,786	Apr. 15, 1873	472	148	3	419
Fire-arm lock	D. Moore	145,118	Dec. 2, 1873	73	23	4	591
Fire-arm, Magazine	A. Assmus	145,478	Dec. 16, 1873	399	131	4	641

Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fire-arm, Magazine.	J. H. Bean	141,694	Aug. 12, 1873	204	64	4	160
Fire-arm, Magazine.	A. Burgess	134,589	Jan. 7, 1873	85	27	3	14
Fire-arm, Magazine.	G. D. Luce	136,660	Mar. 11, 1873	285	95	3	277
Fire-arm, Magazine.	J. Rider	141,590	Aug. 5, 1873	153	49	4	147
Fire-arm, Magazine.	L. C. Rodier and F. G. Bates	138,439	Apr. 29, 1873	1,087	343	3	487
Fire-arm, Magazine.	A. Swingle and F. A. Huntington	135,947	Feb. 18, 1873	520	170	3	194
Fire-arm, Method of forming receiver for breech-block of.	E. G. W. Bartlett	145,717	Dec. 23, 1873	622	204	4	672
Fire-arm, Powder and shot charger for.	A. Hall	138,751	May 13, 1873	265	62	3	529
Fire-arm, Revolving	B. K. Dorwart	142,376	Sept. 2, 1873	49	17	4	246
Fire-arm, Revolving	C. Fochl	139,461	June 3, 1873	16	5	3	610
Fire-arm, Revolving	S. Forehand and H. C. Wadsworth	143,566	Oct. 14, 1873	159	53	4	402
Fire-arm, Revolving	J. M. Marlin	140,516	July 1, 1873	149	51	4	20
Fire-arm, Revolving	W. H. Philip	142,175	Aug. 26, 1873	715	236	4	220
Fire-arm, Revolving	G. W. Schofield	138,047	Apr. 22, 1873	715	226	3	449
Fire-arm, Revolving	O. A. Smith	137,968	Apr. 15, 1873	625	197	3	432
Fire-arm, Revolving	O. A. Smith	135,377	Jan. 28, 1873	826	266	3	114
Fire-arm, Revolving	O. A. Smith	135,378	Jan. 28, 1873	826	266	3	114
Fire-arm, Revolving	W. S. Smoot	143,855	Oct. 21, 1873	440	146	4	434
Fire-arm, Revolving	D. B. Wesson	136,348	Feb. 25, 1873	883	294	3	234
Fire-arm, Revolving	R. White	143,394	Sept. 30, 1873	943	319	4	367
Fire-arm, Revolving	D. Williamson	137,043	Mar. 18, 1873	621	205	3	313
Fire-arm, Revolving	D. Williamson	144,814	Nov. 18, 1873	555	188	4	546
Fire-arm, Revolving	D. Williamson	144,815	Nov. 18, 1873	556	189	4	546
Fire-arm, Swivel-loop for.	E. Whitney, jr	137,989	Apr. 15, 1873	642	202	3	434
Fire-bar and connecting bearing, Tubular	R. J. Ellis	145,995	Dec. 30, 1873	885	287	4	703
Fire-box, Locomotive	C. H. Farley	134,741	Jan. 14, 1873	234	75	3	3
Fire, Composition for kindling	J. C. Crumpton	138,382	Apr. 29, 1873	1,034	.....	3	483
Fire, Distributor for extinguishing	G. J. Orr	144,696	Nov. 18, 1873	458	155	4	538
Fire-engine	J. A. Sinclair	144,001	Oct. 28, 1873	586	194	4	456
Fire-engine, Floating	J. C. Lang	135,922	Feb. 18, 1873	501	163	3	193
Fire-engine, Flue-blast for steam	J. Grabner	134,796	Jan. 14, 1873	281	91	3	43
Fire-engine heater, Steam	W. F. Shaw	142,589	Sept. 9, 1873	247	81	4	274
Fire-engine house, Horse-stall for steam	W. C. Davol, jr	144,068	Oct. 28, 1873	643	211	4	461
Fire-engine, Steam	W. C. Davol, jr	143,750	Oct. 21, 1873	347	116	4	427
Fire-engine, Supplementary heater for steam	R. Gilbert and J. P. Topham	138,880	May 13, 1873	378	118	3	538
Fire-escape	L. E. Ainsworth	143,112	Sept. 23, 1873	698	239	4	331
Fire-escape	P. W. Barnes	142,141	Aug. 26, 1873	689	226	4	217
Fire-escape	L. M. Chipley	145,844	Dec. 23, 1873	729	239	4	681
Fire-escape	C. Dieterich	143,677	Oct. 14, 1873	258	85, 86	4	410
Fire-escape	W. Kegg	138,410	Apr. 29, 1873	1,058	333	3	485
Fire-escape	L. Merritt	139,410	May 27, 1873	873	280	3	599
Fire-escape	C. C. Milton	138,513	May 6, 1873	42	14, 15	3	501
Fire-escape	E. R. Morrison	135,354	Jan. 28, 1873	803	259	3	112
Fire-escape	S. Muret and E. Zuberbuhler	144,122	Oct. 28, 1873	626	227	4	464
Fire-escape	J. O'Brien	139,416	May 27, 1873	878	281	3	599
Fire-escape	A. Pelham	141,378	July 29, 1873	977	317	4	123
Fire-escape	H. A. Richards	137,483	Apr. 1, 1873	184	58	3	373
Fire-escape	D. A. Scott and A. W. Hiltz	144,361	Nov. 4, 1873	158	52	4	491
Fire-escape	G. H. Shaw	138,051	Apr. 22, 1873	721	228	3	449
Fire-escape	J. A. Talpey	139,484	June 3, 1873	37	12	3	612
Fire-escape	J. A. Talpey	141,093	July 22, 1873	690	232	4	93
Fire-escape	F. A. L. Von Ehren	136,883	Mar. 18, 1873	481	160	3	302
Fire-escape for safes	C. Morgan	144,470	Nov. 11, 1873	258	87	4	511
Fire-extinguisher	G. Booth	144,595	Nov. 18, 1873	373	126	4	531
Fire-extinguisher	O. F. Burton	135,779	Feb. 11, 1873	354	114	3	167
Fire-extinguisher	W. L. Drake	145,405	Dec. 9, 1873	330	110	4	624
Fire-extinguisher	W. L. Drake	145,406	Dec. 9, 1873	331	111	4	624
Fire-extinguisher	C. A. Cox	137,895	Apr. 15, 1873	563	176	3	427
Fire-extinguisher	F. Latta	142,637	Sept. 9, 1873	283	83	4	277
Fire-extinguisher	C. Lippincott and J. Patterson	140,512	July 1, 1873	145	50	4	20
Fire-extinguisher	H. S. Maxim	141,062	July 22, 1873	661	223	4	90
Fire-extinguisher	H. L. McAvoy	136,906	June 17, 1873	441	137	3	667
Fire-extinguisher	J. C. Meehan	137,379	Apr. 1, 1873	89	29	3	364
Fire-extinguisher	W. K. Platt	137,481	Apr. 1, 1873	182	57	3	372
Fire-extinguisher	J. H. Steiner	141,825	Aug. 12, 1873	378	124	4	173
Fire-extinguisher	J. B. Stillson	139,275	May 27, 1873	757	239	3	690
Fire-extinguisher	D. J. Tapley	141,607	Aug. 5, 1873	172	55	4	149
Fire-extinguisher	J. S. Tibbets	140,744	July 8, 1873	358	121	4	49
Fire-extinguisher	J. S. Tibbets	143,203	Sept. 23, 1873	768	264, 265	4	337
Fire-extinguisher, Anti-freezing	W. C. Brnson	143,746	Oct. 21, 1873	345	115	4	426
Fire-extinguisher, Automatic	E. H. Ashcroft	144,493	Nov. 11, 1873	278	94	4	512
Fire-extinguisher, Automatic	I. P. Tice	143,794	Oct. 21, 1873	385	128	4	430
Fire-extinguisher, Boiler	J. D. Bresnihan	138,068	Apr. 22, 1873	736	233	3	450
Fire-extinguisher, Chemical	A. E. Hughes	142,340	Sept. 2, 1873	16	6	4	243
Fire-extinguisher for buildings	J. D. Sutter	144,039	Oct. 24, 1873	617	204	4	459
Fire-extinguisher, Portable	I. C. Andrews	143,605	Oct. 14, 1873	193	65	4	405
Fire-extinguishing by steam	J. A. Coleman	141,034	July 22, 1873	637	215	4	68
Fire fender, grate, and andiron combined, Adjustable	W. N. Hall	138,885	May 13, 1873	382	119	3	539
Fire indicator and alarm	J. Fawcett	144,895	Nov. 25, 1873	634	216	4	563
Fire in high buildings, Extinguishing	A. Watson	145,920	Dec. 23, 1873	798	262	4	686
Fire in oil-tanks, &c., Method of extinguishing	J. W. Stanton	145,134	Dec. 2, 1873	92	29	4	592
Fire-kindler	R. Adams	135,395	Feb. 4, 1873	1	1	3	128
Fire-kindler	A. Bushnell	138,852	May 13, 1873	354	110	3	526
Fire-kindler	J. C. Crumpton	143,066	Sept. 23, 1873	662	227	4	328
Fire-kindler	J. C. Crumpton	143,277	Sept. 30, 1873	837	288	4	359
Fire-kindler	M. Gernsey	135,706	Feb. 11, 1873	302	.....	3	163
Fire-kindler	J. Y. Marks	135,260	Jan. 28, 1873	738	.....	3	107
Fire-kindler	C. A. Nisbett	136,451	Mar. 4, 1873	84	29	3	252
Fire-kindler	E. P. Wheeler	143,048	Sept. 23, 1873	648	222	4	327
Fire-kindlings	W. B. Tucker	135,607	Feb. 4, 1873	204	.....	3	143
Fire-pipe for buildings, Stationary	H. Palmieri	136,537	Mar. 4, 1873	168	54	3	259
Fire-place	J. L. Garlington	140,621	July 8, 1873	255	86	4	40
Fire-place	W. Hoyland	144,675	Nov. 18, 1873	438	148	4	537

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Fire-place	J. M. Irwin	142, 791	Sept. 16, 1873	427	144	4	299
Fire-place	W. M. Kepler	142, 241	Aug. 26, 1873	772	254	4	224
Fire-place	W. Lossie	141, 937	Aug. 19, 1873	490	162	4	192
Fire-place	F. Proudfoot	139, 813	June 10, 1873	350	108	3	652
Fire-place	W. D. Robb	140, 543	July 1, 1873	171	58	4	22
Fire-place back	G. W. Cummings	138, 135	Apr. 22, 1873	787	251	3	455
Fire-place front	E. A. Jackson	144, 459	Nov. 11, 1873	250	84	4	510
Fire-place heater, Base-burning	W. Magill	135, 278	Jan. 28, 1873	736	237	3	107
Fire-place heater, Base-burning	J. S. Perry	134, 767	Jan. 14, 1873	255	83, 84	3	41
Fire-place lining	E. A. Jackson	144, 460	Nov. 11, 1873	250	84	4	510
Fire-place lining	A. J. Redway	135, 587	Feb. 4, 1873	185	57	3	142
Fire-plug	J. P. Gallagher	141, 131	July 22, 1873	726	241	4	95
Fire-plug and cistern, Combined	F. Latta and W. H. Hughes	137, 006	Mar. 18, 1873	586	195	3	311
Fire-proof building	E. Vaoher	145, 700	Dec. 16, 1873	597	195	4	658
Fire-proof partition	C. F. Brand	144, 501	Nov. 11, 1873	284	96	4	513
Fire, Protecting buildings against	W. McCallister	144, 625	Nov. 18, 1873	398	133	4	533
Fire safety-line	C. A. Gregory	141, 269	July 29, 1873	874	286	4	115
Fire-shovel	F. M. Ketcham	143, 018	Sept. 23, 1873	621	211	4	325
Firkin	C. Alvord	141, 847	Aug. 19, 1873	407	133	4	186
Fish-bait, Compound for	S. A. Goodman, jr.	135, 113	Jan. 21, 1873	567		3	81
Fish-dressing machine	F. Kelsey and F. H. Hoamer	142, 918	Sept. 16, 1873	527	180	4	307
Fish-grappling spear	J. W. Knapp	144, 110	Oct. 28, 1873	677	224	4	464
Fish-hook	B. F. Allen	141, 910	Aug. 19, 1873	470	154	4	190
Fish, Preparing and preserving	W. Sharp	143, 386	Sept. 30, 1873	937		4	367
Fish-spawn hatcher	M. G. Holton	136, 834	Mar. 18, 1873	443	147	3	299
Fish-trap	C. E. Ketcham	137, 930	Apr. 15, 1873	591	186	3	430
Fish-trap	S. Pavonarius and C. C. Michtie	141, 588	Aug. 5, 1873	152	49	4	147
Fishing-line	F. E. Forster	135, 900	Feb. 18, 1873	484	156	3	191
Fishing-reel	G. Mooney	134, 917	Jan. 14, 1873	389	124	3	51
Fishing-rod	J. B. McHarg	137, 015	Mar. 18, 1873	596	197	3	311
Fishing-rod	W. M. Smith	140, 656	July 8, 1873	282	95	4	42
Fishing-rod holder	F. Senieur	142, 126	Aug. 26, 1873	676	222	4	217
Fishing-stake	J. O. Campbell	144, 888	Nov. 25, 1873	630	214	4	563
Fishing-torch	S. Bartholomew	137, 877	Apr. 15, 1873	547	171	3	426
Flange-union	A. A. Dame	139, 877	June 17, 1873	414	129	3	665
Flash-light signal	W. Mitchell and J. J. Mayo	141, 010	July 22, 1873	618	209	4	87
Flask:							
See Dentists' flask.							
Molders' flask.							
Powder-flask.							
Flat-iron heater	J. F. Hall	144, 335	Nov. 4, 1873	134	45	4	489
Flat-iron heater	J. C. Wright and J. W. Sursa	140, 987	July 15, 1873	586	197	4	75
Flexible tubing, Elastic connection for	W. B. S. Taylor	144, 163	Oct. 28, 1873	721	240	4	467
Flies from rooms, Compound for expelling	J. Baquil	136, 203	Feb. 25, 1873	756		3	224
Flock-cleaning machine	R. H. Dawson	140, 684	July 8, 1873	305	103	4	44
Floor	L. S. Wood	140, 864	July 15, 1873	464	157	4	65
Floor and ceiling, Fire-proof	W. T. Butler	141, 260	July 29, 1873	864	282	4	114
Floor and chimney connection, Fire-proof	W. Neacher	138, 096	Apr. 23, 1873	757	240	3	452
Floor and roof, Fire-proof	T. Hyatt	143, 181	Dec. 2, 1873	134	44	4	596
Floor and wall, Fire-proof	J. John	145, 211	Dec. 2, 1873	155	53	4	598
Floor, Basement	E. S. Vaughan	137, 740	Apr. 8, 1873	424	130	3	403
Floor-clamp	J. J. Foster	136, 428	Mar. 4, 1873	62	22	3	250
Floor-clamp	H. J. O. Reed	144, 140	Oct. 28, 1873	701	232	4	466
Floor-clamp	J. G. Rogers	139, 265	May 27, 1873	745	236	3	580
Floor-clamp	S. B. Wood, W. S., R. Y. H., and A. W. Terry.	141, 528	Aug. 5, 1873	102	32	4	143
Floor, Fire-proof	N. Cheney	137, 345	Apr. 1, 1873	63	90	3	362
Floor, Fire-proof tile	W. L. Drake	140, 352	July 1, 1873	16	5	4	9
Floor-timber support	T. Voelckers	136, 947	Mar. 18, 1873	536	177	3	306
Flooring, Wood block for	F. Donbrava and J. Staib	139, 662	June 10, 1873	264	67	3	641
Flour and middlings bolt	B. F. Foreman and J. P. Speck	137, 436	Apr. 1, 1873	135	44	3	368
Flour and middlings purifier	E. N. Lacroix	142, 705	Sept. 9, 1873	340	114	4	241
Flour-bolt	D. T. Choat and H. Rich	142, 083	Aug. 26, 1873	638	209	4	213
Flour-bolt	W. Goeshorn	143, 821	Oct. 21, 1873	408	136	4	431
Flour-bolt	C. A. Harper	136, 508	Mar. 4, 1873	135	44	3	236
Flour-bolt	J. G. Kaufman	143, 910	Oct. 21, 1873	482	162	4	438
Flour-bolt	F. Render	135, 588	Feb. 4, 1873	185	58	3	142
Flour-bolt	G. T. and A. Smith	135, 496	Feb. 4, 1873	94	30	3	135
Flour for the manufacture of paste, Broom-corn seed.	J. W. Tallmadge	146, 032	Dec. 30, 1873	916		4	706
Flour, Machine for manufacturing	T. Carr	144, 830	Nov. 25, 1873	580	198	4	559
Flour, Machine for preparing	L. S. Chichester	134, 513	Jan. 7, 1873	11	4	3	8
Flour-mill	J. Dean	139, 353	June 3, 1873	93	32	3	616
Flour-packer	S. Taggart	146, 107	Dec. 30, 1873	986	318	4	711
Flour, Process of manufacturing middlings	G. T. Smith	137, 495	Apr. 1, 1873	199		3	373
Flour, Process of preparing grain for manufacture of.	O. F. Cook	145, 846	Dec. 23, 1873	732	240	4	681
Flower-maker's grass-cutting machine.	T. and J. Millot	144, 916	Nov. 25, 1873	651	221	4	565
Flower-pot	M. B. Gould	135, 271	Jan. 28, 1873	729	233	3	106
Flower-pot bracket	M. D. Jones	134, 751	Jan. 14, 1873	242	79	3	40
Flower-pot, &c., Hook for hanging.	I. A. Lovejoy	139, 254	May 27, 1873	734	232	3	588
Flower-stand	A. C. Dakin	135, 696	Feb. 11, 1873	293	92	3	163
Flowers, Artificial	C. A. Schaller	142, 333	Sept. 2, 1873	28	10	4	244
Flowers, Artificial stem for cut.	J. B. Craig	144, 446	Nov. 11, 1873	239	20	4	509
Flowers, Process of bleaching, &c., dried natural.	J. W. and M. L. Ware	134, 714	Jan. 7, 1873	200		3	22
Fluid-meter	H. A. Deeper	144, 747	Nov. 18, 1873	499	170	4	542
Fluid-meter	J. O. Johnson	138, 657	May 6, 1873	168	54	3	511
Fluid-motor, Rotary	H. Q. Hawley	140, 367	July 1, 1873	26	9	4	10
Flush-bolt for door	S. D. Arnold	139, 647	June 10, 1873	192	63	3	640
Fluting and plaiting machine	M. E. Wilson and A. J. Perry	140, 331	June 24, 1873	825	262	3	707
Fluting-machine	E. M. Deey	141, 923	Aug. 18, 1873	478	158	4	191
Fluting-machine	E. P. Holly	138, 650	May 6, 1873	160	52	3	510
Fluting-machine	D. R. Saunders	134, 936	Jan. 14, 1873	405	130	3	52
Fluting-machine	T. Stockmarr	137, 258	Mar. 25, 1873	826	271	3	340
Fly-catcher	L. Bartlett	135, 961	Feb. 18, 1873	531	175	3	195
Fly-protector	L. Daugherty	139, 552	June 3, 1873	92	31	3	616

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Fly-switch.....	L. S. Welch.....	138, 719	May 6, 1873	227	71	3	516
Fly-trap.....	S. B. Bacheller.....	134, 833	Jan. 14, 1873	317	101	2	45
Fly-trap.....	H. L. Chapman.....	145, 093	Dec. 2, 1873	51	16	4	589
Fly-trap.....	A. J. Davis.....	141, 495	Aug. 5, 1873	78	24	4	141
Fly-trap.....	G. W. Eichholtz.....	145, 791	Dec. 23, 1873	686	225	4	677
Fly-trap.....	G. W. Ernst and I. Lucas.....	136, 797	May 13, 1873	305	94	3	532
Fly-trap.....	J. R. Johnson.....	141, 931	Aug. 19, 1873	485	160	4	191
Fly-trap.....	T. Lane.....	145, 507	Dec. 16, 1873	431	140	4	644
Fly-trap.....	R. P. and W. I. Miller.....	139, 412	May 27, 1873	875	280	5	599
Fly-trap.....	C. Packard.....	144, 860	Nov. 25, 1873	610	207 208	4	561
Fly-trap.....	C. S. Rouse.....	143, 423	Oct. 7, 1873	25	10	4	383
Fly-trap.....	T. H. Whiting.....	140, 176	June 24, 1873	692	217	3	696
Fly-wheel.....	H. Gerner.....	143, 009	Sept. 23, 1873	613	208	4	324
Fog-alarm.....	C. and G. M. Stevens.....	141, 396	July 29, 1873	994	323	4	124
Fog-signal.....	G. C. Pattison.....	145, 008	Nov. 25, 1873	728	245	4	572
Fog-signal.....	W. A. Stewart.....	145, 915	Dec. 23, 1873	794	260	4	685
Folding-case.....	J. C. Barker.....	135, 878	Feb. 18, 1873	467	150	3	190
Folding-chair.....	A. C. Boyd.....	138, 124	Apr. 22, 1873	778	248	3	454
Folding-chair.....	A. C. O. and N. Collignon.....	139, 776	June 10, 1873	318	99	3	650
Folding-chair.....	K. Geisler.....	141, 784	Aug. 12, 1873	343	113	4	171
Folding-chair.....	B. J. Harrison.....	141, 271	July 29, 1873	875	256	4	115
Folding-chair.....	G. Hunzinger.....	138, 892	May 13, 1873	387	121	3	539
Folding-chair.....	P. W. Nolan.....	141, 456	Aug. 5, 1873	41	13	4	138
Folding-chair.....	do.....	141, 457	Aug. 5, 1873	43	13	4	138
Folding-chair.....	D. N. Selleg.....	143, 721	Oct. 14, 1873	304	100	4	413
Folding chair, bed, and ottoman combined.....	E. Faub.....	134, 875	Jan. 14, 1873	351	112	3	48
Folding knife and fork.....	H. Schumacher.....	136, 552	Mar. 4, 1873	181	58	3	260
Folding-screen.....	M. G. Lazarus.....	138, 507	May 6, 1873	31	11	3	500
Folding-seat.....	J. H. Hall.....	143, 979	Oct. 28, 1873	564	187	4	454
Folding-seat.....	W. W. Parker.....	139, 021	May 20, 1873	505	159	3	582
Folding-table.....	J. F. Birchard.....	135, 881	Feb. 18, 1873	470	151	3	190
Folding-table.....	S. V. Cornell.....	137, 658	Apr. 8, 1873	346	107	3	397
Folding-table.....	F. W. Heublein.....	139, 673	June 10, 1873	215	69	3	642
Folding-table, &c.....	H. Loth.....	138, 904	May 13, 1873	395	124	3	540
Folding-table, &c.....	T. P. I. Magoun.....	136, 167	Feb. 25, 1873	728	235	3	222
Folding-table.....	P. Munde.....	141, 453	Aug. 5, 1873	39	12	4	138
Folding-table.....	C. H. Wheeler.....	142, 306	Aug. 26, 1873	822	272	4	229
Food, Articles of.....	G. G. Campbell.....	135, 204	Jan. 28, 1873	667	.....	3	101
Food, Articles of.....	L. S. and M. G. Johnson.....	136, 165	Feb. 25, 1873	727	.....	3	222
Food, Artificial.....	H. C. Morris.....	136, 447	Mar. 4, 1873	81	.....	3	252
Food, Compound.....	L. S. Chichester.....	136, 302	Feb. 25, 1873	842	.....	3	231
Food, Compound.....	L. S. Chichester.....	136, 303	Feb. 25, 1873	843	.....	3	231
Food, Compound.....	L. S. Chichester.....	136, 304	Feb. 25, 1873	843	.....	3	231
Food for animals, Machine for cutting.....	R. Faulstich.....	135, 326	Jan. 28, 1873	778	252	3	110
Food for infants from cereals.....	L. S. Chichester.....	144, 508	Nov. 11, 1873	289	.....	4	513
Food from cereals, Articles of.....	L. S. Chichester.....	136, 305	Feb. 25, 1873	844	.....	3	231
Food from wheat and process of preparing the same.....	E. H. Murray.....	139, 600	June 3, 1873	136	.....	3	620
Food or sauce.....	F. A. Friscia.....	145, 562	Dec. 16, 1873	480	.....	4	648
Foot-power apparatus.....	E. and H. Harding.....	141, 928	Aug. 19, 1873	483	159	4	191
Foot-rest, Chair.....	T. A. Johnson.....	136, 734	Mar. 11, 1873	346	115	3	289
Foot-warmer.....	J. B. Craig.....	144, 445	Nov. 11, 1873	238	80	4	509
Foot-warmer.....	W. Heissenbuttel.....	144, 095	Oct. 28, 1873	664	219	4	463
Forge, Blacksmiths'.....	W. T. Kellogg.....	144, 986	Nov. 25, 1873	707	239	4	570
Forge-chimney, Flue-casing for.....	H. S. Wilcox.....	142, 311	Aug. 26, 1873	826	274	4	229
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Fork and grain-rake.....	M. M. Wells.....	136, 347	Feb. 25, 1873	883	284	3	234
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Portable fountain.							
Soda-fountain.							
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Fountain and aquarium.....	J. Moore.....	143, 456	Oct. 7, 1873	50	17	4	385
Fountain and pump combined.....	J. J. Sink.....	141, 600	Aug. 5, 1873	164	53	4	148
Frame:							
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Awning-frame.							
Bonnet-frame.							
Bridge-truss frame.							
Car-frame.							
Chair-frame.							
Clothes-frame.							
Comb-frame.							
Drawing-frame.							
Drying-frame.							
Hat-frame.							
Mattress-frame.							
Net-frame.							
Picture-frame.							
Pillow-spread frame.							
Quilting-frame.							
Saw-frame.							
Ship-frame.							
Slate-frame.							
Spinning-frame.							
Stove-door frame.							
Tent-frame.							
Traveling-bag frame.							
Vertical-engine frame.							
Window-frame.							
Frier and boiler, Combined.....	G. Smith.....	144, 151	Oct. 22, 1873	708	235	4	466
Fringe or border, Knit.....	J. Philips.....	139, 810	June 10, 1873	247	108	3	651

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Flower, Die for forging.	C. Konold.	134, 983	Jan. 21, 1873	467	150	3	73
Fruit and berry basket.	G. W. Swan and W. Finch.	142, 299	Aug. 26, 1873	817	270	4	228
Fruit and lard press.	W. H. Davis.	142, 329	Sept. 2, 1873	7	3	4	242
Fruit-basket.	S. D. Bedell.	138, 605	May 6, 1873	118	39	3	507
Fruit-basket.	W. D. Triasler.	135, 737	Feb. 11, 1873	324	104	3	163
Fruit-basket cover.	W. R. Wilcox.	144, 376	Nov. 4, 1873	170	57	4	492
Fruit-box.	J. C. Ingham and C. Colby.	141, 142	July 22, 1873	736	244	4	96
Fruit-box.	E. P. Bothwell.	134, 973	Jan. 21, 1873	449	143	3	71
Fruit-can.	C. W. Weston.	141, 842	Aug. 12, 1873	394	128	4	175
Fruit-can.	M. Bray.	144, 380	Nov. 11, 1873	184	63	4	505
Fruit-can.	M. O'Connor.	142, 503	Sept. 2, 1873	163	53	4	255
Fruit-cans and other vessels, Apparatus for exhausting air from.	L. C. Cooley.	140, 247	June 24, 1873	747	236	3	701
Fruit, Canning.	J. B. Matthews.	135, 927	Feb. 18, 1873	504	164	3	193
Fruit-crate.	W. H. Clarkson.	136, 968	Mar. 18, 1873	553	183	3	308
Fruit-crate.	D. Crane.	142, 148	Aug. 26, 1873	694	228	4	218
Fruit-crate.	L. Selling.	141, 389	July 29, 1873	989	321	4	124
Fruit-dryer.	I. B. Cottrell.	142, 147	Aug. 26, 1873	693	228	4	218
Fruit-dryer.	A. Edwards.	134, 528	Jan. 7, 1873	24	8	3	9
Fruit-dryer.	G. R. Nebinger.	138, 516	May 6, 1873	45	15	3	501
Fruit-dryer.	J. L. Post.	136, 670	Mar. 11, 1873	295	98	3	278
Fruit-dryer.	J. Stevenson.	137, 634	Apr. 8, 1873	322	101	3	395
Fruit-dryer.	J. Williams.	143, 949	Oct. 21, 1873	514	173	4	440
Fruit-fork.	L. C. Draper.	135, 975	Feb. 18, 1873	541	179	3	196
Fruit-gatherer.	H. Kelsey.	138, 565	May 6, 1873	89	28	3	505
Fruit-gatherer.	J. Kisor.	136, 072	Feb. 18, 1873	628	206	3	202
Fruit, Instrument to loosen dried.	J. F. Schmeltzer and J. M. Roberts.	144, 147	Oct. 28, 1873	705	234	4	466
Fruit-jar.	T. B. Carroll.	139, 115	May 20, 1873	593	186	3	569
Fruit-jar.	H. C. Gaskill.	136, 148	Feb. 25, 1873	714	230	3	221
Fruit-jar.	E. G. Haller.	136, 240	Feb. 25, 1873	784	254	3	227
Fruit-jar.	E. G. Haller.	140, 916	July 15, 1873	514	173	4	69
Fruit-jar.	G. W. Hempell.	136, 996	Mar. 18, 1873	578	192	3	310
Fruit-jar.	H. Hering.	136, 513	Mar. 4, 1873	143	46	3	257
Fruit-jar.	H. Howson.	135, 430	Feb. 4, 1873	35	10	3	130
Fruit-jar.	A. T. Jones.	139, 580	June 3, 1873	117	39	3	618
Fruit-jar.	A. T. Jones.	140, 508	July 1, 1873	142	49	4	20
Fruit-jar.	J. L. Mason.	137, 461	Apr. 1, 1873	163	52	3	370
Fruit-jar cover.	J. L. Mason.	137, 462	Apr. 1, 1873	163	52	3	370
Fruit-jar, Sealing.	R. S. Manning.	139, 170	May 20, 1873	647	202	3	573
Fruit-knife.	G. W. Stevens.	137, 501	Apr. 1, 1873	205	69	3	373
Fruit loosener, Dried.	H. W. Holman.	144, 542	Nov. 11, 1873	321	109	4	516
Fruit loosener, Dried.	C. Ragan.	137, 622	Apr. 8, 1873	313	97	3	394
Fruit-package.	D. Snedeker.	141, 605	Aug. 5, 1873	170	54	4	149
Fruit-packer.	M. E. Lewis.	140, 511	July 1, 1873	145	49	4	20
Fruit-picker.	H. Mewes.	139, 015	May 20, 1873	500	158	3	562
Fruit-press.	O. Metcalf.	137, 787	Apr. 15, 1873	472	148	3	420
Fuel and method of burning the same, Artificial.	A. Berney.	139, 288	May 27, 1873	766	252	3	590
Fuel from coal-waste, Manufacture of.	J. R. Hayes.	136, 375	Mar. 4, 1873	23	8	3	247
Fuel, Manufacture of.	M. Rae.	136, 263	Feb. 25, 1873	809	261	3	228
Fuel, Manufacture of artificial.	D. Barker.	140, 452	July 1, 1873	90	30	4	16
Fulling-mill.	R. Eickemeyer.	144, 841	Nov. 25, 1873	590	201	4	560
Fumigator.	A. R. Denlinger.	144, 962	Nov. 25, 1873	688	232	4	568
Fumigator, Hospital, &c.	T. J. Mayall.	143, 583	Oct. 14, 1873	173	59	4	403
Funnel.	W. B. Crowther.	140, 350	July 1, 1873	15	5	4	9
Funnel.	C. G. Way.	135, 391	Jan. 28, 1873	836	270	3	115
Funnel-manufacture.	L. R. Comstock.	139, 673	June 17, 1873	411	128	3	665
Funnel-measuring.	J. K. Coble and D. H. Shartzler.	139, 496	June 3, 1873	48	15	3	612
Fur-coated fabric, Manufacture of.	H. Kellogg.	143, 163	Sept. 23, 1873	732	252	4	334
Furnace:							
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Blast-furnace.							
Boiler-furnace.							
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Cupola-furnace.							
Desulphurizing-furnace.							
Gas-furnace.							
Gas-retort furnace.							
Glass-furnace.							
Heating-furnace.							
Hot-air furnace.							
Locomotive-furnace.							
Metal-melting furnace.							
Metallurgic furnace.							
Metallurgic gas-furnace.							
Ore-reducing furnace.							
Ore roasting and treating furnace.							
Portable furnace.							
Puddling-furnace.							
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Reverberatory-furnace.							
Shaft-furnace.							
Smelting-furnace.							
Smoke-burning furnace.							
Soldering-furnace.							
Summer-furnace.							
Fire-heating furnace.							
Zinc-furnace.							
Furnace.	C. Schacher and L. Feret.	145, 689	Dec. 16, 1873	586	192	4	657
Furnace and furnace-door.	B. R. Hawley.	136, 509	Mar. 4, 1873	136	44, 45	3	256
Furnace and steam-generator combined.	O. W. Ketchum.	139, 795	June 10, 1873	334	104	3	651
Furnace and steam-generator for heating, &c.	B. R. Hawley.	136, 510	Mar. 4, 1873	137	45	3	256
Furnace, Apparatus for feeding fuel to.	C. P. Leavitt.	141, 650	Aug. 12, 1873	226	71	4	161

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Furnace-block press	A. Hall	136, 913	Mar. 18, 1873	507	168	3	304
Furnace, Process of using anthracite-coal dust as fuel in.	A. Berney	137, 820	Apr. 15, 1873	501	3	422
Furnace-door	D. Auld, jr.	145, 608	Dec. 16, 1873	517	169	4	651
Furnace-door	J. M. Clark	145, 150	Dec. 2, 1873	103	34	4	593
Furnace linings, retorts, &c., Plastic compound for	S. J. Payne	138, 688	May 6, 1873	196	.....	3	513
Furnace, Straw-feeding attachment for	D. Morey	139, 075	May 20, 1873	557	175	3	566
Furnaces, Bridge wall for	S. C. Sturtevant	144, 421	Nov. 11, 1873	222	74	4	568
Furnaces, crucibles, &c., Composition for lining	A. E. Bates	145, 326	Dec. 9, 1873	265	.....	4	619
Furnaces, Hot-air draft for	E. Boughton	144, 249	Nov. 4, 1873	70	22	4	423
Furnaces, Straw-feeding attachment for	D. Morey	135, 659	Feb. 11, 1873	256	81	3	160
Furniture leg	J. C. Orr and J. M. Baird	141, 071	July 22, 1873	670	225	4	91
Furniture polish	C. A. Libby	138, 262	Apr. 29, 1873	929	.....	3	474
Furniture, School	J. L. Riter	136, 548	Mar. 4, 1873	178	57	3	259
Furniture spring	W. T. Doremus	137, 600	Apr. 8, 1873	297	92	3	392
Furniture spring	W. T. Doremus	140, 188	June 24, 1873	702	221	3	697
Furniture spring	W. T. Doremus	140, 189	June 24, 1873	703	221	3	657
Furrowing machine	W. H. Rutledge	142, 283	Aug. 28, 1873	904	266	4	27
Fuse, Electric	G. M. Mowbray	139, 686	June 10, 1873	227	73	3	643
Fuse for shell, Combined percussion and time	E. Drake	137, 186	Mar. 25, 1873	759	251	3	335
G.							
Gage:							
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Carpenters' gage.							
Collar-gage.							
Diamond-gage.							
Drill-gage.							
Harness-makers' gage.							
Joiners' gage.							
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Micrometer-gage.							
Pressure-gage.							
Printing-press feed-gage.							
Railway-gage.							
Reading-gage.							
Ruling-gage.							
Saw-gage.							
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Sliding-gage.							
Splitting-gage.							
Speed-gage.							
Steam-gage.							
Water-gage.							
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Gage	J. W. Butler	134, 729	Jan. 14, 1873	226	72	3	39
Gaining machine	J. Richards	143, 531	Oct. 7, 1873	115	39	4	390
Gaiter	W. Love	139, 321	May 27, 1873	791	252	3	592
Gaiter	W. E. Putnam	143, 186	Sept. 23, 1873	751	259	4	336
Gaiter	M. M. Wheeler	144, 173	Oct. 28, 1873	729	243	4	468
Galvanic battery	L. Bastet	138, 602	May 6, 1873	116	38	3	507
Galvanic battery	T. A. Edison	142, 999	Sept. 23, 1873	605	205	4	324
Galvanic battery	R. M. Lockwood	137, 556	Apr. 8, 1873	259	80	3	369
Galvanic battery	A. L. Nolf	142, 502	Sept. 2, 1873	163	53	4	255
Game apparatus	R. E. Bean	145, 385	Dec. 9, 1873	308	104	4	623
Game apparatus	J. N. Sawkins	145, 757	Dec. 23, 1873	660	215	4	675
Game apparatus	A. M. Smith	135, 494	Feb. 4, 1873	92	29	3	135
Game apparatus	F. W. Smith	145, 914	Dec. 23, 1873	793	260	4	685
Game apparatus	P. West and G. S. Lee	143, 047	Sept. 23, 1873	647	221	4	327
Game apparatus	P. West and G. S. Lee	143, 799	Oct. 21, 1873	388	129	4	430
Game apparatus	J. C. Wilhelm	145, 706	Dec. 16, 1873	603	197	4	658
Game-board	J. C. Arms	136, 200	Feb. 25, 1873	753	243	3	224
Game-board	A. F. R. Arndt	145, 271	Dec. 9, 1873	214	73	4	615
Game-board	G. R. Elliott	136, 048	Feb. 18, 1873	604	199	3	201
Game-board	F. P. Holmes	141, 053	July 22, 1873	652	220	4	90
Game-board	G. Wentz	142, 066	Aug. 19, 1873	606	199	4	201
Game register for cards	J. W. Sheppard	143, 536	Oct. 7, 1873	119	40	4	390
Game-table	R. R. Crawford	144, 659	Nov. 18, 1873	427	144	4	536
Game-table	L. A. Powers	136, 092	Feb. 18, 1873	645	211	3	204
Game-table	S. S. Schindler	139, 425	May 27, 1873	886	285	3	(0)
Game-table	F. Uebel	138, 961	May 13, 1873	442	138	3	544
Game-table top	G. G. Thomson	137, 113	Mar. 25, 1873	694	220	3	331
Gang-plank	F. G. Johnson	137, 776	Apr. 15, 1873	465	145	3	411
Garbage-tub	S. B. Munson, jr.	140, 527	July 1, 1873	159	54	4	21
Garden-implement	J. M. Lungnest	146, 083	Dec. 30, 1873	960	310	4	710
Garden-weeding implement	W. Jones	143, 354	Sept. 30, 1873	910	309	4	364
Garment, Under	O. P. Flynt	144, 609	Nov. 18, 1873	383	129	4	532
Garments, Apparatus for ironing and pressing	R. B. Sanson	142, 516	Sept. 2, 1873	174	57	4	256
Garter	H. A. House	136, 599	Mar. 11, 1873	234	79	3	273
Garter and belt, Coll-spring	J. M. Ellis	145, 160	Dec. 2, 1873	113	37	4	584
Gasalier extension	L. Hull	143, 765	Oct. 21, 1873	360	119	4	428
Gasalier, Smoke-bell for	C. Deavs	141, 634	Aug. 12, 1873	213	67	4	160
Gas and water main coupling	W. Kilburn	140, 834	July 15, 1873	438	149	4	63
Gas and water pipe	E. H. Austin	136, 952	Mar. 18, 1873	540	178	3	307
Gas and water pipe coupling	J. Holmes	143, 348	Sept. 30, 1873	905	308	4	364
Gas apparatus	J. W. Brown and H. B. West	138, 377	Apr. 29, 1873	1, 029	324	3	482
Gas apparatus	H. H. Wainwright	135, 455	Feb. 4, 1873	59	19	3	132
Gas, Apparatus for carbureting and regulating the pressure of	T. G. Springer	142, 525	Sept. 2, 1873	181	59, 60	4	256
Gas, Apparatus for manufacturing	W. H. Spencer	141, 090	July 22, 1873	688	231	4	92
Gas, Apparatus for manufacture of coal	E. Jones	135, 647	Feb. 11, 1873	248	78	3	159
Gas, Apparatus for manufacturing hydrogen	W. L. Imlay	144, 543	Nov. 11, 1873	322	109	4	516
Gas, Apparatus for manufacturing illuminating	J. G. and W. Müller	145, 810	Dec. 23, 1873	701	230	4	678
Gas apparatus for railway-car	J. B. Olney	141, 826	Aug. 19, 1873	449	146	4	189
Gas apparatus, Hydro-carbon	L. Maring and E. Mertz	135, 568	Feb. 4, 1873	161	52	3	140

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Gas as a motive-power, Utilizing	O. Bolton, jr.	143, 954	Oct. 28, 1873	542	180	4	453
Gas-bracket	J. F. Goldthwait	143, 138	Sept. 23, 1873	715	245	4	333
Gas, Composition for purifying illuminating	S. B. Parham	144, 284	Nov. 4, 1873	94		4	486
Gases, Apparatus for the manufacture of	W. Maynard	136, 081	Feb. 18, 1873	635	208	3	203
Gas-exhausting and washing apparatus	C. H. Brown and J. J. Thomas	137, 174	Mar. 25, 1873	747	248	3	205
Gas-extinguisher	D. M. Reynolds	145, 243	Dec. 2, 1873	182	63	4	600
Gas-fittings, Device for boring and turning	M. Walty	138, 456	Apr. 29, 1873	102	348	3	488
Gas-fixtures	G. G. Sheldon	138, 766	May 13, 1873	277	86	3	530
Gas for illuminating, heating, &c., Manufacture of	R. M. Whipple and J. G. Blunt	137, 521	Apr. 1, 1873	221	68	3	375
Gas from hydro-carbons, Apparatus for the manufacture of	J. Rigby	135, 666	Feb. 11, 1873	264	83	3	160
Gas from oil, Apparatus for making	S. H. Goldthorp	140, 911	July 15, 1873	509	171	4	60
Gas from petroleum, &c., Manufacture of illuminating	R. H. Smith	141, 732	Aug. 12, 1873	292	96	4	167
Gas-furnace	L. Stevens	141, 179	July 22, 1873	776	253	4	99
Gas-furnace	L. Stevens	141, 180	July 22, 1873	777	254	4	99
Gas, &c., Furnace for manufacture of	F. Carroll	144, 506	Nov. 11, 1873	287	97	4	513
Gas furnace, Metallurgic	H. Frank	135, 639	Feb. 11, 1873	241	76	3	158
Gas furnace, Metallurgic	J. Thomas	139, 834	June 10, 1873	367	114	3	654
Gas generator	D. H. Ireland	138, 160	Apr. 22, 1873	808	257	3	456
Gas generator	J. S. Wood	138, 778	May 13, 1873	289	89	3	531
Gas generator, Carbonic acid	J. W. Stanton	137, 330	Apr. 1, 1873	50	15	3	361
Gas generator, Carbonic acid	F. W. Wiesebrook	144, 719	Nov. 18, 1873	475	161	4	540
Gas generator, Carbonic acid	O. Zwietsch	145, 774	Dec. 23, 1873	673	220	4	676
Gas governor and by-pass	P. Munzinger	139, 514	June 3, 1873	61	20, 21	3	613
Gas-heater	C. H. Prentiss	136, 383	Mar. 4, 1873	29	10	3	248
Gas-illuminator	J. B. Van Patten	136, 565	Mar. 4, 1873	192	63	3	261
Gas in furnaces, Method of burning	J. C. Tiffany	145, 257	Dec. 2, 1873	196	68	4	601
Gas-light and pressure-indicator	W. W. Goodwin	138, 016	Apr. 22, 1873	683	216	3	446
Gas-lighter	E. D. McCracken	136, 084	Feb. 18, 1873	637	209	3	203
Gas-lighting apparatus	A. Potter	140, 591	July 8, 1873	228	76	4	38
Gas-lighting apparatus, Automatic	F. Korwan	136, 739	Mar. 11, 1873	350	116	3	282
Gas-lighting apparatus, Electrical	J. Vansant	139, 692	June 10, 1873	233	75	3	644
Gas-lighting by electricity	W. A. Pitt	139, 811	June 10, 1873	348	108	3	652
Gas-lighting, Electrical	C. G. Mueller and H. Meier	139, 599	June 3, 1873	134	44	3	620
Gas-lighting torch	E. P. Gleason	140, 191	June 24, 1873	704	222	3	697
Gas-lime &c., Obtaining bisulphide of carbon from	J. Kircher	138, 504	May 6, 1873	29		3	500
Gas-lime, Obtaining sulphur, sulphuric acid, and sulphurets of sodium and potassium from	J. Kircher	137, 692	Apr. 8, 1873	377		3	399
Gas-machine	T. B. Fogarty	135, 980	Feb. 18, 1873	546	181	3	196
Gas-machine	H. Tilden	138, 715	May 6, 1873	222	69	3	515
Gas-machine, Air	P. Werni	141, 973	Aug. 19, 1873	517	171	4	194
Gas machine, Portable	B. Sloper	143, 426	Oct. 7, 1873	28	10	4	383
Gas, Manufacture of	R. H. Patterson	137, 713	Apr. 8, 1873	397		3	401
Gas, Manufacture of	F. A. Sabbaton	139, 083	May 20, 1873	564	177	3	586
Gas, Manufacture of	H. Skoines	145, 021	Nov. 25, 1873	739	249	4	572
Gas, Manufacture of illuminating	W. Elmer	141, 500	Aug. 5, 1873	81	250	4	141
Gas, Manufacture of illuminating	C. Gearing	140, 264	June 24, 1873	762	240	3	702
Gas, Manufacture of illuminating	E. R. Hopkins	145, 655	Dec. 16, 1873	556	183	4	654
Gas, Manufacture of illuminating	T. N. Miller	139, 910	June 17, 1873	445		3	667
Gas, Manufacture of illuminating	A. P. Southwick	142, 289	Aug. 26, 1873	808	267	4	227
Gas, Manufacture of vapor	C. L. Cohen	141, 119	July 22, 1873	713		4	95
Gas, Manufacture of water	E. J. Jermianowski	145, 350	Dec. 9, 1873	283	94	4	620
Gas, Manufacturing illuminating	A. W. Wilkinson	140, 104	June 17, 1873	609		3	681
Gas, Manufacturing illuminating	W. C. Wren	137, 750	Apr. 8, 1873	435	134	3	403
Gas-meter	D. DeCastro and R. Burton	141, 263	July 29, 1873	869	284	4	114
Gas-meter	W. A. Telling and S. Johnson	143, 390	Sept. 30, 1873	940	318	4	367
Gas-meter, Dry	A. Harris	145, 650	Dec. 16, 1873	553	182	4	654
Gas-meter, Paper dry	A. Schüssler and C. F. Dieterich	144, 868	Nov. 25, 1873	616		4	562
Gas-meter, Method of purifying carbonic acid	A. P. Maylert	135, 001	Jan. 21, 1873	476		3	73
Gasmeter or gas-holder	J. C. Tiffany	135, 172	Jan. 21, 1873	615	201	3	85
Gas-pipe and fixture	J. and T. D. Richardson	140, 165	June 24, 1873	681	214	3	695
Gas-pipe, Apparatus for removing obstructions from	G. Goldsmith and J. Dilkes	144, 843	Nov. 25, 1873	594	202	4	560
Gas-pipe nipples, Device for holding	L. W. Stockwell	141, 244	July 29, 1873	649	277	4	113
Gas, Process and composition for manufacture of illuminating	W. H. Sterling	142, 959	Sept. 16, 1873	565		4	310
Gas, Process of purifying carbonic acid	A. P. Maylert	137, 615	Apr. 8, 1873	308		3	393
Gas, Purification of illuminating	W. H. St. John	142, 358	Sept. 2, 1873	32	12	4	245
Gas-purifier	J. T. Goodfellow and F. A. Sabbaton	140, 034	June 17, 1873	543	172	3	676
Gas-purifier and regulator	J. A. Enos	139, 131	May 20, 1873	607	173	3	570
Gas-purifier tray or grating	J. L. Cheeseman	139, 702	June 10, 1873	249	79	3	645
Gas-regulator	C. H. Edwards	142, 155	Aug. 26, 1873	700	231	4	218
Gas-regulator	P. Keller	137, 454	Apr. 1, 1873	155	50	3	369
Gas-regulator or vulcanizer	G. M. Hopkins	139, 579	June 3, 1873	116	39	3	618
Gas-retort	D. Davison	143, 675	Oct. 14, 1873	253	85	4	409
Gas-retort	G. A. McIlhenney	145, 672	Dec. 16, 1873	572	188	4	656
Gas-retort	J. D. Patton	139, 605	June 3, 1873	140	46	3	620
Gas-retort	J. C. Tiffany	145, 256	Dec. 2, 1873	195	67	4	601
Gas-retort	J. Wetherapoon and W. Foulis	145, 267	Dec. 2, 1873	206	70	4	601
Gas-retort, Apparatus for charging	A. F. Havens	140, 624	July 8, 1873	257	87	4	40
Gas-retort, Apparatus for charging	T. F. Rowland	137, 485	Apr. 1, 1873	187	58	3	372
Gas-retort, Apparatus for charging	J. Somerville and J. Robinson	143, 039	Sept. 23, 1873	638	218	4	326
Gas-retort, Apparatus for charging and drawing	W. Foulis	144, 526	Nov. 11, 1873	304	219	4	514
Gas-retort, Apparatus for raking	T. F. Rowland	137, 486	Apr. 1, 1873	189	59	3	372
Gas-retort charger	T. F. Rowland	137, 487	Apr. 1, 1873	192	59	3	373
Gas-retort, Closing	G. A. McIlhenney	137, 704	Apr. 8, 1873	388	120	3	400
Gas-retort, Closing	G. A. McIlhenney	142, 253	Aug. 26, 1873	780	257	4	225
Gas-retort, Compound for	G. F. Kreischer & L. A. Tartiere	137, 934	Apr. 15, 1873	595		3	430
Gas-retort, Compound for cleaning	W. L. Pitkin and C. J. Gleason	140, 590	July 8, 1873	227		4	38
Gas-retort furnace	W. C. Wren	137, 811	Apr. 15, 1873	493	154	3	491

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Gas-retort mouth-piece	P. Munzinger	144,857	Nov. 25, 1873	608	207	4	561
Gas-retort mouth-piece	T. F. Rowland	143,958	Oct. 28, 1873	583	194	4	456
Gas-seal, &c.	R. M. Caffall	144,504	Nov. 11, 1873	285	97	4	513
Gas, Treating offal and manufacturing	J. Turner	140,391	July 1, 1873	47	16	4	12
Gas, water, &c., Machine for making laminated pipe for	J. S. Patric.	138,814	May 13, 1873	320	99	3	534
Gas-works, By-pass for	P. Munzinger	144,408	Nov. 11, 1873	207	69	4	507
Gas-works, Hydraulic main for	P. T. Burtis	137,655	Apr. 8, 1873	342	106	3	396
Gas-works, Hydraulic main of	W. Farmer	134,874	Jan. 14, 1873	350	111	3	48
Gate:							
<i>See</i> Automatic gate.							
Change-gate.							
Farm-gate.							
Fence-gate.							
Hanging-gate.							
Nursery-gate.							
Railway-gate.							
Swinging-gate.							
Tilting-gate.							
Wagon-end gate.							
Water-wheel gate.							
Gate	J. Blinn	135,463	Feb. 4, 1873	67	21	3	133
Gate	E. Hickman	145,104	Dec. 2, 1873	60	19	4	590
Gate	M. Loomis	145,434	Dec. 9, 1873	354	118	4	626
Gate	G. W. and G. S. Mackey	144,780	Nov. 18, 1873	527	179	4	544
Gate, Adjustably-hinged	E. M. George	136,149	Feb. 25, 1873	714	231	3	221
Gate-fastener	J. H. Nichols	145,362	Dec. 9, 1873	292	98	4	621
Gates, Hanging	E. Secor	142,522	Sept. 2, 1873	179	59	4	256
Gear-cutting machine	J. W. Foster	136,429	Mar. 4, 1878	63	22	3	250
Gear-cutting machine	J. J. Greenough	135,218	Jan. 28, 1873	680	219	3	102
Gear, Friction	F. Simmons	138,444	Apr. 29, 1873	1,092	345	3	487
Gear, Friction-driving	W. W. Tunis	134,825	Jan. 14, 1873	311	99	3	45
Gearing	E. G. Chormann	134,642	Jan. 7, 1873	134	43	3	17
Gearing	F. Emmerich	140,690	July 8, 1873	309	105	4	45
Gearing	J. J. Greenough	145,499	Dec. 16, 1873	417	137	4	643
Gearing, Device for increasing the friction of helical	G. Lindsay	141,149	July 22, 1873	743	245	4	97
Gear or universal joint, Spherical	T. Weaver	145,075	Dec. 2, 1873	31	10	4	588
Gear, Trotting	H. Schmalhausen	142,871	Sept. 16, 1873	491	167	4	304
Generator:							
<i>See</i> Acid-generator.							
Gas-generator.							
Ozone generator.							
Steam-generator.							
Steam and vapor generator.							
Vapor-generator.							
Gimlet-handle	C. L. Griswold	143,142	Sept. 23, 1873	717	246	4	333
Gimlet-handle	H. S. Sheppardson	141,671	Aug. 12, 1873	245	78	4	163
Gin-saw, Machine for sharpening	J. M. Bailey	135,256	Jan. 28, 1873	718	230	3	105
Girder, Apparatus for testing	P. H. Jackson	134,549	Jan. 7, 1873	42	13, 14	3	10
Glass and silver ware, Composition for cleaning	W. H. Roosevelt	141,819	Aug. 12, 1873	374	.....	4	173
Glass, Apparatus for manufacturing window	W. W. Pilkington	134,926	Jan. 14, 1873	395	196	3	52
Glass articles, Process of forming orifices and necks on	J. Wing	143,863	Oct. 21, 1873	446	148	4	435
Glass-blowers, Chimney-tool for	J. G. Mustin	144,628	Nov. 18, 1873	400	134	4	534
Glass-blowing machine	S. L. Fleishman	142,845	Sept. 16, 1873	470	159	4	302
Glass, Flattening-oven for plate	J. B. Boulicault	144,946	Nov. 25, 1873	675	229	4	567
Glass-furnace	E. Bayard and B. A. Mason	136,057	Mar. 18, 1873	544	179	3	307
Glass-furnace	W. Leighton, jr.	141,935	Aug. 19, 1873	488	161	4	192
Glass-furnace	A. Pocheron	141,666	Aug. 12, 1873	241	76	4	162
Glass, &c., Machine for marking designs on	H. A. Wassell	135,610	Feb. 4, 1873	206	64, 65	3	143
Glass-mold	H. Wickham, jr.	135,502	Feb. 4, 1873	99	31	3	135
Glass-mold carriage	D. Bennett, M. Krebs, and J. Haley	138,368	Apr. 29, 1873	1,023	322	3	482
Glass-mold, Method of treating	J. Lydiatt	142,573	Sept. 9, 1873	233	76	4	273
Glass, Ornamental window	C. Frederici	141,782	Aug. 12, 1873	342	112	4	171
Glass, porcelain, &c., Attaching metal cap to	C. B. Jenkins	139,981	June 17, 1873	482	152	3	671
Glass, Pot for melting	J. Dougherty	134,789	Jan. 14, 1873	276	90	3	42
Glass-press	J. Haley	138,750	May 13, 1873	263	82	3	529
Glass-press	A. M. Smith	135,292	Jan. 28, 1873	746	240	3	107
Glass, Process of gilding on	V. Schwarzenbach	141,670	Aug. 12, 1873	244	.....	4	163
Glass, Process of ornamenting	S. M. Adams	141,305	July 29, 1873	903	.....	4	118
Glass, Process of ornamenting	C. Schüssler	142,125	Aug. 26, 1873	676	.....	4	216
Glass-stock, Sifter, mixer, and grinder for	G. B. Barnes and J. A. Leasure	138,554	May 6, 1873	79	25	3	504
Glass-ware, Manufacture of	A. H. Baggs	145,144	Dec. 2, 1873	98	32, 33	4	593
Glass-ware, Manufacture of stemmed	J. Oesterling	143,778	Oct. 21, 1873	372	123	4	429
Glass-ware, Method and mold for manufacturing	J. S. and T. B. Atterbury	139,993	June 17, 1873	506	{ 160 161 }	3	673
Glass-ware mold	G. H. Lomax	143,629	Oct. 14, 1873	213	72	4	406
Glazier's tool	S. G. Monce	140,426	July 1, 1873	70	25	4	14
Globe-holders, Manufacture of	C. H. Barney	143,656	Oct. 14, 1873	235	79	4	408
Glove	R. D. Burr	141,203	July 29, 1873	808	264	4	110
Glove	T. G. Foster	144,665	Nov. 18, 1873	431	146	4	536
Glove	E. V. Whitaker	136,115	Feb. 18, 1873	665	217	3	205
Glove, Corn-husking	P. N. Harts	137,918	Apr. 15, 1873	583	183	3	429
Glove-fastener	L. Meyers	141,580	Aug. 5, 1873	145	47	4	147
Glove-fastener	L. Ferris	144,197	Nov. 4, 1873	23	7	4	480
Glove-fastening	H. P. Carver	140,613	July 8, 1873	249	84	4	40
Glove-fastening	D. A. Cooper	139,703	June 10, 1873	250	79	3	645
Glove-fastening	C. H. Hall and R. Knott	141,555	Aug. 5, 1873	125	39	4	145
Glove, Gauntlet	F. Farrant	145,099	Dec. 2, 1873	57	18	4	590
Glove, Gauntlet	I. B. Whipple	137,988	Apr. 15, 1873	641	202	3	434
Glove-turning machine	F. Vanderpool	146,111	Dec. 30, 1873	990	319	4	712
Glue, Manufacture of	O. S. Pollett	137,835	Apr. 15, 1873	515	.....	3	453
Glue, Manufacture of	B. F. Shaw	145,454	Dec. 9, 1873	368	4	627
Glue, Manufacture of	W. Plumer	141,379	July 29, 1873	978	{ 317 318 }	4	123

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Gold and silver from base metals, Process for separating	E. Lundquist	137, 375	Apr. 1, 1873	86		3	364
Gold and silver from lead containing the same, Separating.	C. Roewag and A. N. De Panville	138, 938	May 13, 1873	423	132	3	543
Gold and silver ore, Treating	J. Kallmes	138, 500	May 6, 1873	27		3	500
Gold leaf for book-binder's use, Manufacture of	R. E. Hastings	146, 001	Dec. 30, 1873	890		4	704
Gong, Door	C. W. Penfield	143, 896	Oct. 28, 1873	581	193	4	456
Goods on bias, Device for aiding cutting	G. Moore	134, 918	Jan. 14, 1873	390	124	3	51
Goods on bias, Device for marking	G. Moore	134, 919	Jan. 14, 1873	391	124	3	51
Governor	J. B. Duff	137, 682	Apr. 8, 1873	350	108	3	397
Governor	J. E. Hugou	144, 205	Nov. 4, 1873	33	9	4	480
Governor	M. Gally	135, 423	Feb. 4, 1873	28	8	3	130
Governor	R. W. Gardner	139, 055	May 20, 1873	533	169	3	564
Governor cut-off gear	E. Towns	139, 631	June 3, 1873	160	53	3	622
Governor, Engine	H. H. Meyer	142, 491	Sept. 2, 1873	155	50	4	254
Governor, Engine	E. Buss	140, 467	July 1, 1873	105	35, 36	4	17
Governor for gas-exhauster	J. Hendy	140, 414	July 1, 1873	62	22	4	13
Governor for steam-heater	R. Koch	137, 215	Mar. 25, 1873	788	260	3	337
Governor, Marine steam-engine	S. J. Olsson	140, 156	June 24, 1873	674	212	3	694
Governor, Safety appliance for	O. Marland	138, 420	Apr. 29, 1873	1,069	337	3	485
Governor, Steam-engine	J. Gaskell	144, 973	Nov. 25, 1873	698	235	4	569
Governor, Steam-engine	J. M. Bottum	137, 652	Apr. 8, 1873	339	105	3	396
Governor, Steam-engine	R. W. Gardner	142, 846	Sept. 16, 1873	471	159	4	302
Governor, Steam-engine	J. C. Hoadley	144, 098	Oct. 28, 1873	666	220	4	463
Governor, Steam-engine	J. E. Hugou	144, 204	Nov. 4, 1873	32	9	4	490
Governor, Steam-engine	A. Matson	142, 167	Aug. 26, 1873	708	234	4	219
Governor, Steam-engine	W. Ord	138, 521	May 6, 1873	49	17	3	501
Governor, Steam-engine	S. P. Ruggles	142, 869	Sept. 16, 1873	488	167	4	304
Governor, Steam-engine	C. R. Rungvist	143, 642	Oct. 14, 1873	224	75	4	407
Governor, Steam-engine	B. B. Smith	137, 573	Apr. 8, 1873	275	84	3	391
Grafting	C. E. Symonds	141, 092	July 22, 1873	690	232	4	93
Grain and malt cleaner and crusher	N. Thielen	145, 314	Dec. 9, 1873	253	84	4	618
Grain and rust cleaning machine	J. Johnson	139, 248	May 27, 1873	730	230	3	588
Grain and seed, Apparatus for protecting	J. M. Joannides	136, 437	Mar. 4, 1873	72	25	3	251
Grain and seed drill	J. H. Shreiner	141, 730	Aug. 12, 1873	291	95	4	167
Grain, &c., Apparatus for collecting and transporting	J. and G. Richards	143, 254	Sept. 30, 1873	819	281	4	357
Grain, Apparatus for conveying	H. G. Yates	144, 589	Nov. 11, 1873	360	121	4	519
Grain-bag	W. B. Carlock	143, 876	Oct. 21, 1873	456	152	4	435
Grain-band, bag-tie, &c.	E. Foote	135, 899	Feb. 18, 1873	483	156	3	191
Grain-basket	H. C. Jones	145, 573	Dec. 16, 1873	488	161	4	649
Grain-binder	J. F. Gordon	140, 822	July 15, 1873	430	146	4	62
Grain-binder	A. S. Hoyt	141, 507	Aug. 5, 1873	86	27	4	142
Grain-binder	S. D. Locke	135, 826	Feb. 11, 1873	409	132	3	171
Grain-binder	S. D. Locke	139, 008	May 20, 1873	495	156	3	561
Grain-binder	A. Phillippi	142, 040	Aug. 19, 1873	582	191	4	199
Grain-binder	Q. A. Scott	140, 083	June 17, 1873	589	186	3	680
Grain-binder	J. Waddington	142, 304	Aug. 26, 1873	821	272	4	229
Grain-cleaner	W. Houghton	144, 455	Nov. 11, 1873	245	83	4	510
Grain-cleaner	S. Moore	139, 257	May 27, 1873	736	233	3	588
Grain-cleaning machine	G. E. Throop	135, 675	Feb. 11, 1873	273	86	3	161
Grain-conveyer	C. Lazarevitch	145, 112	Dec. 2, 1873	65	21	4	590
Grain-cribble	D. Duesler	145, 933	Dec. 30, 1873	830	271	4	699
Grain-distributor, Rotary	A. D. Foote	144, 753	Nov. 18, 1873	505	171	4	542
Grain-drill	G. G. Blunt	139, 860	June 17, 1873	397	125	3	664
Grain-drill	J. P. Fulghum	145, 795	Dec. 23, 1873	629	226	4	677
Grain-drill	S. Hart	144, 452	Nov. 11, 1873	243	82	4	510
Grain-drill	J. F. Keller	137, 929	Apr. 15, 1873	590	186	3	429
Grain-drill	J. King	138, 166	Apr. 22, 1873	813	259	3	457
Grain-drill	S. R. Nye	135, 932	Feb. 18, 1873	508	166	3	193
Grain-drill	C. E. Patric	136, 260	Feb. 25, 1873	804	261	3	228
Grain-drill	G. A. Puraly	139, 610	June 3, 1873	146	48	3	621
Grain-drill, Grass-seed attachment to	J. P. Fulghum	140, 694	July 8, 1873	315	107	4	45
Grain-drill teeth	J. D. Welsh	135, 186	Jan. 21, 1873	627	205	3	86
Grain-drier	E. S. Forgy	137, 606	Apr. 8, 1873	302	93	3	393
Grain-drier	W. F. Morgan	141, 160	July 22, 1873	754	248	4	96
Grain-drier	A. Soper	144, 710	Nov. 18, 1873	468	159	4	539
Grain-drier	R. J. Williams	142, 184	Aug. 26, 1873	722	239	4	230
Grain-elevator	H. Merrill	138, 175	Apr. 22, 1873	823	261	3	456
Grain, Elevating, conveying, storing, and shipping	H. I. P. F. and E. D. Chase	138, 994	May 20, 1873	481	152	3	560
Grain in bulk, Vessel for transporting	F. Demartini and J. Chertizza	142, 842	Sept. 16, 1873	468	158	4	302
Grain raker and loader	G. S. Dudley	139, 303	May 27, 1873	779	247	3	591
Grain-register	G. W. NeSmith	143, 527	Oct. 7, 1873	100	38	4	369
Grain-register	J. S. Price and P. Miller	134, 928	Jan. 14, 1873	397	127	3	52
Grain-register	S. Ramer	135, 845	Feb. 11, 1873	422	137	3	172
Grain-sampler	J. J. Bois	143, 953	Oct. 28, 1873	541	179	4	452
Grain-scourer	C. B. Horton	144, 980	Nov. 25, 1873	703	237	4	569
Grain-scourer	T. Shiveley	135, 602	Feb. 4, 1873	200	61, 62	3	143
Grain-separator	W. B. Allen	135, 746	Feb. 11, 1873	332	106	3	166
Grain-separator	J. W. Breese	142, 672	Sept. 9, 1873	316	105	4	279
Grain-separator	S. Daw	144, 836	Nov. 25, 1873	586	200	4	559
Grain-separator	O. J. Everson	141, 130	July 22, 1873	724	241	4	95
Grain-separator	J. Koons	143, 081	Sept. 23, 1873	672	231	4	329
Grain-separator	S. Lessig, sr	144, 211	Nov. 4, 1873	37	11	4	461
Grain-separator	G. B. Turner	141, 524	Aug. 5, 1873	99	31	4	143
Grain-separator	W. E. Turner	141, 676	Aug. 12, 1873	249	79	4	163
Grain separator and scourer	S. W. Andrews and L. Godfrey	144, 180	Nov. 4, 1873	2	1	4	478
Grain separator and scourer	W. P. Clifford	143, 331	Sept. 30, 1873	884	302	4	363
Grain-separator, Blast-governor for	T. Hoge	138, 563	May 6, 1873	87	28	3	504
Grain-separator, Sieve for	E. Doud	141, 637	Aug. 12, 1873	215	68	4	160
Grain-steaming apparatus	J. H. Ebert and E. Pitts	142, 008	Aug. 19, 1873	548	181	4	197
Grain, Ventilating	B. Dunwiddie	139, 126	May 20, 1873	604	189	3	570
Grain-weighter, Automatic	J. W. Hill	137, 921	Apr. 15, 1873	585	184	3	429
Grape and flower picker	C. W. H. Delano	144, 837	Nov. 25, 1873	587	200	4	559
Grapple	J. Burkhardt	137, 592	Apr. 8, 1873	269	90	3	392

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Grate.....	S. Kepner.....	145, 212	Dec. 2, 1873	155	53	4	598
Grate-bar.....	G. H. Clark.....	142, 146	Aug. 26, 1873	692	228	4	218
Grate-bar.....	A. F. Crowell.....	143, 224	Sept. 30, 1873	792	273	4	355
Grate-bar.....	R. A. Hutchinson.....	142, 471	Sept. 2, 1873	135	44	4	253
Grate-bar.....	H. C. Kerstine.....	143, 079	Sept. 23, 1873	670	231	4	329
Grate-bar.....	J. A. Sinclair.....	135, 447	Feb. 4, 1873	52	17	3	131
Grate-bar.....	P. Umbholtz.....	144, 372	Nov. 7, 1873	165	55	4	492
Grate bar, Furnace.	R. C. Graves.....	135, 799	Feb. 11, 1873	383	123	3	169
Grate bar, Furnace.	A. Rawson.....	141, 890	Aug. 19, 1873	452	147	4	199
Grate, Casting fire.	H. Anshutz.....	134, 832	Jan. 14, 1873	316	101	3	45
Grate, Coal-stove.	S. G. Morrison.....	141, 452	Aug. 5, 1873	38	12	4	138
Grate, Fire.....	W. H. Farris.....	141, 760	Aug. 12, 1873	339	111	4	170
Grate, Fire-place.....	J. S. Runyan.....	142, 514	Sept. 2, 1873	172	56	4	255
Grate, Fire-place.....	J. E. Wood.....	145, 141	Dec. 2, 1873	97	32	4	593
Grate, Fire-place.....	J. M. Woodcock.....	137, 993	Apr. 15, 1873	646	204	3	434
Grate, Fire-place and hot-air furnace.	J. H. Sherwood.....	136, 775	Mar. 11, 1873	379	125	3	285
Grate, Furnace.....	W. B. Le Van.....	141, 936	Aug. 19, 1873	469	161	4	192
Grate, Furnace.....	H. Ryder.....	136, 673	Mar. 11, 1873	297	99	3	276
Grate, Furnace.....	T. Bolzano.....	135, 390	Jan. 28, 1873	835	269	3	115
Grate, Furnace.....	J. Withington.....	142, 068	Aug. 19, 1873	608	200	4	201
Grate, Rocking.....	J. Seddon.....	143, 034	Sept. 23, 1873	634	216	4	326
Grate, Shade and draft-blower for.	F. McCarthy.....	134, 556	Jan. 7, 1873	50	15	3	11
Grate, Stove.....	E. Dewitt.....	135, 095	Jan. 21, 1873	551	180	3	80
Grate, Stove.....	E. Dewitt.....	135, 096	Jan. 21, 1873	552	180	3	80
Grate, Stove.....	S. Duncan.....	135, 471	Feb. 4, 1873	72	23	3	133
Grate, Stove.....	G. W. Eltonhead.....	143, 443	Oct. 7, 1873	40	14	4	384
Grate, Stove.....	W. Hagerty.....	145, 172	Dec. 2, 1873	125	41	4	595
Grate, Stove.....	A. M. Harris.....	135, 909	Feb. 18, 1873	490	159	3	192
Grate, Stove.....	W. J. Keep.....	139, 583	June 3, 1873	119	40	3	618
Grate, Stove.....	G. R. Moore.....	145, 360	Dec. 9, 1873	291	98	4	621
Grate, Stove.....	S. Smyth.....	140, 224	June 24, 1873	729	230	3	699
Grate, Stove.....	J. R. Stone.....	135, 735	Feb. 11, 1873	323	103	3	165
Grate, Stove.....	D. Stuart and L. Bridge.	145, 253	Dec. 2, 1873	193	66	4	600
Grate, Stove.....	W. H. Stryker.....	143, 541	Oct. 7, 1873	123	41	4	390
Grate, Stove.....	J. S. Van Buren.....	139, 934	June 17, 1873	463	145	3	669
Grate, Stove and fire-place.	W. B. Sutor.....	137, 733	Apr. 8, 1873	416	126	3	402
Grate, Stove and furnace.	J. J. Richardson.....	141, 891	Aug. 19, 1873	453	148	4	189
Grate, Stove, furnace, &c.	S. Smith.....	143, 856	Oct. 21, 1873	441	147	4	434
Grater.....	G. Booth.....	138, 122	Apr. 22, 1873	776	248	3	454
Grater, Nutmeg.....	T. Marriott.....	145, 884	Dec. 23, 1873	768	250	4	683
Grater, Nutmeg.....	A. L. Platt.....	138, 191	Apr. 22, 1873	841	266	3	459
Grater, Vegetable.....	G. Booth.....	138, 123	Apr. 22, 1873	777	248	3	454
Grater, Vegetable.....	A. S. McNeir and W. D. Stockton	139, 173	May 20, 1873	650	303	3	573
Grave-covering.....	J. R. Abrams.....	144, 300	Nov. 4, 1873	106	36	4	487
Grave-guard.....	A. Rank.....	140, 728	July 8, 1873	341	115	4	47
Grave-mound cover.....	B. Hunter.....	144, 392	Nov. 11, 1873	194	66	4	506
Gridiron.....	A. Bataille.....	136, 955	Mar. 18, 1873	543	179	3	307
Griddle.....	S. Kennedy.....	142, 164	Aug. 26, 1873	706	233	4	219
Griddle-greaser.....	W. H. Bixler.....	140, 992	July 22, 1873	602	203	4	85
Grinding-machine.....	P. D. Cummings.....	145, 488	Dec. 16, 1873	408	134	4	642
Grinding metal castings, Machine for.	G. H. Spencer.....	137, 104	Mar. 25, 1873	686	228	3	330
Grinding-mill.....	J. G. Baker.....	193, 867	Oct. 21, 1873	448	149	4	435
Grinding-mill.....	D. A. Caldwell.....	145, 786	Dec. 23, 1873	682	223	4	677
Grinding-mill.....	P. Evans.....	143, 816	Oct. 21, 1873	404	135	4	431
Grinding-mill.....	J. T. Harvey.....	136, 321	Feb. 25, 1873	857	276	3	232
Grinding-mill.....	R. and S. Patterson.....	143, 710	Oct. 14, 1873	293	96	4	412
Grinding mill, Barley.....	J. Mackay.....	136, 527	Mar. 4, 1873	157	50, 51	3	258
Grinding-mill feeding-device.	S. Middleton.....	143, 989	Oct. 28, 1873	572	190	4	455
Grinding-mill feed-regulator.	E. H. Austin.....	143, 315	Sept. 30, 1873	870	298	4	362
Grinding-mill feed-regulator.	J. C. Dunlap.....	138, 384	Apr. 29, 1873	1,035	326	3	483
Grinding-mill hopper.....	M. Replogle.....	139, 973	June 17, 1873	491	155	3	671
Grinding-mill hopper.....	G. S. Thompson.....	138, 212	Apr. 22, 1873	857	271	3	460
Grinding-mill hopper and casing.	J. M. Finch.....	137, 429	Apr. 1, 1873	134	44	3	368
Grinding-mill, Metallic.....	H. B. Stevens.....	137, 503	Apr. 1, 1873	207	63	3	374
Grinding-mill, Trammig bolt for.	J. T. Noye.....	142, 809	Sept. 16, 1873	441	148	4	300
Grinding, scouring, and polishing machine.	A. B. Walters.....	135, 456	Feb. 4, 1873	60	19	3	132
Grindstone.....	J. F. and S. H. Green.....	140, 823	July 15, 1873	431	146	4	63
Grindstone-cutting machine.	J. P. Gillespie.....	137, 435	Apr. 1, 1873	139	46	3	368
Grindstone, Device for wetting.	D. Cumming, jr.....	144, 891	Nov. 25, 1873	631	215	4	563
Grindstone-hanger.....	S. L. Bignall.....	143, 952	Oct. 28, 1873	540	179	4	452
Grindstone trough and support.	C. P. Richardson.....	136, 339	Mar. 18, 1873	530	175	3	306
Groove cutting-machine, Cam Guard.	J. S. George and W. Houghtaling	137, 358	Apr. 1, 1873	74	24	3	363
Guard:							
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Candle-guard.							
Cattle-guard.							
Door and window guard.							
Grave-guard.							
Hame-guard.							
Hat and coat guard.							
Hatchway-guard.							
Key-hole guard.							
Knob-guard.							
Lantern-guard.							
Loom-shuttle guard.							
Railway cattle-guard.							
Railway safety-guard.							
Saw-guard.							
Weather-guard.							
Window-guard.							
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Gum compound, Vulcanizable.....	D. M. Lamb.....	144, 622	Nov. 18, 1873	396		4	533
Gun, Air-repeating.....	P. Giffard.....	136, 315	Feb. 25, 1873	853	274	3	232
Gun-barrel, Instrument for cleaning.....	W. E. Turner.....	139, 633	June 3, 1873	161	54	3	622
Gun-barrel, Means of attaching the fore-end stock to.....	J. Deeley and J. S. Edge, Jr.....	140, 482	July 1, 1873	117	40	4	18
Gun, Battery.....	A. E. Miltimore.....	145, 224	Dec. 2, 1873	167	57	4	586
Gun, Breech-loading and magazine.....	B. and W. G. Burton.....	143, 614	Oct. 14, 1873	200	67, 68	4	405
Gun-cleaner.....	C. G. Gould.....	143, 139	Sept. 23, 1873	715	246	4	333
Gun-cotton, Manufacture of.....	S. J. Mackie.....	141, 654	Aug. 12, 1873	230		4	162
Gun-lock.....	C. Gordon.....	138, 145	Apr. 22, 1873	795	253	3	455
Gun-lock.....	W. J. Morris.....	137, 381	Apr. 1, 1873	90	29	3	364
Gun-lock, Safety.....	D. H. Mapother.....	135, 233	Jan. 28, 1873	697	223	3	104
Gun, Machine.....	W. B. Farwell.....	137, 428	Apr. 1, 1873	132	43	3	368
Gun, Machine.....	C. Stensland.....	143, 729	Oct. 14, 1873	310	102	4	413
Gun, Magazine.....	A. Swingle.....	137, 392	Apr. 1, 1873	101	33	3	365
Gun, Means for operating heavy.....	A. Moncrieff.....	144, 120	Oct. 28, 1873	683	226	4	464
Gunpowder, Manufacture of.....	F. Burney.....	145, 149	Dec. 2, 1873	102	34	4	583
Gun-sight.....	M. W. Harrington.....	136, 159	Feb. 25, 1873	722	233	3	222
Gun-sight.....	H. A. Shottky and T. Simendinger.....	134, 772	Jan. 14, 1873	259	85	3	41
Gun-stock and spade, Combined.....	W. E. Blake.....	135, 624	Feb. 11, 1873	227	71	3	157
Gun, Traversing-mechanism for machine.....	R. J. Gatling.....	145, 563	Dec. 16, 1873	481	157	4	648
Gutter, Metallic.....	T. McClunie.....	139, 324	May 27, 1873	793	253	3	593
Gymnastic apparatus.....	J. Smith.....	138, 590	May 6, 1873	108	35	3	506
H.							
Hair, Curling.....	E. T. Crain.....	138, 995	May 20, 1873	483		3	560
Hair, Machine for heading.....	E. Hough.....	145, 060	Dec. 2, 1873	18	7	4	587
Hair, Machine for heading.....	R. Turneaute.....	145, 259	Dec. 2, 1873	198	68	4	601
Hair, Manufacture of crimped.....	R. F. Donisthorpe and T. A. W. Clarke.....	145, 056	Dec. 2, 1873	14	5, 6	4	587
Hair, Medical compound for treating the.....	W. F. Staten.....	145, 313	Dec. 9, 1873	253		4	618
Hair-wash.....	R. Travis.....	142, 532	Sept. 2, 1873	189		4	257
Halter for hitching horses, Pastern.....	J. C. Ford.....	144, 198	Nov. 4, 1873	24	7	4	480
Haltering, &c., Fastening for.....	E. M. Kinne.....	136, 071	Feb. 18, 1873	627	206	3	202
Hame.....	J. Thornton and E. G. Latta.....	144, 371	Nov. 4, 1873	165	55	4	492
Hame-fastener.....	T. L. Booker.....	141, 690	Aug. 12, 1873	261	84	4	164
Hame-fastener.....	J. G. Fleming.....	145, 163	Dec. 2, 1873	116	38	4	594
Hame-fastening.....	E. Covert.....	140, 475	July 1, 1873	112	38	4	17
Hame-guard harness.....	C. H. Allen.....	136, 403	Mar. 4, 1873	45	16	3	249
Hame, Harness.....	C. Robinson.....	137, 241	Mar. 25, 1873	810	266	3	359
Hame-staple socket.....	R. J. Algeo.....	136, 803	Mar. 18, 1873	417	139	3	297
Hammer, Blacksmiths'.....	G. B. Cubberley.....	136, 139	Feb. 25, 1873	707	228	3	220
Hammer, Bush.....	E. J. Worcester.....	138, 975	May 13, 1873	451	142	3	545
Hammer-die, Machine for feeding wire to.....	W. H. Dayton.....	141, 922	Aug. 19, 1873	477	157	4	191
Hammers, Die for forging.....	T. Daffin.....	143, 406	Oct. 7, 1873	9	3	4	381
Hammer, Die for forming.....	J. Yerkes.....	142, 070	Aug. 19, 1873	610	200	4	201
Hammer, Drop.....	J. McGeorge.....	140, 717	July 8, 1873	333	113	4	47
Hammer, Drop.....	J. Tobin.....	145, 601	Dec. 16, 1873	512	168	4	651
Hammer for planishing sheet-iron.....	W. D. Wood.....	142, 754	Sept. 9, 1873	385	129	4	285
Hammer lifter, Drop.....	C. Peck.....	142, 723	Sept. 9, 1873	355	120	4	282
Hammer, Machine for forging.....	W. Evans.....	144, 969	Nov. 25, 1873	694	234	4	569
Hammer, Power.....	J. C. Butterfield.....	144, 058	Oct. 28, 1873	634	209	4	460
Hammer, Power.....	J. C. Butterfield.....	144, 059	Oct. 28, 1873	636	209	4	460
Hammer, Power.....	J. M. Long.....	136, 253	Feb. 25, 1873	797	259	3	228
Hammer, Power.....	S. Pennock.....	137, 092	Mar. 25, 1873	675	224	3	329
Hammer, Revolving.....	G. Stacy.....	144, 638	Nov. 18, 1873	408	137	4	534
Hammer, Steam.....	D. R. Quick and G. A. Gardner.....	141, 667	Aug. 12, 1873	242	77	4	162
Hammer, Steam drop.....	F. B. Miles.....	137, 313	Apr. 1, 1873	30	10	3	359
Hammer, Tack.....	G. J. Capewell.....	144, 953	Nov. 25, 1873	680	230	4	565
Hammock, Device for suspending.....	O. Tufts.....	143, 392	Sept. 30, 1873	942	319	4	367
Hammock-lounge.....	J. C. Craft.....	142, 327	Sept. 2, 1873	5	2	4	242
Hammock-support.....	F. Park.....	144, 219	Nov. 4, 1873	44	13	4	481
Hammock-support.....	O. Tufts.....	144, 168	Oct. 28, 1873	725	242	4	467
Handle:							
<i>See</i> Auger-handle.							
Awl-handle.							
Broom-handle.							
Brush-handle.							
Burial-casket handle.							
Coffin-handle.							
Comb-handle.							
Tile-handle.							
Gimlet-handle.							
Knife-handle.							
Latch-handle.							
Plow-handle.							
Pump-handle.							
Saw-handle.							
Sheet-metal ware handle.							
Shovel-handle.							
Tool-handle.							
Umbrella-handle.							
Hand-rest.....	I. Belford.....	136, 357	Mar. 4, 1873	4	1	3	245
Hand-rubber.....	W. H. Blye.....	145, 927	Dec. 30, 1873	826	269	4	699
Hand-washing rubber.....	A. S. Mann.....	144, 118	Oct. 28, 1873	682	226	4	464
Hanger:							
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Grindstone-hanger.							
Journal or shaft hanger.							
Shaft-hanger.							
Tobacco-hanger.							

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Hanging bracket or shelf	A. C. Brown	136,900	Mar. 18, 1873	498	165	3	303
Harness	E. Covert	141,698	Aug. 12, 1873	266	86	4	164
Harness	G. Renton	138,530	May 6, 1873	57	19	3	502
Harness and saddle-pad	G. Elsey	135,790	Feb. 11, 1873	375	120	3	169
Harness-attachment	E. Croughwell, A. Tillman, and E. L. Vanderburg.	142,085	Aug. 26, 1873	639	210	4	214
Harness check-hook	H. A. Carlton	138,003	Apr. 22, 1873	672	213	3	445
Harness check-loop	W. Parsons	136,454	Mar. 4, 1873	86	29	3	252
Harness-clasp	M. A. Penn	137,954	Apr. 15, 1873	612	193	3	431
Harness coach-pad	A. Gilliam	141,873	Aug. 19, 1873	439	143	4	188
Harness-fastening	E. Covert	140,474	July 1, 1873	112	38	4	17
Harness-loop	F. Hickman	145,299	Dec. 9, 1873	238	89	4	617
Harness-maker's Bench-iron for	J. Thornton and E. G. Latta	142,967	Sept. 16, 1873	574	194	4	311
Harness-maker's clamp	D. Eighme	142,384	Sept. 2, 1873	59	19	4	247
Harness-maker's gage	D. G. Garlock	135,472	Feb. 4, 1873	73	23	3	133
Harness, Mode of attaching sleigh-bell to	B. E. Dexter	140,124	June 24, 1873	645	203	3	692
Harness-mounting	T. Fawcett	143,817	Oct. 21, 1873	405	135	4	431
Harness-mounting	J. F. Kuorr	136,073	Feb. 18, 1873	629	206	3	202
Harness-pad	J. D. Groff and K. H. Wilson	136,155	Feb. 25, 1873	730	232	3	221
Harness-pad	S. A. Marker	144,853	Nov. 25, 1873	603	205	4	561
Harness-pad	M. W. Pond	140,384	July 1, 1873	42	14	4	11
Harness-pad	M. W. Pond	140,385	July 1, 1873	43	14	4	11
Harness-pad	W. A. Reddick	143,253	Sept. 30, 1873	818	280	4	357
Harness-pad-tree	W. H. Taylor	141,395	Aug. 12, 1873	368	126	4	174
Harness-saddle	A. Gilliam	144,613	Nov. 18, 1873	389	130	4	533
Harness-saddle	A. V. Sargeant	136,870	Mar. 18, 1873	470	156	3	301
Harness-saddle	S. E. Tompkins	140,968	July 15, 1873	566	190	4	73
Harness-saddle	S. E. Tompkins	140,969	July 15, 1873	567	190	4	73
Harness-saddle	S. E. Tompkins	140,970	July 15, 1873	569	191	4	74
Harness-saddle, Back-band of	S. F. Marshall	135,831	Feb. 11, 1873	412	134	3	171
Harness-saddle, Buckle-attachment to	J. B. Welpton	137,519	Apr. 1, 1873	220	67	3	375
Harness-saddle, Check-hook for	A. V. Sargeant	142,415	Sept. 2, 1873	81	27	4	249
Harness saddle-pad	H. Lorew	139,403	May 27, 1873	868	278	3	599
Harness saddle-tree	M. W. Pond	143,381	Sept. 30, 1873	933	316	4	366
Harness safety-strap	C. W. Nichols	145,006	Nov. 25, 1873	726	245	4	572
Harness-trimmings, Manufacture of rubber-coated	A. Allbright	137,873	Apr. 15, 1873	544	170	3	425
Harrow	W. Brown	136,027	Feb. 18, 1873	588	193	3	199
Harrow	A. C. Carnes	140,403	July 1, 1873	55	19	4	12
Harrow	H. Cartwright	135,464	Feb. 4, 1873	67	21	3	133
Harrow	J. F. Gazley	139,309	May 27, 1873	784	249	3	592
Harrow	L. C. Gifford	136,717	Mar. 11, 1873	331	109	3	261
Harrow	D. L. Jaques	137,926	Apr. 15, 1873	588	185	3	429
Harrow	T. M. King	139,065	May 20, 1873	546	172	3	565
Harrow	D. B. Maze	143,520	Oct. 7, 1873	103	36	4	389
Harrow	W. H. Platt	137,569	Apr. 8, 1873	272	83	3	390
Harrow	L. C. Rumberger	145,016	Nov. 25, 1873	736	248	4	572
Harrow	C. Smith	135,448	Feb. 4, 1873	52	17	3	131
Harrow	J. Smith	137,254	Mar. 25, 1873	822	270	3	340
Harrow	A. J. Stewart	144,236	Nov. 4, 1873	60	18	4	483
Harrow	W. D. Summers	142,055	Aug. 19, 1873	598	197	4	200
Harrow	C. Svenzen	143,941	Oct. 21, 1873	507	171	4	440
Harrow	R. L. Taylor	142,593	Sept. 9, 1873	250	82	4	274
Harrow	J. A. Walker	141,031	July 22, 1873	629	212	4	88
Harrow	G. Watt	140,563	July 1, 1873	191	64	4	24
Harrow	J. N. Wamsley	135,022	Jan. 21, 1873	496	159	3	75
Harrow	H. Wendover	137,520	Apr. 1, 1873	221	68	3	375
Harrow	P. N. Woodworth	139,987	June 17, 1873	502	159	3	672
Harrow	M. K. Young	144,044	Oct. 28, 1873	620	205	4	459
Harrow and seeder combined	L. G. Jackson	138,806	May 13, 1873	311	96	3	533
Harrow and seeder combined, Wheel	F. Bramer	140,182	June 24, 1873	697	219	3	696
Harrow, Circular	G. W. Hills	144,978	Nov. 25, 1873	701	237	4	569
Harrow, Revolving	H. Mittendorf	136,169	Feb. 25, 1873	730	235	3	222
Harrow, Rotary	R. Rakestraw	139,814	June 10, 1873	351	109	3	653
Harrow, Sulky	W. C. Bye	136,131	Feb. 25, 1873	698	226	3	920
Harrow, Sulky	P. Speelmon	144,231	Nov. 4, 1873	56	17	4	492
Harrow, Sulky	G. W. Van Gorder	136,564	Mar. 4, 1873	192	63	3	260
Harrow-teeth	W. H. Platt	143,713	Oct. 14, 1873	296	97	4	412
Harrow-teeth, Reversible	G. W. Hurst	140,198	June 24, 1873	710	223	3	697
Harvester	H. A. Adams	144,179	Nov. 4, 1873	1	1	4	478
Harvester	E. M. Awrey	140,804	July 15, 1873	412	140	4	61
Harvester	I. W. Bragg	140,675	July 8, 1873	298	100	4	44
Harvester	S. D. Carpenter	144,189	Nov. 4, 1873	14	4	4	479
Harvester	E. H. Clinton	145,050	Dec. 2, 1873	7	2, 3	4	586
Harvester	J. S. Davis	139,122	May 20, 1873	597	188	3	589
Harvester	J. W. H. Doubler	142,903	Sept. 16, 1873	516	176	4	306
Harvester	J. H. Elward	141,863	Aug. 19, 1873	426	140	4	187
Harvester	J. H. Elward	141,864	Aug. 19, 1873	427	140	4	187
Harvester	J. H. Elward	141,865	Aug. 19, 1873	429	141	4	187
Harvester	J. H. Elward	141,866	Aug. 19, 1873	431	141	4	187
Harvester	J. H. Elward	141,867	Aug. 19, 1873	433	141	4	187
Harvester	J. H. Elward	141,868	Aug. 19, 1873	424	142	4	187
Harvester	J. Farrington	134,531	Jan. 7, 1873	26	9	3	9
Harvester	W. Harrison	139,787	June 10, 1873	327	102	3	651
Harvester	P. F. Hodges	142,231	Aug. 26, 1873	763	251	4	324
Harvester	J. F. Kingwill	136,325	Feb. 25, 1873	661	277	3	232
Harvester	G. W. Leisher	139,900	June 17, 1873	437	136	3	667
Harvester	C. Lidren	135,460	Feb. 4, 1873	81	25	3	134
Harvester	S. Luce	141,938	Aug. 19, 1873	491	162	4	192
Harvester	J. P. Manny	135,041	Jan. 21, 1873	512	165	3	76
Harvester	C. N. McCandlish and J. C. Naginey.	137,614	Apr. 8, 1873	308	96	3	393
Harvester	S. L. McColloch	138,172	Apr. 22, 1873	819	260	3	457
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Harvester	W. K. Miller	139, 597	June 3, 1873	132	44	3	620
Harvester	W. K. Miller	139, 596	June 3, 1873	131	43, 44	3	619
Harvester	J. G. Perry	142, 811	Sept. 16, 1873	442	149	4	300
Harvester	W. K. Rairigh	139, 611	June 3, 1873	146	48	3	621
Harvester	W. K. Rairigh	139, 612	June 3, 1873	147	48, 49	3	621
Harvester	B. W. S. and C. H. Bessler	139, 817	June 10, 1873	354	109	3	653
Harvester	A. Rickart	135, 729	Feb. 11, 1873	318	101	3	165
Harvester	R. A. Roberts	136, 940	Mar. 18, 1873	530	175	3	306
Harvester	J. F. Seiberling	135, 013	Jan. 21, 1873	486	156	3	74
Harvester	J. F. Seiberling	137, 490	Apr. 1, 1873	195	60	3	373
Harvester	J. F. Seiberling	139, 268	May 27, 1873	747	237	3	589
Harvester	W. H. Seymour and D. S. Morgan	135, 731	Feb. 11, 1873	319	102	3	165
Harvester	J. H. Shireman	141, 507	Aug. 5, 1873	161	52	4	148
Harvester	H. J. Silvernale	139, 199	May 20, 1873	672	210	3	575
Harvester	G. H. Spaulding	140, 738	July 8, 1873	351	118	4	48
Harvester	C. S. Stone	144, 367	Nov. 3, 1873	162	54	4	492
Harvester	Z. Swope	136, 279	Feb. 25, 1873	823	266	3	230
Harvester	E. Taylor	137, 506	Apr. 1, 1873	211	64	3	374
Harvester	J. S. Truxell	136, 628	Mar. 11, 1873	261	88	3	275
Harvester	W. Wallace	131, 970	Aug. 19, 1873	514	169	4	194
Harvester	J. Werner, jr.	139, 986	June 17, 1873	501	159	3	672
Harvester	J. D. Wilber	138, 830	May 13, 1873	333	102	3	535
Harvester	J. D. Wilber	142, 828	Sept. 16, 1873	453	154	4	301
Harvester	W. A. Wood	136, 295	Feb. 25, 1873	836	270	3	230
Harvester	T. Y. Woolford	135, 741	Feb. 11, 1873	826	105	3	165
Harvester	H. M. Yale	137, 162	Mar. 25, 1873	735	244	3	334
Harvester	T. Yates	143, 110	Sept. 23, 1873	695	238	4	331
Harvester	G. W. N. Yoast	137, 812	Apr. 15, 1873	494	154	3	421
Harvester	G. W. N. Yoast	137, 813	Apr. 15, 1873	495	155	3	421
Harvester	G. W. N. Yoast	137, 814	Apr. 15, 1873	496	155	3	421
Harvester	G. W. N. Yoast	137, 815	Apr. 15, 1873	497	155	3	421
Harvester	C. M. Young	135, 394	Jan. 28, 1873	838	270	3	115
Harvester and thrasher combined	J. H. Adamson	140, 396	July 1, 1873	50	17, 18	4	12
Harvester attachment for dumping and shocking sheaves.	W. A. Sharp and C. L. McClung	138, 536	May 6, 1873	61	21	3	502
Harvester, Bean	J. Hinds	137, 370	Apr. 1, 1873	82	27	3	364
Harvester-binder attachment	J. H. Garnhart	142, 331	Sept. 2, 1873	8	3	4	243
Harvester-binder attachment	J. H. Garnhart	143, 505	Oct. 7, 1873	90	31	4	388
Harvester-binder attachment	H. Porter	144, 789	Nov. 18, 1873	534	182	4	545
Harvester-binder attachment	W. L. Sanford	142, 870	Sept. 16, 1873	489	167	4	304
Harvester-binder attachment	T. Urdahl	144, 715	Nov. 18, 1873	472	160	4	539
Harvester-binder attachment	T. Webb	138, 771	May 13, 1873	282	87	3	530
Harvester Binder's stand and table for	W. R. Low	135, 461	Feb. 4, 1873	82	26	3	134
Harvester, Binder's table for	J. H. Smith	135, 168	Jan. 21, 1873	612	199	3	84
Harvester, Clover	D. R. Bruton	138, 786	May 13, 1873	295	91	3	531
Harvester, Corn	J. and W. Carrothers	139, 367	May 27, 1873	825	264	3	595
Harvester, Corn	H. M. Carter	135, 403	Feb. 4, 1873	7	3	3	128
Harvester, Corn	L. Hamilton	141, 138	July 22, 1873	731	243	4	96
Harvester, Corn	W. H. Kenyon	134, 678	Jan. 7, 1873	169	56	3	20
Harvester, Corn	J. Kilborn	142, 920	Sept. 16, 1873	528	181	4	307
Harvester, Corn	S. Patton	138, 181	Apr. 22, 1873	828	263	3	458
Harvester, Corn	E. W. Quincy	140, 305	June 24, 1873	798	253	3	705
Harvester, Corn	A. Scott	141, 466	Aug. 5, 1873	51	16	4	139
Harvester, Corn	J. H. Spears and K. and R. Wells	139, 623	June 3, 1873	154	51	3	621
Harvester, Corn	G. M. Tope	140, 971	July 15, 1873	570	191	4	74
Harvester, Cotton	J. W. Leigh	136, 924	Mar. 18, 1873	517	170	3	305
Harvester, Cotton	W. H. Pedrick	144, 620	Nov. 18, 1873	401	134	4	534
Harvester-cutter	J. W. H. Doubler	141, 210	July 29, 1873	815	266	4	110
Harvester-cutter	W. McKeever	137, 705	Apr. 8, 1873	388	120	3	400
Harvester-cutter	C. Pomeroy	138, 192	Apr. 22, 1873	842	266	3	459
Harvester-cutter	S. H. Koed and T. Thompson	136, 266	Feb. 25, 1873	813	262	3	229
Harvester-cutter	W. E. Shoales	142, 417	Sept. 2, 1873	84	28	4	249
Harvester-cutter	F. R. and W. O. Sutton	141, 298	July 29, 1873	897	294	4	117
Harvester-cutter	W. Wasson, P. F. Powers, and G. W. Dungan	135, 500	Feb. 4, 1873	97	31	3	135
Harvester-cutter	S. H. Wellings and S. Soules	139, 695	June 10, 1873	243	76	3	644
Harvester-dropper	J. S. Fowler	145, 640	Dec. 16, 1873	545	179	4	654
Harvester-dropper	J. B. Gathright	136, 370	Mar. 4, 1873	18	6	3	247
Harvester-dropper	A. J. Hodges	145, 419	Dec. 9, 1873	342	114	4	625
Harvester-dropper	N. Johnson	139, 395	May 27, 1873	858	274	3	598
Harvester-dropper	W. J. Plecker	138, 526	May 6, 1873	53	18	3	502
Harvester-dropper	J. S. Truxell	143, 391	Sept. 30, 1873	941	318	4	367
Harvester, Dropping platform for	P. Warner	144, 239	Nov. 4, 1873	62	19	4	483
Harvester finger-bar	C. A. Smith	135, 495	Feb. 4, 1873	93	29	3	135
Harvester, Grain-binding	C. F. Goddard	135, 985	Feb. 18, 1873	551	182	3	197
Harvester, Hemp	P. S. Fitch	134, 656	Jan. 7, 1873	147	47	3	18
Harvester-knives, Machine for grinding	J. M. Connel	140, 810	July 15, 1873	421	142	4	62
Harvester-knives, Machine for grinding	J. M. Connel	140, 811	July 15, 1873	422	142	4	62
Harvester-knives, Machine for grinding	J. Murphy	136, 171	Feb. 25, 1873	731	236	3	222
Harvester-knives, Machine for sharpening	J. S. Elliott	138, 743	May 13, 1873	258	80	3	528
Harvester-knives, Tempering	J. F. Shippey	138, 349	Apr. 29, 1873	1,007	317	3	480
Harvester, Lifting-finger for	A. Hughes	144, 457	Nov. 11, 1873	247	83	4	510
Harvester pitman-connection	B. F. Waters	134, 954	Jan. 14, 1873	420	134	3	54
Harvester-platform, Adjustable grain-wheel for	G. M. Patten	134, 610	Jan. 7, 1873	104	34	3	15
Harvester-rake	J. K. Augspurger	142, 139	Aug. 26, 1873	687	226	4	217
Harvester-rake	T. P. Barbour	134, 722	Jan. 14, 1873	221	71	3	38
Harvester-rake	S. Clevenger	141, 695	Aug. 12, 1873	264	85	4	164

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Harvester-rake	J. Collins	135,691	Feb. 11, 1873	288	91	3	168
Harvester-rake	W. T. Eastes	141,127	July 22, 1873	720	239 240	4	95
Harvester-rake	J. Irvine	142,632	Sept. 9, 1873	280	92	4	276
Harvester-rake	E. Lippoldt	144,683	Nov. 18, 1873	447	151	4	537
Harvester-rake	S. D. Locke	142,798	Sept. 16, 1873	431	146	4	299
Harvester-rake	J. B. McMillan	142,490	Sept. 2, 1873	154	50	4	254
Harvester-rake	T. Murphy	142,171	Aug. 26, 1873	711	225	4	219
Harvester-rake	M. L. Nix	141,164	July 22, 1873	758	249	4	98
Harvester-rake	J. L. Owens	142,644	Sept. 9, 1873	289	95	4	277
Harvester-rake	A. Rank	141,668	Aug. 12, 1873	243	77	4	163
Harvester-rake	J. S. Truxell	137,510	Apr. 1, 1873	213	65	3	374
Harvester-reel	C. F. Goddard	142,389	Sept. 2, 1873	62	21	4	247
Harvester-reel	J. Werner, Jr.	142,881	Sept. 16, 1873	497	170	4	305
Harvester-reel-rake	C. A. Warden	136,885	Mar. 18, 1873	453	160	3	303
Harvester, &c., seat	G. W. Perry	141,075	July 22, 1873	675	226	4	91
Harvester-seat	G. W. N. Yost	137,816	Apr. 15, 1873	497	155	3	422
Harvester track-clearer	O. Du Bois	137,351	Apr. 1, 1873	68	22	3	362
Harvester-wheel and axle	B. G. Turner	141,965	Aug. 19, 1873	510	168	4	184
Harvesting-machine	E. Bayliss, J. O. Brown, and F. T. Lomont.	143,609	Oct. 14, 1873	196	66	4	405
Hasp-lock	J. Kinzer	140,926	July 15, 1873	525	175	4	70
Hasp-lock	A. B. Smith	139,430	May 27, 1873	8-9	286	3	600
Hasp-lock	E. P. Stimons and T. C. Martin	136,877	Mar. 18, 1873	477	158	3	302
Hat	J. O'Donnell	138,430	Apr. 29, 1873	1,079	340	3	486
Hat, Adjustable	I. Y. Cassiano	145,092	Dec. 2, 1873	50	16	4	569
Hat and cap, Ear-covering for	B. R. Morse	138,040	Apr. 22, 1873	709	224	3	448
Hat and coat guard	S. N. Robbins	136,005	Feb. 18, 1873	569	188	3	198
Hat and coat hook	C. G. Cole	135,968	Feb. 18, 1873	536	177	3	195
Hat and coat hook	J. Danner	136,905	Mar. 18, 1873	501	166	3	304
Hat and parcel holder	A. Clarke	136,587	Mar. 11, 1873	227	76	3	273
Hat-block, Expansible	R. Eickemeyer	141,338	July 29, 1873	937	305	4	120
Hat-blocking machine	E. C. Fales	139,133	May 20, 1873	609	191	3	570
Hat-bodies, Forming	J. Wharton	145,262	Dec. 2, 1873	201	69	4	601
Hat-bodies, Machine for felting	J. Bowden and R. Shaw	135,399	Feb. 4, 1873	3	2	3	128
Hat-bodies, Machine for stretching	R. Eickemeyer	135,033	Jan. 21, 1873	505	163	3	76
Hat-brim, Extension	I. Y. Cassiano	140,614	July 8, 1873	250	84	4	40
Hat-brim, Extension	I. Y. Cassiano	140,615	July 8, 1873	251	85	4	40
Hat-conformator	J. J. McKnight	144,855	Nov. 25, 1873	605	206	4	561
Hat-frames, Machine for forming	B. Ertola and A. Caselli	143,814	Oct. 21, 1873	402	134	4	431
Hat-press	R. Eickemeyer	138,871	May 13, 1873	369	115	3	528
Hat-press	R. Eickemeyer	140,335	June 24, 1873	829	263 264 265	3	708
Hat-pressing device	C. M. Osgood	135,577	Feb. 4, 1873	173	55	3	141
Hat-pressing die	J. Deeper	139,708	June 10, 1873	253	79	3	645
Hat-pressing die	J. Deeper	144,262	Nov. 4, 1873	79	26	4	484
Hat-pressing machine	E. B. Hastings and J. Deeper	135,428	Feb. 4, 1873	33	10	3	130
Hat-pressing machinery	D. Brown	140,993	July 22, 1873	602	204	4	85
Hat-rack	N. Clarke	136,032	Feb. 18, 1873	592	195	3	200
Hat-shearing machine	R. Cooke	145,052	Dec. 2, 1873	10	3	4	586
Hat-steaming apparatus	C. W. Banta	140,341	July 1, 1873	6	2	4	8
Hat-stretching machine	R. Eickemeyer	140,903	July 15, 1873	500	168 169	4	68
Hat-stretching machine	R. Eickemeyer	141,337	July 29, 1873	935	305	4	120
Hat-stretching machine	S. Goodman	135,112	Jan. 21, 1873	566	184	3	81
Hat-tip lining	W. H. M. Pye	141,727	Aug. 12, 1873	289	94	4	166
Hat wiring and binding machine	H. A. Whiting	138,459	Apr. 29, 1873	1,105	348	3	488
Hats, Machine for ironing	R. Eickemeyer	145,934	Dec. 30, 1873	831	271	4	699
Hats, Machine for lustering	R. Eickemeyer	141,339	July 29, 1873	939	306	4	120
Hatchet blank, Die for shaping	J. Yerkes	136,479	Mar. 4, 1873	109	36	3	254
Hatch, Self-closing	C. H. Reynolds	135,728	Feb. 11, 1873	317	101	3	164
Hatchway	G. Follett and A. Brummel	139,307	May 27, 1873	783	249	3	592
Hatchway, Closing	E. M. Hackett	140,499	July 1, 1873	133	45	4	19
Hatchway-door, Metallic	T. Hyatt	145,184	Dec. 2, 1873	136	44	4	596
Hatchway-guard	M. J. Hinden	136,161	Feb. 25, 1873	724	234	3	222
Hatchway-guard, Automatic	G. E. Berry and F. C. Pingree	144,432	Nov. 11, 1873	230	77	4	509
Hatchway, Means for closing	J. S. Baldwin	138,984	May 20, 1873	472	149	3	559
Hatchway, Self-closing	W. P. Cherrington	145,626	Dec. 6, 1873	533	174 175	4	653
Hatchway, Self-closing	A. Reid	141,171	July 22, 1873	765	251	4	98
Hatchway, Self-closing	A. B. See	142,738	Sept. 9, 1873	370	124	4	283
Hay and cotton press	W. H. McBurney	138,909	May 13, 1873	399	126	3	540
Hay and cotton press	J. Müller	143,586	Oct. 14, 1873	175	59	4	403
Hay and cotton press	D. A. Nelson	142,718	Sept. 9, 1873	351	118	4	282
Hay and cotton press	P. A. Shear	135,291	Jan. 28, 1873	745	240	3	107
Hay and cotton press	G. W. Stewart	138,210	Apr. 22, 1873	855	271	3	460
Hay and grain loader	W. J. Webber	141,840	Aug. 12, 1873	392	128	4	174
Hay, Apparatus for elevating and unloading	H. Buck	136,029	Feb. 18, 1873	589	194	3	300
Hay-carrier	E. B. Tanner	138,953	May 13, 1873	436	137	3	544
Hay-elevator	C. H. Kirkpatrick	142,635	Sept. 9, 1873	282	93	4	276
Hay-fork, Horse	G. Atherton	136,016	Feb. 18, 1873	580	191	3	199
Hay-fork, Horse	S. B. Bowen	141,851	Aug. 19, 1873	409	135	4	186
Hay-fork, Horse	L. Haverstick	138,249	Apr. 29, 1873	916	289	3	473
Hay-fork, Horse	J. W. Lowe	143,170	Sept. 23, 1873	739	254	4	335
Hay-fork, Horse	A. J. Nellus	143,775	Oct. 21, 1873	368	122	4	428
Hay-fork, Horse	T. Rhoads	138,286	Apr. 29, 1873	953	300	3	476
Hay-fork, Horse	B. B. Rockwell	144,143	Oct. 28, 1873	703	233	4	466
Hay-fork, Horse	I. E. Snyder	143,192	Sept. 23, 1873	759	262	4	336
Hay-fork, Horse	H. C. Stouffer	138,211	Apr. 22, 1873	857	271	3	460
Hay-grinding machine	W. P. Miller	139,911	June 17, 1873	445	138	3	667
Hay-knife	J. S. Ball	144,591	Nov. 18, 1873	370	125	4	531
Hay-loader	T. P. Davidson and A. Parvis	137,751	Apr. 8, 1873	436	134	3	404
Hay-loader	H. C. Howland and T. L. Moore	142,234	Aug. 26, 1873	766	252	4	284
Hay-loader	C. E. Warner	145,321	Dec. 9, 1873	260	86	4	619

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Hay-loading and elevating apparatus	J. H. Bean	142, 836	Sept. 16, 1873	462	157	4	302
Hay-loading and unloading apparatus	G. W. Long	135, 729	Feb. 11, 1873	312	99	3	164
Hay-press	H. F. Blank	144, 733	Nov. 18, 1873	487	165	4	541
Hay-press, Wagon	H. Brocksmith	145, 986	Dec. 30, 1873	878	285	4	703
Hay rake and loader	F. Marion and N. E. Wilson	134, 997	Jan. 21, 1873	471	151	3	73
Hay-rake, Horse	A. Amos	144, 305	Nov. 4, 1873	169	37	4	487
Hay-rake, Horse	A. Amos	144, 306	Nov. 4, 1873	110	37	4	487
Hay-rake, Horse	J. H. Bean	140, 671	July 8, 1873	294	99	4	43
Hay-rake, Horse	B. J. Downing	143, 278	Sept. 30, 1873	838	288	4	359
Hay-rake, Horse	C. Edgar	142, 844	Sept. 16, 1873	469	159	4	302
Hay-rake, Horse	C. N. Goss	135, 330	Jan. 28, 1873	781	253	3	110
Hay-rake, Horse	W. H. Hartley	143, 372	Oct. 14, 1873	164	55	4	402
Hay-rake, Horse	J. F. Keller	137, 212	Mar. 25, 1873	786	259	3	337
Hay-rake, Horse	L. Litchfield and J. S. Corbin	140, 513	July 1, 1873	145	50	4	20
Hay-rake, Horse	C. M. Lufkin and C. G. Allen	142, 031	Aug. 19, 1873	570	188	4	198
Hay-rake, Horse	W. C. Martindale	140, 634	July 8, 1873	264	90	4	41
Hay-fork, Horse	D. C. McDonald	138, 572	May 6, 1873	95	30	3	505
Hay-rake, Horse	J. H. Mears	141, 370	July 29, 1873	969	315	4	122
Hay-rake, Horse	B. Morse	141, 884	Aug. 19, 1873	442	146	4	188
Hay-rake, Horse	R. B. Sheldon	137, 389	Apr. 1, 1873	98	32	3	365
Hay-rake, Horse	S. Stevenson	136, 785	Mar. 11, 1873	389	128 129	3	286
Hay-rake, Horse	G. Sweet	145, 029	Nov. 25, 1873	749	253	4	573
Hay-rake, Horse	J. H. Walker	141, 684	Aug. 12, 1873	257	83	4	164
Hay, &c., Sling for loading and unloading	G. W. Long	142, 638	Sept. 9, 1873	285	93	4	277
Hay-tedder	T. J. and G. M. Clark	141, 999	Aug. 19, 1873	541	178	4	196
Head-band	D. McKinnon	142, 169	Aug. 26, 1873	710	235	4	219
Head-block	P. M. Cummings	144, 388	Nov. 11, 1873	191	65	4	506
Head-light, Locomotive	J. W. H. and A. E. Briggs	142, 204	Aug. 26, 1873	740	244	4	222
Head-light, Locomotive	L. Michaels	138, 426	Apr. 29, 1873	1, 076	339	3	486
Head-light, Locomotive	P. F. Stout	141, 183	July 22, 1873	780	255	4	99
Head-rest	O. M. Mitchell	136, 531	Mar. 4, 1873	161	52	3	258
Head-support, Plasterer's	T. T. Wright	138, 463	Apr. 29, 1873	1, 108	350	3	488
Heat-governor or draft-regulator	F. E. Chatard, jr.	138, 736	May 13, 1873	252	78	3	528
Heat-indicator, Distant	J. A. Read	142, 727	Sept. 9, 1873	358	121	4	283
Heat-regulator	H. Boyle	142, 371	Sept. 2, 1873	44	15, 16	4	246
Heater:							
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Boiler-heater.							
Car-heater.							
Dish-heater.							
Feed-water heater.							
Fire-engine heater.							
Fire-place heater.							
Flat-iron heater.							
Gas-heater.							
Hot water and hot air heater.							
Kerosene heater.							
Lamp-heater.							
Peanut-heater.							
Steam-heater.							
Tire-heater.							
Water-heater.							
Heater and blower	W. M. Jackson	142, 397	Sept. 2, 1873	69	23	4	248
Heater and filter	L. F. Meunier	140, 719	July 8, 1873	335	113	4	47
Heater and filter, Combined	W. T. Bate	137, 878	Apr. 15, 1873	548	171	3	426
Heating air and supplying boilers therewith	G. E. Hibbard	145, 568	Dec. 16, 1873	485	158 159	4	648
Heating and illuminating apparatus	L. Ruel	144, 414	Nov. 11, 1873	212	71	4	507
Heating apparatus	W. C. Baker	144, 650	Nov. 18, 1873	423	142	4	535
Heating-furnace	E. W. Crane	137, 598	Apr. 8, 1873	295	91	3	392
Heating-furnace	J. G. Porter	139, 812	June 10, 1873	349	108	3	652
Heating-furnace, Hot-air flue for	G. R. Barker	141, 101	July 22, 1873	699	234	4	93
Heddle-eye opener	J. H. Crowell	139, 875	June 17, 1873	412	129	3	665
Hedge-hook	E. S. Turner	139, 215	May 20, 1873	685	215	3	576
Hedge-trimmer	S. B. Turner	138, 106	Apr. 22, 1873	764	243	3	453
Heel-blank, Machine for compressing and punching	R. C. Lambart	143, 914	Oct. 21, 1873	485	163 164	4	438
Heel-blank, Machine for manufacturing boot and shoe	C. W. Glidden	139, 382	May 27, 1873	840	269	3	597
Heel, Boot	J. B. Gebhard and C. G. Schwarz	143, 688	Oct. 14, 1873	269	89	4	410
Heel, Boot and shoe	L. R. Blake	145, 389	Dec. 9, 1873	314	106	4	623
Heel, Boot and shoe	M. Bray	142, 203	Aug. 26, 1873	740	243	4	222
Heel-breasting machine	A. B. Jaquith and J. Wolohan	145, 061	Dec. 2, 1873	20	7	4	587
Heel-breasting machine	V. K. Spear	139, 273	May 27, 1873	753	239	3	589
Heel-breasting machine	V. K. Spear	141, 735	Aug. 12, 1873	296	97	4	167
Heel-burnishing machine	E. H. Downing and W. Joint	135, 786	Feb. 11, 1873	365	118	3	168
Heel-burnishing machine	C. W. Glidden	143, 690	Oct. 14, 1873	270	89	4	411
Heel-burnishing machine	C. W. Glidden	143, 507	Oct. 7, 1873	92	32	4	388
Heel-burnishing machine	G. C. Hawkins	145, 943	Dec. 16, 1873	842	274	4	700
Heel-burnishing machine	H. S. Vrooman	139, 636	June 3, 1873	168	55, 56	3	622
Heel-burnishing machine, Boot and shoe	C. W. Glidden	143, 899	Oct. 21, 1873	473	159	4	437
Heel-burnishing machine, Boot and shoe	R. C. Lambart	145, 430	Dec. 9, 1873	351	117	4	626
Heel-burnishing machinery, Boot and shoe	J. Beasley	135, 259	Jan. 28, 1873	721	230	3	105
Heel-burnishing machinery, Boot and shoe	J. Van Noubuys	141, 678	Aug. 12, 1873	251	80	4	163
Heel for boots and shoes	O. Underwood	144, 580	Nov. 11, 1873	352	119	4	518
Heeling boots and garters, Machine for	L. Graf	145, 645	Dec. 16, 1873	550	181	4	654
Heeling-machine	C. W. Glidden and H. P. Fairfield	139, 058	May 20, 1873	537	169 170	3	564
Heeling-machine, Boot and shoe	C. W. Glidden	136, 233	Feb. 25, 1873	677	251	3	226
Heel nailing and shaving machine	L. P. Hawkins	135, 911	Feb. 18, 1873	492	159	3	192
Heel-plate	H. L. Drake	139, 500	June 3, 1873	51	16	3	613
Heel-plate, Boot and shoe	G. Rohr	143, 719	Oct. 14, 1873	303	99	4	413
Heel-raud, Machine for turning	J. B. Johnson and G. W. Moulton	138, 257	Apr. 29, 1873	925	291	3	474
Heels, Apparatus for manufacturing boot and shoe	J. Blakey	139, 859	June 17, 1873	395	123 124	3	664

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Heels for shoes, Machine for finishing wooden	R. Hübler	135,038	Jan. 21, 1873	510	{ 164 165 }	3	76
Heels, Hand-tool for manufacture of	S. L. Riker	143,718	Oct. 14, 1873	302	99	4	413
Heels, Machine for cutting leather for boot and shoe	M. H. Hall	145,647	Dec. 16, 1873	551	181	4	654
Heels, Machine for forming boot	C. W. Glidden	138,634	May 6, 1873	147	47	3	509
Heels, Machine for making boot and shoe	A. C. McKnight	140,060	June 17, 1873	569	{ 180 181 }	3	678
Heels, Machine for making boot and shoe	A. Knowlton	134,899	Jan. 14, 1873	372	118	3	50
Heels, Machine for pricking and nail-loading boot and shoe	C. W. Glidden	136,503	Mar. 4, 1873	131	42, 43	3	256
Heels, Machine for shaping the edges of boot and shoe	C. W. Glidden	135,538	Feb. 4, 1873	135	42	3	138
Heels, Machinery for finishing boot and shoe	L. P. Hawkins	137,304	Apr. 1, 1873	22	7	3	359
Heels, Machinery for finishing boot and shoe	L. P. Hawkins	141,712	Aug. 12, 1873	277	91	4	165
Heels, Manufacture of boot and shoe	C. W. Glidden	134,538	Jan. 7, 1873	33	11	3	10
Heels of boots and shoes, Machine for breasting	W. C. Butler	145,625	Dec. 16, 1873	532	174	4	652
Heel-stiffener	L. C. Crowell	134,736	Jan. 14, 1873	211	74	3	39
Heel-stiffener	L. C. Crowell	139,228	May 27, 1873	721	227	3	587
Heel-stiffener	I. R. Rogers	134,933	Jan. 14, 1873	402	126	3	52
Heel-stiffeners for boots and shoes	S. Moore	144,556	Nov. 11, 1873	333	112	4	517
Heel-stiffeners, Machine for making	J. Samules	145,017	Nov. 25, 1873	736	248	4	572
Heel-stiffening for boots and shoes	F. E. Darrow and O. E. Wait	138,010	Apr. 22, 1873	677	214	3	446
Heel-trimming and burnishing machine, Attachment for	S. H. Hodges	136,916	Mar. 18, 1873	509	168	3	304
Heel-trimming apparatus, Boot and shoe	L. Coté	137,293	Apr. 1, 1873	13	4	3	358
Heel-trimming machine	C. J. Addy	133,745	Feb. 11, 1873	331	106	3	165
Heel-trimming machine	C. C. Ballou	142,980	Sept. 23, 1873	589	200	4	323
Heel-trimming machine	E. U. Jones	140,420	July 1, 1873	66	23	4	13
Heel-turning machine, Wooden	R. Hübler	135,037	Jan. 21, 1873	509	164	3	76
Hemmer	O. L. Brown	143,433	Oct. 7, 1873	33	12	4	383
Hemmer	E. S. Yentzer	138,064	Apr. 22, 1873	732	231	3	450
Hemp-brake	J. F. Adams	144,301	Nov. 4, 1873	107	36	4	487
Hemp-brake	W. S. Lawrence	141,569	Aug. 5, 1873	138	44	4	146
Hemp-brake	J. C. Matherly	140,289	June 24, 1873	785	249	3	704
Hemp-machine	J. E. Neill	143,179	Sept. 23, 1873	745	257	4	335
Hides and skins, Process for treating	W. Maynard	136,082	Feb. 18, 1873	636	203	3	203
Hides or skins, Apparatus for sweating	W. M. Mason	145,436	Dec. 9, 1873	355	119	4	626
High and low water indicator, Combined	G. Walton	142,536	Sept. 2, 1873	192	62	4	257
Hitching-strap	A. M. Brubaker	136,811	Mar. 18, 1873	425	141	3	298
Hinge	S. Bingham	134,969	Jan. 21, 1873	445	142	3	71
Hinge	E. Boileau	141,989	Aug. 19, 1873	530	175	4	195
Hinge	H. D. Bradley	139,290	May 27, 1873	769	244	3	591
Hinge	W. I. Ludlow	137,458	Apr. 1, 1873	160	51	3	370
Hinge	P. P. Lynch	138,336	Apr. 29, 1873	996	314	3	479
Hinge	H. Manneck	143,704	Oct. 14, 1873	288	94	4	412
Hinge	F. Müsser	134,697	Jan. 7, 1873	187	61	3	21
Hinge	A. Rankin	137,623	Apr. 8, 1873	314	98	3	394
Hinge	A. Wirth	142,315	Aug. 26, 1873	829	275	4	229
Hinge	J. W. Wood	140,449	July 1, 1873	88	31	4	15
Hinge and spring, Combined door	W. Gillfillan	143,234	Sept. 30, 1873	800	276	4	356
Hinge, Blind	O. S. Garretson	145,797	Dec. 23, 1873	691	226	4	677
Hinge, Blind	L. Gathman	144,898	Nov. 25, 1873	636	216	4	564
Hinge, Blind	A. Huffer	136,061	Feb. 18, 1873	617	203	3	202
Hinge, Butt	I. L. Thompson	134,617	Jan. 7, 1873	109	36	3	16
Hinge, Butt	S. Van Gilder	139,982	June 17, 1873	499	158	3	672
Hinge, Compound	H. Loth	140,930	July 15, 1873	529	177	4	70
Hinge for blinds, Lock	T. Lucas, jr.	142,679	Sept. 9, 1873	221	107	4	280
Hinge for safe-doors, &c	W. F. Stevens	145,973	Dec. 30, 1873	869	281	4	702
Hinge, Gate	W. G. Franklin	138,081	Apr. 22, 1873	744	236	3	451
Hinge, Gate	W. Hull	143,764	Oct. 21, 1873	359	119	4	428
Hinge, Gate	J. H. Stone	137,972	Apr. 15, 1873	628	198	3	432
Hinge, Lock	C. B. Clark	141,323	July 29, 1873	919	301	4	119
Hinge, Lock	M. C. Lee	138,092	Apr. 22, 1873	754	239	3	452
Hinge, Lounger	A. Spiegel	142,957	Sept. 16, 1873	564	191	4	310
Hinge, Pin	A. Lyons and I. B. Abrahams	138,418	Apr. 29, 1873	1,065	335	3	485
Hinge-pivots, Machine for forging solid belted	J. J. and L. Crooke	142,774	Sept. 16, 1873	413	139	4	298
Hinge, Safe and vault door	H. Gross	144,669	Nov. 18, 1873	433	147	4	536
Hinge, Safe-door	J. L. Hall	136,239	Feb. 25, 1873	783	253	3	226
Hinge, Seat	M. W. Chase	141,115	July 22, 1873	710	237	4	94
Hinge, Sheet-metal	W. H. Hart	139,464	June 3, 1873	19	6	3	610
Hinge, Shutter	W. Fosket	144,971	Nov. 25, 1873	696	235	4	569
Hinge, Spring	W. Hoar	142,392	Sept. 2, 1873	65	21	4	247
Hinge, Spring	S. Joyce	141,855	Sept. 16, 1873	477	163	4	303
Hinge, Spring	J. Palmer	137,951	Apr. 15, 1873	609	192	3	431
Hinge, Spring butt	H. A. Clark	137,178	Mar. 25, 1873	750	249	3	335
Hinge, Stop	G. C. Thomas	145,315	Dec. 9, 1873	254	84	4	618
Hinge, Table	E. C. Brinser	142,077	Aug. 26, 1873	632	208	4	913
Hinge, Table	W. F. Daly	142,210	Aug. 26, 1873	745	245	4	222
Hinge, Table	J. W. Palmer	140,947	July 15, 1873	548	183	4	72
Hinge, Trunk	A. M. Darrell	136,040	Feb. 18, 1873	599	197	3	200
Hinge, Wrought-iron blind	W. R. Goodrich	136,650	Mar. 11, 1873	278	93	3	277
Hobby-horse	J. A. Crandall	137,896	Apr. 15, 1873	563	177	3	427
Hobby-horse	J. Reinhart	143,930	Oct. 21, 1873	497	164	4	439
Hobby-horse, Swing	J. A. Crandall	139,371	May 27, 1873	828	265	3	596
Hoe-elevator	E. Harlow	140,185	June 24, 1873	707	223	3	497
Hoe	J. M. Baird	141,208	July 29, 1873	905	297	4	118
Hoe	H. R. Barnes	135,462	Feb. 4, 1873	66	21	3	139
Hoe	H. R. Barnes	137,755	Apr. 15, 1873	443	138	3	417
Hoe	N. D. Beecroft	136,020	Feb. 18, 1873	583	192	3	199
Hoe	H. Camp	135,076	Jan. 21, 1873	539	175	3	79
Hoe	J. H. Gould	142,159	Aug. 26, 1873	703	232	4	219
Hoe	M. Johnson	136,733	Mar. 11, 1873	346	114	3	282
Hoe	T. B. Lockwood	141,365	July 29, 1873	965	314	4	122
Hoe	E. W. McLendon	140,291	June 24, 1873	786	249	3	704
Hoe	H. Parkman	144,127	Oct. 22, 1873	690	229	4	465
Hoe and roller, Combined garden	E. Blanchard	137,124	Mar. 25, 1873	705	234	3	331

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Hoe-plate, Die for forging.....	L. T. Richardson.....	136, 672	Mar. 11, 1873	297	99	3	278
Hoe, Weeding.....	H. S. Crossland.....	142, 149	Aug. 26, 1873	694	228	4	218
Hog-trap.....	T. Darby.....	141, 633	Aug. 12, 1873	212	67	4	160
Hog-trap.....	A. B. De Vore.....	140, 816	July 15, 1873	426	144	4	62
Hog-scraper, Rotary.....	R. Fyfe.....	140, 409	July 1, 1873	58	21	4	13
Hog-scraper apparatus.....	O. McNeil and P. W. Dalton.....	140, 838	July 15, 1873	441	150	4	63
Hogs, Forceps for snouting.....	G. Stephenson.....	143, 730	Oct. 14, 1873	312	103	4	413
Hogsheads and heavy barrels, Apparatus for moving and rolling.....	F. O. J. Burr.....	136, 486	Mar. 4, 1873	116	38	3	255
Hoisting and conveying apparatus.....	O. T. McIntosh.....	138, 910	May 13, 1873	400	126	3	540
Hoisting and conveying apparatus.....	G. Stanciff.....	13.....	May 13, 1873	432	136	3	543
Hoisting and conveying apparatus.....	C. B. Stough.....	141, 297	July 29, 1873	895	294	4	117
Hoisting apparatus.....	J. N. B. Bond.....	135, 513	Feb. 4, 1873	107	34	3	136
Hoisting apparatus.....	C. Clark.....	136, 212	Feb. 25, 1873	762	246	3	225
Hoisting apparatus.....	F. Farrell.....	141, 551	Aug. 5, 1873	122	38	4	145
Hoisting apparatus.....	J. L. Isbell.....	138, 655	May 6, 1873	186	59	3	511
Hoisting apparatus.....	D. Knowles.....	140, 421	July 1, 1873	66	24	4	13
Hoisting apparatus.....	G. B. Massey.....	143, 518	Oct. 7, 1873	100	35	4	389
Hoisting apparatus.....	G. B. Massey.....	143, 519	Oct. 7, 1873	102	35	4	389
Hoisting apparatus.....	N. S. McFarland.....	143, 706	Oct. 14, 1873	290	95	4	412
Hoisting apparatus.....	C. R. Otis.....	146, 090	Dec. 30, 1873	968	312	4	710
Hoisting apparatus, Brake-clutch for.....	T. A. Weston.....	134, 957	Jan. 14, 1873	422	135	3	54
Hoisting apparatus, Differential gearing for.....	J. and J. H. Webster.....	137, 267	Mar. 25, 1873	834	274	3	341
Hoisting apparatus for mines, Swivel.....	T. M. Martin.....	136, 661	Mar. 11, 1873	287	96	3	277
Hoisting apparatus, Hydraulic.....	P. Hinkle.....	140, 502	July 1, 1873	136	47	4	19
Hoisting apparatus, Portable and adjustable.....	G. A. Myers.....	140, 427	July 1, 1873	70	25	4	14
Hoisting apparatus, Steam.....	J. Beggs.....	141, 197	July 29, 1873	800	262	4	109
Hoisting apparatus, Steam.....	C. R. and N. P. Otis.....	134, 699	Jan. 7, 1873	189	61	3	21
Hoisting engine.....	F. Murgatroyd.....	144, 217	Nov. 4, 1873	42	12	4	481
Hoisting-jack.....	J. H. Churchill.....	141, 919	Aug. 19, 1873	475	156	4	191
Hoisting-machine.....	J. Darling.....	145, 727	Dec. 23, 1873	632	207	4	673
Hoisting-machine.....	C. H. Hersey.....	141, 051	July 22, 1873	651	219	4	90
Hoisting-machine.....	J. Jones.....	145, 657	Dec. 16, 1873	558	184	4	655
Hoisting-machine.....	P. W. Mellen.....	140, 786	July 15, 1873	395	135	4	60
Hoisting-machine.....	S. Reynolds.....	139, 614	June 3, 1873	148	49	3	621
Hoisting-machine.....	I. Smith.....	137, 152	Mar. 25, 1873	725	241	3	333
Hoisting-machine.....	J. M. Yates.....	143, 214	Sept. 23, 1873	777	268	4	338
Hoisting-machine, Brake-clutch for.....	T. A. Weston.....	134, 958	Jan. 14, 1873	423	135	3	54
Hoisting-machine safety-attachment.....	W. D. Andrews.....	137, 165	Mar. 25, 1873	737	215	3	331
Hoisting-whim.....	J. C. Marshall.....	138, 811	May 13, 1873	317	98	3	533
Holdback.....	G. D. Cleveland.....	143, 964	Oct. 28, 1873	549	182	4	453
Holdback.....	M. D. Myers.....	135, 833	Feb. 11, 1873	413	134	3	171
Holder:							
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Billiard-table ball-holder.							
Billiard-table chalk-holder.							
Blacking-box holder.							
Boquet-holder.							
Brush-holder.							
Brush and mop holder.							
Button-holder.							
Cartridge-holder.							
Cigar-holder.							
Clothes-line holder.							
Coil-holder.							
Comb-holder.							
Copy-holder.							
Cork or stopper holder.							
Crayon-holder.							
Cuff-holder.							
Currency and postage-stamp holder.							
Curtain-roller holder.							
File-holder.							
Gimlet-holder.							
Globe-holder.							
Hat and parcel holder.							
Hose-holder.							
Knitting-holder.							
Lamp-shade holder.							
Last-block holder.							
Mail-pouch holder.							
Meat-holder.							
Mirror-holder.							
Mop-holder.							
Napkin-holder.							
Pen-holder.							
Pencil-holder.							
Photographic-plate holder.							
Portfolio-holder.							
Rein-holder.							
Ruche-holder.							
Sad-iron holder.							
Sash-holder.							
Seythe-holder.							
Seythe-stone holder.							
Sewing-machine cloth-holder.							
Sewing-machine bobbin-holder.							
Shade-holder.							
Sheep-holder.							
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Soda-water-tumbler holder.							
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Twine-holder.							
Washtub-holder.							
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Work-holder.							
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Hominy-mill	J. L. Toner	144, 486	Nov. 11, 1873	273	92	4	519
Honey from the comb, Centrifugal apparatus for extracting.	W. Probasco	134, 561	Jan. 7, 1873	56	17	3	11
Hoof paring-machine, Horse	G. W. Schafer	138, 101	Apr. 22, 1873	761	242	3	453
Hoof-spreader	T. Armstrong	136, 689	Mar. 11, 1873	309	102	3	279
Hook:							
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Cant-hook.							
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Check-hook.							
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Curtain-hook.							
Fish-hook.							
Harness-check hook.							
Hat and coat hook.							
Hedge-hook.							
Needle-threading hook.							
Pocket-hook.							
Pruning-hook.							
Security-hook.							
Sewing-machine cover-hook.							
Siding-hook.							
Snap-hook.							
Tag-hook.							
Tobacco-hanging hook.							
Whiffletree-hook.							
Whiffletree snap-hook.							
Hook	R. Weiss	136, 114	Feb. 18, 1873	665	217	3	905
Hook and hasp, Combined	B. H. Brooks	141, 691	Aug. 12, 1873	262	84	4	164
Hoop:							
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Cheese-hoop.							
Hoop-bending machine	E. Coapman	145, 398	Dec. 9, 1873	322	109	4	624
Hoop-cutting machine	A. G. Parkhurst	137, 384	Apr. 1, 1873	92	30	3	364
Hoop-cutting machine	P. Welch	141, 246	July 29, 1873	852	278	4	113
Hoop cutting and bending machine	J. Dobbins	135, 413	Feb. 4, 1873	18	6	3	129
Hoop-dressing machine	S. L. Heywood	139, 387	May 27, 1873	846	270 271	3	597
Hoop-lock	T. E. Lucas	144, 117	Oct. 23, 1873	681	225	4	464
Hoop-lock cutter	J. G. Loggins and P. P. Wilkins	145, 956	Dec. 30, 1873	853	277	4	701
Hoop-lock, Machine for cutting	J. McGrew	139, 594	June 3, 1873	129	43	3	619
Hoop-shaving machine	J. A. Douglass and J. Wagner	135, 637	Feb. 11, 1873	239	75	3	158
Hoop-skirt	W. Coe	145, 845	Dec. 23, 1873	731	239	4	681
Hoop-skirt	G. H. Lockwood and A. Carter	139, 510	June 3, 1873	58	19	3	613
Hoop-skirt tape.	C. C. Carpenter	141, 112	July 22, 1873	708	237	4	94
Horn to resemble whalebone, Treating.	W. Birch	145, 045	Dec. 2, 1873	3		4	586
Horse, Apparatus for treating	D. Sullivan	139, 207	May 20, 1873	679	213	3	576
Horse-checking apparatus	J. Jackson	143, 244	Sept. 30, 1873	810	278	4	356
Horse-cleaning apparatus	O. W. Allison and P. Homelius	137, 045	Mar. 25, 1873	631	209	3	326
Horse-cover	A. H. Morris	134, 921	Jan. 14, 1873	392	125	3	51
Horse-detaching apparatus	H. Latschaw	139, 068	May 20, 1873	550	173	3	565
Horse-detaching device	E. P. Jones	145, 426	Dec. 9, 1873	348	116	4	625
Horse-detaching device	R. R. Jones	143, 260	Sept. 30, 1873	843	290	4	360
Horse-detaching device	I. L. Landis	145, 662	Dec. 16, 1873	563	185	4	655
Horse-detaching device	S. Sykes	143, 428	Oct. 7, 1873	29	11	4	383
Horse-feed bag	T. Adams	141, 686	Aug. 12, 1873	259	83	4	164
Horse-foot-pad	J. Johnson	135, 814	Feb. 11, 1873	400	122	3	170
Horse from cart, Device for releasing	G. H. Meirer	140, 521	July 1, 1873	153	52	4	91
Horse from cribbing, Device for preventing	A. Stillwell	141, 962	Aug. 19, 1873	508	167	4	193
Horse from vehicle, Apparatus for detaching.	T. Y. Vancleave	135, 177	Jan. 21, 1873	620	202	3	85
Horse from vehicle, Device for detaching.	J. McNeill	139, 803	June 10, 1873	341	106	3	652
Horse nose-bag	H. D. McGovern	140, 058	June 17, 1873	587	179	3	678
Horse-power	E. Crockett	137, 294	Apr. 1, 1873	13	4	3	358
Horse-power	G. M. Branch	136, 899	Mar. 18, 1873	497	164	3	303
Horse-power	L. H. Bratt	134, 510	Jan. 7, 1873	9	3	3	8
Horse-power	L. Bronson	134, 511	Jan. 7, 1873	9	4	3	8
Horse-power	W. P. Emerson	138, 873	May 13, 1873	372	116	3	538
Horse-power	L. R. Faught	143, 974	Oct. 28, 1873	559	186	4	454
Horse-power	W. Gillilan	140, 622	July 8, 1873	256	86, 87	4	40
Horse-power	A. G. Hagerstrom	135, 331	Jan. 28, 1873	782	253	3	110
Horse-power	H. M. Irwin	137, 684	Apr. 8, 1873	368	114	3	398
Horse-power	Z. P. Landrum	136, 075	Feb. 18, 1873	661	207	3	203
Horse-power	Z. P. Landrum	141, 363	July 29, 1873	964	314	4	122
Horse-power	H. I. Marnette	139, 682	June 10, 1873	222	71	3	643
Horse-power	E. G. McMillan	142, 115	Aug. 26, 1873	667	219	4	216
Horse-power	J. Milbourn	139, 725	June 10, 1873	270	84	3	647
Horse-power	J. Müller	135, 439	Feb. 4, 1873	43	13	3	131
Horse-power	J. Nichols and E. D. Brown	136, 754	Mar. 11, 1873	364	120	3	283
Horse-power	J. S. Tadlock	144, 040	Oct. 28, 1873	617	204	4	459
Horse-power	A. G. Waterhouse	138, 108	Apr. 22, 1873	766	244	3	453
Horse-power	D. Woodbury	145, 473	Dec. 9, 1873	387	128	4	628
Horse-power, Link of endless-chain for	A. W. Gray	141, 268	July 29, 1873	873	286	4	115

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Horse-rake.....	C. Edgar.....	145, 852	Dec. 23, 1873	736	241	4	681
Horse-rake and tedder, Combined.....	G. L. Ives.....	135, 276	Jan. 28, 1873	734	236	3	107
Horse-rake, Revolving.....	M. K. Flory.....	143, 684	Oct. 14, 1873	265	88	4	410
Horse-rake, Revolving.....	G. Penlsten, sr.....	142, 581	Sept. 9, 1873	240	78	4	273
Horse-rake, Revolving.....	W. Wells.....	137, 987	Apr. 15, 1873	641	202	3	433
Horse, Safety-check for.....	J. W. Domett.....	135, 208	Jan. 28, 1873	670	216	3	102
Horse, Sun-bonnet for.....	O. C. Ross.....	141, 386	July 29, 1873	985	320	4	123
Horse, Sun-bonnet for.....	W. Harrison.....	136, 993	Mar. 18, 1873	574	191	3	310
Horse, Sun-shade for.....	J. Anderson.....	139, 491	June 3, 1873	44	14	3	612
Horse, Suspender for fly-guard upon.....	S. Ruth.....	134, 564	Jan. 7, 1873	58	18	3	11
Horse-trough, &c., Float-valve for.....	G. Shelton.....	138, 205	Apr. 22, 1873	851	270	3	460
Horses, Harness-attachment for hitching and unhitching.....	J. Jonson.....	138, 659	May 6, 1873	170	54	3	511
Horses, Heel-boot for.....	T. J. Dobbs.....	143, 678	Oct. 14, 1873	258	86	4	410
Horseshoe.....	W. Mathis.....	144, 782	Nov. 18, 1873	529	180	4	544
Horseshoe.....	M. C. Clark.....	137, 891	Apr. 15, 1873	559	175	3	427
Horseshoe.....	R. F. Cooke.....	144, 833	Nov. 25, 1873	583	199	4	559
Horseshoe.....	I. De Mott.....	137, 128	Mar. 25, 1873	707	234	3	332
Horseshoe.....	C. Goodenough.....	142, 097	Aug. 26, 1873	652	214	4	215
Horseshoe.....	J. B. Johnson.....	143, 353	Sept. 30, 1873	908	309	4	364
Horseshoe.....	R. K. Jordan.....	145, 108	Dec. 2, 1873	62	20	4	590
Horseshoe.....	A. Leach.....	141, 509	Aug. 5, 1873	89	27	4	142
Horseshoe.....	J. Rowe, jr. and F. B. Brown.....	142, 282	Aug. 16, 1873	803	266	4	297
Horseshoe.....	A. W. Smith.....	142, 590	Sept. 9, 1873	248	81	4	274
Horseshoe.....	U. Snyder.....	144, 483	Nov. 11, 1873	270	91	4	512
Horseshoe.....	G. H. Todd.....	145, 463	Dec. 9, 1873	377	124	4	628
Horseshoe-attachment.....	F. H. O'Neill.....	137, 794	Apr. 15, 1873	479	150	3	420
Horseshoe-calk.....	T. M. Clark.....	135, 081	Jan. 21, 1873	542	176	3	79
Horseshoe-calk.....	G. Cnster.....	138, 618	May 6, 1873	131	43	3	508
Horseshoe-calk.....	J. J. Merveep.....	136, 379	Mar. 4, 1873	25	8	3	247
Horseshoe-calk, Machine for grinding.....	J. Little.....	137, 852	Apr. 15, 1873	529	165	3	424
Horseshoe interfering-attachment.....	H. S. Davis.....	137, 660	Apr. 8, 1873	349	108	3	387
Horseshoe-machine.....	C. H. Perkins.....	143, 782	Oct. 21, 1873	375	124	4	429
Horseshoe-nail forging-machine.....	F. H. Richards.....	142, 044	Aug. 19, 1873	586	192	4	199
Horseshoe-nail machine.....	A. D. Bingham.....	134, 841	Jan. 14, 1873	322	103	3	46
Horseshoe-nail machine.....	A. H. Caryl.....	142, 437	Sept. 2, 1873	100	33	4	250
Horseshoe-nail machine.....	J. M. Laughlin.....	135, 993	Feb. 18, 1873	558	185	3	197
Horseshoe-nail machine.....	J. Mills.....	135, 140	Jan. 21, 1873	592	192	3	83
Horseshoe-nails from plates, Die for punching.....	A. H. Caryl.....	142, 678	Sept. 7, 1873	320	106	4	280
Horseshoe-nails, Hammer-roll device for forming.....	T. Harris and P. Dunn.....	134, 664	Jan. 7, 1873	158	52	3	19
Horseshoe-nails, Machine for feeding.....	S. S. Putnam.....	144, 226	Nov. 4, 1873	48	15	4	482
Horseshoe-nails, Machine for finishing.....	S. S. Putnam.....	144, 922	Nov. 25, 1873	656	222	4	565
Horseshoe-nails, Machine for finishing.....	R. Ross.....	139, 331	May 27, 1873	797	254	3	593
Horseshoe-nails, Machine for finishing.....	R. Ross.....	142, 352	Sept. 2, 1873	27	10	4	244
Horseshoe-nails, Machine for making.....	E. W. Kelley.....	139, 250	May 27, 1873	731	231	3	528
Horseshoe-nails, Machine for swaging and trimming the point of.....	R. Ross.....	139, 332	May 27, 1873	798	255	3	593
Horseshoe-nails, Manufacture of.....	H. D. Cowles.....	137, 762	Apr. 15, 1873	452	141	3	418
Horseshoe-nails, Manufacture of.....	H. D. Cowles.....	145, 336	Dec. 9, 1873	272	91	4	620
Horseshoe-nails, Manufacture of.....	J. C. Paige.....	142, 506	Sept. 2, 1873	166	54	4	255
Horseshoe-nails, Manufacture of.....	D. Turbayne and G. M. Wyman.....	134, 948	Jan. 14, 1873	415	133	3	53
Horseshoe-nails, Manufacture of.....	D. Turbayne.....	142, 597	Sept. 9, 1873	253	83	4	274
Horseshoe-nails, Roll for rolling iron for.....	J. Huggett and J. A. Hugget.....	138, 499	May 6, 1873	26	9	3	500
Horseshoe, Sectional.....	J. D. Abbott.....	142, 547	Sept. 9, 1873	211	62	4	271
Horseshoe, Swage for forming.....	D. F. Hofstatter and W. H. Shaw.....	137, 923	Apr. 15, 1873	587	185	3	429
Horseshoeing-machine.....	C. H. Perkins.....	143, 781	Oct. 21, 1873	374	124	4	429
Horseshoer's rest.....	J. Legg.....	141, 651	Aug. 12, 1873	227	71	4	161
Hose and pipe coupling.....	T. E. Button.....	137, 823	Apr. 15, 1873	503	157	3	422
Hose, Apparatus for oiling, testing, and washing fire-engine.....	P. Noyes.....	141, 885	Aug. 19, 1873	449	146	4	188
Hose-bridge.....	E. Batzel.....	143, 400	Oct. 7, 1873	3	1	4	381
Hose-bridge.....	J. E. McCaullay.....	136, 745	Mar. 11, 1873	357	118	3	283
Hose-bridge.....	G. J. Orr and C. E. Gildersleeve.....	135, 285	Jan. 28, 1873	741	239	3	107
Hose-coupling.....	J. Edson.....	145, 731	Dec. 23, 1873	636	208	4	673
Hose-coupling.....	G. S. Goble.....	142, 388	Sept. 2, 1873	62	20	4	247
Hose-coupling.....	S. Ingersoll.....	140, 830	July 15, 1873	436	148	4	63
Hose-coupling.....	J. W. Kennedy.....	140, 374	July 1, 1873	33	11	4	11
Hose-coupling.....	J. W. Kennedy.....	141, 718	Aug. 12, 1873	282	92	4	166
Hose-coupling.....	W. Kilburn.....	143, 514	Oct. 7, 1873	97	97	4	388
Hose-coupling.....	H. Lewis.....	136, 322	Feb. 25, 1873	662	278	3	223
Hose-coupling.....	T. J. Mayall.....	145, 997	Nov. 25, 1873	719	243	4	571
Hose-coupling.....	I. J. Trapp.....	139, 632	June 3, 1873	160	54	3	622
Hose-coupling.....	G. Westinghouse, jr.....	136, 397	Mar. 4, 1873	40	14	3	249
Hose-coupling.....	I. Wilson and L. B. Kondall.....	139, 223	May 20, 1873	691	217	3	577
Hose-coupling, Metallic.....	E. S. Elmer.....	139, 459	June 3, 1873	15	5	3	610
Hose-coupling spanner.....	L. Pond.....	144, 882	Nov. 25, 1873	612	208	4	561
Hose, Flexible play-pipe for.....	J. Graecen.....	145, 415	Dec. 9, 1873	338	113	4	625
Hose holder, Garden.....	H. C. Smith.....	137, 802	Apr. 15, 1873	487	152	3	421
Hose, Hydraulic.....	L. R. Blake.....	138, 845	May 13, 1873	349	108	3	536
Hose, Hydraulic.....	L. R. Blake.....	143, 661	Oct. 14, 1873	240	81	4	408
Hose, Hydraulic.....	L. H. Downing.....	138, 867	May 13, 1873	266	114	3	537
Hose, Machine for manufacture of.....	T. J. Mayall.....	140, 934	July 15, 1873	533	178	4	71
Hose, Manufacture of hydraulic.....	E. A. Street.....	142, 054	Aug. 19, 1873	597	196	4	200
Hose-pipe and sprinkler.....	W. W. Ransom.....	137, 095	Mar. 25, 1873	677	225	3	329
Hose-pipe, Compound.....	M. Cronin.....	139, 550	June 3, 1873	91	31	3	616
Hose-reel.....	T. J. Mayall.....	140, 784	July 15, 1873	393	135	4	60
Hose rest, Garden.....	C. Ryder.....	144, 415	Nov. 11, 1873	213	71	4	507
Hose, Sleeve or patch for stopping leaks in.....	J. F. Bellemere and F. R. Fleer.....	141, 536	Aug. 5, 1873	109	34	4	144
Hose, Suction.....	W. C. Downs.....	134, 654	Jan. 7, 1873	145	46	3	18
Hose, syringe, &c., Distributing-apparatus for garden.....	S. Barton, jr.....	141, 620	Aug. 12, 1873	201	63	4	159
Hose-wrench.....	E. Bucklin, jr.....	144, 827	Nov. 25, 1873	578	197	4	559
Hosiery, Pressing.....	O. Osborne.....	140, 068	June 17, 1873	578	183	3	679

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Hot-air furnace.....	J. Fridley, jr.....	135, 422	Feb. 4, 1873	27	8	3	129
Hot-air furnace.....	W. B. Geddes.....	134, 879	Jan. 14, 1873	354	{ 112 113 }	3	48
Hot-air furnace.....	S. F. Gold.....	137, 546	Apr. 8, 1873	250	77	3	389
Hot-air furnace.....	W. O. Grover.....	139, 505	June 3, 1873	54	17	3	613
Hot-air furnace.....	J. D. Hall.....	137, 838	Apr. 15, 1873	518	161	3	423
Hot-air furnace.....	O. S. Kelsey.....	143, 453	Oct. 7, 1873	47	16, 17	4	384
Hot-air furnace.....	H. N. Longfellow.....	135, 227	Jan. 28, 1873	690	222	3	103
Hot-air furnace.....	J. Magee.....	145, 512	Dec. 16, 1873	437	{ 142 143 }	4	644
Hot-air furnace.....	J. Magee.....	145, 513	Dec. 16, 1873	438	143	4	644
Hot-air furnace.....	G. H. Miller.....	140, 523	July 1, 1873	154	53	4	21
Hot-air furnace.....	D. B. Montague.....	135, 003	Jan. 21, 1873	477	153	3	73
Hot-air furnace.....	D. B. Morris.....	146, 069	Dec. 30, 1873	967	312	4	710
Hot-air furnace.....	H. L. Palmer.....	135, 838	Feb. 11, 1873	417	135	3	178
Hot-air furnace.....	A. Pfund.....	144, 355	Nov. 4, 1873	153	51	4	491
Hot-air furnace.....	C. L. Pierce.....	138, 188	Apr. 22, 1873	839	265	3	450
Hot-air furnace.....	C. L. Pierce.....	138, 189	Apr. 22, 1873	840	265	3	459
Hot-air furnace.....	B. C. Sayre.....	137, 800	Apr. 15, 1873	485	151	3	421
Hot-air furnace.....	M. D. Seward.....	137, 727	Apr. 8, 1873	411	126	3	402
Hot-air furnace.....	C. J. Shepard.....	143, 851	Oct. 21, 1873	437	145	4	434
Hot-air furnace.....	T. Yates.....	137, 277	Mar. 25, 1873	841	276	3	342
Hot-air register.....	W. Highton.....	144, 616	Nov. 18, 1873	390	131	4	533
Hot-air register.....	E. A. Tuttle.....	136, 682	Mar. 11, 1873	304	101	3	279
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Houses, Construction of.....	D. L. Emerson.....	137, 833	Apr. 15, 1873	512	160	3	433
Houses, Construction of.....	T. W. H. Moseley.....	140, 941	July 15, 1873	541	{ 180 181 182 }	4	71
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Hub band, Roll for rolling wagon.....	J. Glass.....	141, 641	Aug. 12, 1873	217	69	4	161
Hub-band for vehicle-wheel.....	G. H. Johnson.....	139, 317	May 27, 1873	789	251	3	592
Hub-boring machine.....	E. Caswell.....	141, 425	Aug. 5, 1873	14	3	4	136
Hub-boring machine.....	J. Duncan and W. H. Arnold.....	141, 264	July 29, 1873	870	285	4	115
Hub-boring machine.....	J. Eisenmann.....	138, 742	May 13, 1873	257	80	3	528
Hub-boring machine.....	F. Jonas.....	144, 618	Nov. 18, 1873	392	132	4	533
Hub-boring machine.....	J. A. Newell.....	145, 521	Dec. 16, 1873	445	145	4	645
Hub-boring machine.....	W. S. Owen.....	145, 894	Dec. 23, 1873	776	253	4	684
Hub-boring machine.....	D. B. Wright.....	145, 142	Dec. 2, 1873	97	32	4	593
Hub, Carriage-wheel.....	P. Murphy.....	141, 659	Aug. 12, 1873	234	73	4	162
Hub, Heavy-wheeled vehicle.....	J. J. Anderson.....	137, 874	Apr. 15, 1873	545	170	3	425
Hub to axle, Device for attaching.....	O. F. Shepard.....	140, 389	July 1, 1873	46	15	4	12
Hub to shaft, Mode of securing wheel.....	E. Sanford.....	143, 849	Oct. 21, 1873	436	145	4	434
Hub, Vehicle.....	H. M. DuBois.....	135, 470	Feb. 4, 1873	71	22	3	133
Hub, Vehicle.....	S. McGee.....	135, 570	Feb. 4, 1873	163	53	3	140
Hub, Vehicle.....	G. L. Rouse.....	139, 691	June 10, 1873	232	74	3	644
Hub, Vehicle.....	T. Royer and G. L. Rouse.....	136, 459	Mar. 4, 1873	89	31	3	253
Hub, Vehicle.....	S. T. F. Sterick.....	134, 945	Jan. 14, 1873	412	132	3	53
Hub, Vehicle-wheel.....	J. Monk.....	137, 314	Apr. 1, 1873	32	10	3	359
Huller:							
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Hulling-machine.....	A. Bertelson.....	139, 758	June 10, 1873	301	93	3	649
Hydrant.....	W. H. Graham.....	145, 294	Dec. 9, 1873	234	79	4	617
Hydrant.....	J. V. Hayes.....	138, 562	May 6, 1873	86	27	3	504
Hydrant.....	F. J. Paul.....	137, 476	Apr. 1, 1873	177	56	3	372
Hydrant.....	T. Ragan.....	136, 545	Mar. 4, 1873	176	56	3	259
Hydrant.....	T. Van Kannel and G. Elzenhofer.....	145, 768	Dec. 23, 1873	669	218	4	676
Hydrant and fire-plug.....	J. I. Healey.....	139, 890	June 17, 1873	426	133	3	666
Hydraulic-elevator.....	T. Stebins.....	139, 624	June 3, 1873	155	52	3	621
Hydraulic-engine.....	R. F. Dobson.....	134, 651	Jan. 7, 1873	143	46	3	18
Hydraulic-engine.....	J. C. Hodges.....	134, 806	Jan. 14, 1873	292	94	3	43
Hydraulic-jack.....	R. Dudgeon.....	137, 765	Apr. 15, 1873	454	{ 141 142 }	3	418
Hydraulic-jack.....	A. V. Ojeda.....	141, 232	July 29, 1873	837	273	4	112
Hydraulic-motor.....	B. A. Bloch.....	137, 171	Mar. 25, 1873	744	247	3	334
Hydraulic-motor.....	W. Walter.....	142, 183	Aug. 26, 1873	721	238	4	290
Hydraulic-motor, Organ-lever coupling for.....	H. F. Wheeler.....	138, 546	May 6, 1873	70	23	3	503
Hydraulic-wheel press.....	G. A. Gray, jr.....	138, 393	Apr. 29, 1873	1, 042	328	3	483
Hydrocarbon-burning apparatus.....	E. F. Rogers.....	135, 011	Jan. 21, 1873	484	155	3	74
Hydrocarbons, Apparatus for burning.....	M. Carbonel.....	140, 009	June 17, 1873	519	165	3	674
Hydrocarbons, Apparatus for burning.....	C. H. Cushing.....	144, 660	Nov. 18, 1873	428	144	4	536
Hydrocarbon vapor, Combustion-chamber for burning.....	C. J. Rames.....	137, 132	Mar. 25, 1873	710	235	3	332
Hydrocarbon vapor generating and burning device.....	C. Carpenter, jr.....	143, 061	Sept. 23, 1873	659	226	4	328
Hygienic basin and steam-bath.....	E. O. Murden.....	135, 004	Jan. 21, 1873	479	154	3	74
I.							
Ice, Apparatus for making.....	G. Willard.....	137, 523	Apr. 1, 1873	224	69	3	375
Ice breaker and fender.....	F. Ford.....	143, 003	Sept. 23, 1873	608	206	4	324
Ice, cooling buildings, &c., Apparatus for manufacture of.....	A. H. Tait.....	144, 577	Nov. 11, 1873	350	118	4	518
Ice-cream freezer.....	R. P. Beil.....	144, 053	Oct. 28, 1873	630	208	4	460
Ice-cream freezer.....	H. B. Campbell.....	139, 453	June 3, 1873	6	2	3	609
Ice-cream freezer.....	J. Dooling.....	141, 209	July 29, 1873	813	266	4	110
Ice-cream freezer.....	S. S. Fitch.....	136, 496	Mar. 4, 1873	125	40	3	255
Ice-cream freezer.....	M. F. Graves.....	143, 822	Oct. 21, 1873	408	136	4	431
Ice-cream freezer.....	G. Guinot.....	135, 474	Feb. 4, 1873	74	23	3	133
Ice-cream freezer.....	A. Lucetti.....	141, 060	July 22, 1873	658	222	4	90
Ice-cream freezer.....	C. E. Simmons.....	142, 951	Sept. 16, 1873	559	169	4	310

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Ice-cream, jelly, &c., Mold for	E. M. May	141, 882	Aug. 19, 1873	446	145	4	188
Ice-creeper	E. B. Colby	135, 629	Feb. 11, 1873	232	73	3	158
Ice-creeper	R. H. Earle	145, 340	Dec. 9, 1873	275	92	4	620
Ice-creeper	A. Heulings	139, 506	June 3, 1873	55	18	3	613
Ice-creeper	C. H. Johnson and W. Axford	145, 656	Dec. 16, 1873	558	183	4	655
Ice-crusher	M. J. Dixon and W. Tunstill	140, 019	June 17, 1873	531	168	3	675
Ice-crusher	F. Hudner and J. R. Little	135, 556	Feb. 4, 1873	150	48	3	139
Ice-elevating track	A. Pfund	144, 133	Oct. 28, 1873	694	230	4	465
Ice-elevator	E. E. Conklin	140, 187	June 24, 1873	701	220 221	3	697
Ice from water or gas pipe, Device for thawing	O. R. Mason	142, 488	Sept. 2, 1873	152	49	4	254
Ice-house	A. Wilbur	144, 720	Nov. 18, 1873	476	161	4	540
Ice-machine	W. Bray	145, 638	Dec. 23, 1873	722	238	4	680
Ice-machine	H. Norman and C. F. Dietrich	135, 576	Feb. 4, 1873	169	54, 55	3	141
Ice-pick	S. S. Boynton and D. Keefe	143, 957	Oct. 28, 1873	544	180	4	453
Ice-shaving machine	J. D. Freeman	141, 553	Aug. 5, 1873	124	39	4	145
Index, Case for containing	C. E. Fellows	139, 503	June 3, 1873	52	17	3	613
India-rubber, Process of obtaining gum resembling	E. H. Rogers	136, 765	Mar. 11, 1873	372	.....	3	284
India-rubber ring, Manufacture of	W. H. Collins and C. E. Longden	140, 472	July 1, 1873	110	37	4	17
India-rubber spring	A. Magowan	136, 079	Feb. 18, 1873	633	208	3	203
Indicator:							
<i>See</i> Car-indicator.							
Fire-indicator.							
Gas-light and pressure indicator.							
Heat-indicator.							
High and low water indicator.							
Low-water indicator.							
Privy-indicator.							
Railway-train indicator.							
Station-indicator.							
Water-indicator.							
Indicator and safety-valve, Combined	J. Smith	143, 644	Oct. 14, 1873	226	76	4	407
Indicator-lock	E. A. Cooper	137, 181	Mar. 25, 1873	753	249	3	335
Indigo-blue vat for coloring wool and cotton	G. Molt	134, 694	Jan. 7, 1873	185	.....	3	21
Indigo for dyeing and printing, Preparation of	F. Schutzenberger and F. de Lande	136, 770	Mar. 11, 1873	375	.....	3	284
Ingot-mold	N. Churchman	145, 278	Dec. 9, 1873	219	75	4	615
Ingot-mold	M. T. Mooney	145, 677	Dec. 16, 1873	577	189	4	656
Ingot mold, Adjustable	M. S. Drake	136, 821	Mar. 18, 1873	433	143	3	298
Ingot-mold, Gold or silver	J. Feix	144, 605	Nov. 18, 1873	380	125	4	532
Ingots, Casting steel	J. A. Holmes	141, 506	Aug. 5, 1873	85	27	4	142
Ingots, Working scrap-iron or other metals into	D. D. Parmelee	146, 092	Dec. 30, 1873	971	314	4	710
Inhaler	W. K. Crumb	134, 858	Jan. 14, 1873	336	107	3	47
Inhaler	W. H. Cutler	135, 411	Feb. 4, 1873	17	5	3	129
Inhaler	C. D. Hunter and E. S. Woods	138, 253	Apr. 29, 1873	921	290	3	474
Inhaler	C. D. Hunter and E. S. Woods	140, 828	July 15, 1873	434	148	4	63
Inhaler	S. J. Shaw	141, 175	July 22, 1873	773	252	4	99
Inhaler and nasal-douche, Combined	E. Schofield	135, 372	Jan. 28, 1873	820	265	3	113
Inhaler, Medical	N. I. Donaldson	134, 861	Jan. 14, 1873	339	108	3	47
Inhaler, Medical	J. C. Parkinson	145, 679	Dec. 16, 1873	578	190	4	656
Inhaling apparatus	E. Schofield	145, 758	Dec. 23, 1873	661	216	4	675
Injector	S. Rue	145, 969	Dec. 30, 1873	866	281	4	702
Injector for feeding boilers	W. and C. Sellers	141, 174	July 22, 1873	769	252	4	99
Injector for feeding boilers, Self-adjusting	W. Sellers	141, 173	July 22, 1873	767	252	4	99
Injector for steam-generators	S. Rue, jr.	128, 198	Apr. 22, 1873	846	268	3	459
Injector for steam-generators	S. Rue, jr.	138, 199	Apr. 22, 1873	847	268	3	459
Injector, Steam	S. and J. Benson	137, 651	Apr. 8, 1873	338	105	3	396
Injectors, Feed-regulator for	J. A. Marden and T. S. Smith	143, 988	Oct. 28, 1873	571	190	4	455
Ink for stamping purposes	J. B. Jud	140, 782	July 15, 1873	392	.....	4	59
Ink-pad	H. R. Towne and W. H. Taylor	135, 949	Feb. 18, 1873	522	171	3	194
Inking apparatus	F. L. Bailey	143, 489	Oct. 7, 1873	77	26	4	387
Inking apparatus	G. P. Gordon	142, 457	Sept. 2, 1873	120	38	4	252
Inking apparatus	I. Hart	144, 673	Nov. 18, 1873	437	148	4	537
Inking-pad	J. A. Miles	135, 043	Jan. 21, 1873	514	166	3	76
Inkstand	S. W. Baldwin	134, 836	Jan. 14, 1873	319	102	3	45
Inkstand	W. M. Brooke	134, 587	Jan. 7, 1873	82	26	3	13
Inkstand	B. Brower	144, 825	Nov. 25, 1873	577	196	4	558
Inkstand	S. Hawson and T. Sweeney	137, 548	Apr. 8, 1873	252	77	3	389
Inkstand	A. D. Judd	145, 352	Dec. 9, 1873	285	95	4	621
Inkstand	J. H. Kidder and G. E. Hood	136, 070	Feb. 18, 1873	627	206	3	202
Inkstand	W. Read, jr.	139, 261	May 27, 1873	740	235	3	588
Inkstand	T. S. Shenston	144, 929	Nov. 25, 1873	662	224	4	566
Inkstand	J. B. Thurston and F. M. West	135, 296	Jan. 28, 1873	749	242	3	108
Inkstand-filler	M. C. Stebbins	136, 186	Feb. 25, 1873	743	240	3	223
Inkstands, Tool for molding	A. W. Brinkerhoff	145, 619	Dec. 16, 1873	527	173	4	652
Ink-well	J. H. Kidder	136, 069	Feb. 18, 1873	626	205	3	202
Illuminating apparatus	J. A. Thompson	146, 109	Dec. 30, 1873	988	319	4	712
Illuminating plate, Flexible sheet-metal	T. Hyatt	145, 185	Dec. 2, 1873	137	45	4	596
Implement	H. B. Whitehead	139, 748	June 10, 1873	293	91	3	648
Implement, Compound	A. Iske	136, 601	Mar. 11, 1873	235	80	3	273
Insect-destroyer	J. A. Finney	140, 818	July 15, 1873	427	144	4	62
Insect-destroyer	D. G. Mosher	137, 469	Apr. 1, 1873	172	55	3	371
Insect-destroyer	S. W. Thomas	139, 277	May 27, 1873	758	240	3	590
Insect-destroying attachment for cultivators	C. T. Hurd	145, 949	Dec. 30, 1873	848	276	4	700
Insect-destroying compound	W. C. Bibb	142, 985	Sept. 23, 1873	593	.....	4	323
Insect-destroying compound	J. B. Lunbeck	141, 512	Aug. 5, 1873	90	.....	4	142
Insect-destroying compound	W. B. Royall	140, 079	June 17, 1873	586	.....	3	680
Insect-powder gun	W. H. Ball	141, 481	Aug. 5, 1873	63	20	4	140
Insect-trap	J. W. Anderson	137, 588	Apr. 8, 1873	287	89	3	392
Insect-trap	M. Rigell	135, 366	Jan. 28, 1873	816	264	3	113
Insect-trap	J. M. Smith	137, 255	Mar. 25, 1873	822	270	3	340
Insect, vermin, &c., Compound for destroying	E. B. Sears	136, 185	Feb. 25, 1873	743	.....	3	223
Insulating and finishing compound for conducting wires	T. L. Reed and E. F. Phillips	144, 794	Nov. 18, 1873	538	4	545

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Insulator for battery-cup	J. H. Thomas	136, 191	Feb. 25, 1873	747	241	3	223
Insulator, Telegraph	C. Fox and E. J. Heston	145, 997	Dec. 30, 1873	887	288	4	703
Insulator, Telegraph	N. Hendricks	135, 334	Jan. 28, 1873	786	254	3	111
Insulator, Telegraph-line	P. Eby and M. B. Fenninger	138, 489	May 6, 1873	19	7	3	499
Insulator, Telegraph-line	E. A. Merrell	138, 512	May 6, 1873	41	14	3	501
Insulator, Telegraph-line	I. L. Tatom	139, 436	May 27, 1873	893	288	3	601
Invalid chair	T. Armstrong	140, 868	July 15, 1873	466	158	4	65
Invalid chair and lounge, Combined	D. G. Boardman	136, 962	Mar. 18, 1873	547	181	3	307
Iron :							
<i>See</i> Axle-iron.							
Carriage-iron.							
Curling-iron.							
Plane-iron.							
Plow-iron.							
Sad-iron.							
Sad and embossing iron.							
Sad and fluting iron.							
Shaft-iron.							
Smoothing-iron.							
Soldering-iron.							
Iron and other metals, Composition for coating	F. J. Seybold	135, 668	Feb. 11, 1873	266		3	160
Iron and other ores, Separator for	A. Goodhart	139, 782	June 10, 1873	324	100	3	650
Iron and steel, Converting cast iron into wrought	A. C. Rand	137, 025	Mar. 18, 1873	603	200	3	312
Iron and steel from granulated iron, Manufacture of	C. Wood	144, 009	Oct. 28, 1873	595		4	457
Iron and steel, Furnace for manufacture of	G. E. Harding	143, 145	Sept. 23, 1873	720	247 248	4	333
Iron and steel, Manufacture of	O. Bolton, jr., and J. Pedder	140, 761	July 15, 1873	375		4	58
Iron and steel, Manufacture of	C. Carpenter, jr	145, 843	Dec. 23, 1873	728	239	4	680
Iron and steel, Manufacture of	E. Peckham	143, 637	Oct. 14, 1873	219		4	407
Iron and steel, Manufacture of	J. Pedder and G. Abel	137, 621	Apr. 8, 1873	312	97	3	394
Iron and steel, Manufacturing	O. Bolton, jr., and J. Pedder	135, 512	Feb. 4, 1873	106		3	136
Iron and steel, Preventing the corrosion of	R. A. Fisher	145, 496	Dec. 16, 1873	415		4	643
Iron and steel, Refining	I. M. Phelps	145, 680	Dec. 16, 1873	579	190	4	656
Iron and steel to anneal and toughen them, Treating	A. F. Andrews	142, 977	Sept. 23, 1873	586	199	4	322
Iron and steel, Welding	J. Popping	145, 445	Dec. 9, 1873	362		4	627
Iron articles into steel, Process for converting cast	R. A. Jackson	135, 646	Feb. 11, 1873	249		3	159
Iron bars, Furnace for heating	J. Pardoe	136, 667	Mar. 11, 1873	292	97	3	278
Iron chips, &c., for remelting, Process for preparing	A. Pevey	140, 383	July 1, 1873	41	13	4	11
Iron, Finery fire for manufacture of	T. Ash and Z. Walker	144, 821	Nov. 25, 1873	572	195	4	558
Iron from blast-furnace slag, Manufacture of	J. J. Vinton	143, 600	Oct. 14, 1873	186		4	404
Iron from ore, Manufacture of cast	P. E. Jay	143, 350	Sept. 30, 1873	906		4	364
Iron, Furnace for producing malleable	D. K. Nash	142, 716	Sept. 9, 1873	349	118	4	282
Iron, Hardening the surface of	R. T. King	145, 110	Dec. 2, 1873	64		4	590
Iron, Manufacture of	W. Bushnell	135, 886	Feb. 18, 1873	473	152	3	190
Iron, Manufacture of	W. J. Taylor	145, 461	Dec. 9, 1873	374		4	628
Iron, Manufacture of	W. J. Taylor	145, 462	Dec. 9, 1873	376		4	628
Iron, Manufacture of refined cast	C. Burgess	141, 319	July 29, 1873	917	300	4	119
Iron, Manufacturing sheet	W. D. Wood	137, 585	Apr. 8, 1873	284		3	391
Iron, Process of manufacturing rolled	G. W. Billings	139, 359	May 27, 1873	819		3	595
Iron-puddling apparatus	J. Davies	143, 811	Oct. 21, 1873	401	133	4	431
Iron, steel, &c., Compound for treating	W. A. Skinner and J. E. Goodson	139, 335	May 27, 1873	800		3	593
Ironing apparatus	E. Sumption	135, 606	Feb. 4, 1873	203	63	3	143
Ironing apparatus	R. A. Tyler	136, 471	Mar. 4, 1873	103	34	3	254
Ironing-board	E. Bassett	140, 758	July 15, 1873	373	127	4	58
Ironing-board	R. N. Herring	138, 331	Apr. 29, 1873	994	313	3	479
Ironing-machine	G. W. Cottingham	144, 743	Nov. 18, 1873	496	168 169	4	541
Ironing-machine	J. T. Walker	145, 034	Nov. 25, 1873	754	254 255	4	574
Ironing-table	C. Blom, jr	145, 614	Dec. 16, 1873	523	172	4	652
Ironing-table	E. S. Farson	145, 162	Dec. 2, 1873	115	38	4	594
Ironing-table	J. H. Frank	141, 639	Aug. 12, 1873	216	68	4	160
Ironing-table	J. Frankenfeld and W. E. Kich- line	140, 356	July 1, 1873	20	6	4	9
Ironing-table	W. B. Grosh and S. H. Foreman	143, 071	Sept. 23, 1873	665	228	4	328
Ironing-table	J. R. Groves	136, 056	Feb. 18, 1873	612	201	3	201
Ironing-table	A. J. Palmberg	142, 645	Sept. 9, 1873	290	95	4	277
Ironing-table	L. Scofield	144, 869	Nov. 25, 1873	617	210	4	562
Ironing-table	W. H. Sparks	144, 418	Nov. 11, 1873	219	73	4	508
Ironing-table	A. Wechsler	135, 303	Jan. 28, 1873	754	243	3	106
Ironing-table, Folding	W. Edwards	137, 602	Apr. 8, 1873	289	92	3	393
Ironing-table, lap-board, and step-ladder, Combined	H. C. Smith	136, 390	Mar. 4, 1873	34	12	3	248
Irrigation, Subterranean	W. H. Pugh	142, 413	Sept. 2, 1873	80	26	4	249
Isinglass, Manufacture of	J. Manning	134, 690	Jan. 7, 1873	181	59	3	21
J.							
Jack :							
<i>See</i> Boot-jack.							
Carriage-jack.							
Hoisting-jack.							
Hydraulic jack.							
Lasting-jack.							
Lifting-jack.							
Painter's jack.							
Shoe fastening jack.							
Spinning-jack.							
Wagon-jack.							
Jacket, hunting	J. Garaud	139, 950	June 17, 1873	475	149	3	670
Jar :							
<i>See</i> Candy-jar.							
Drill-jar.							
Fruit-jar.							
Jelly-jar.							
Slop-jar.							

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Jelly, Hand-press for.....	J. M. Newton	141, 809	Aug. 12, 1873	367	120	4	173
Jelly-glass.....	D. C. Ripley	139, 081	May 20, 1873	562	176	3	566
Jelly-glass.....	T. A. Zellers	137, 995	Apr. 15, 1873	647	204	3	434
Jelly-glass lid.....	J. Adams	138, 833	May 13, 1873	337	194	3	535
Jelly-glass lid.....	D. Challinor	138, 735	May 13, 1873	251	78	3	598
Jelly-jar.....	W. C. King	138, 502	May 6, 1873	28	10	3	500
Jelly-tumbler.....	W. Doyle	136, 492	Mar. 4, 1873	121	39	3	255
Jet, Adjustable spray.....	A. Nickerson	142, 719	Sept. 9, 1873	352	119	4	282
Jewel-case.....	C. Beck	144, 431	Nov. 11, 1873	229	77	4	508
Jeweler's drilling-device.....	J. K. Laudermitch	143, 084	Sept. 23, 1873	675	232	4	389
Jeweler's hand-press.....	J. McWilliams	143, 023	Sept. 23, 1873	625	212	4	325
Jewelers' use, Manufacture of catches for.....	G. H. Fuller	145, 938	Dec. 16, 1873	837	272	4	700
Jewelry-bases, Device for manufacturing.....	S. Cottle	140, 616	July 8, 1873	252	85	4	40
Jewelry-bases, Manufacture of.....	S. Cottle	135, 087	Jan. 21, 1873	546	178	3	79
Jewelry-bases, Manufacture of.....	S. Cottle	135, 088	Jan. 21, 1873	546	178	3	79
Jewelry, diamonds, &c., Chemical compound for cleaning.....	A. H. Longley and E. R. Stickney	145, 065	Dec. 2, 1873	23		4	587
Jewelry-ornaments, Pin for.....	J. P. Courtney	145, 990	Dec. 30, 1873	882	286	4	703
Joiner's clamp.....	W. H. Goodchild and S. F. Hay	136, 152	Feb. 25, 1873	717	232	3	221
Joiner's clamp.....	E. A. Walker	140, 747	July 8, 1873	361	122	4	49
Joiner's gage.....	S. H. Jennings and W. F. Arnold	146, 075	Dec. 30, 1873	954	308	4	709
Joint: See Ball and socket joint. Bracelet-joint. Carriage-top joint. Doll-joint. Pipe-joint. Railway-rail joint. Sheathing-joint. Sheet-metal joint. Stove-pipe joint. Universal joint.							
Journal, Adjustable.....	M. Jackson	135, 477	Feb. 4, 1873	79	25	3	133
Journal and bearing.....	J. Whitaker	145, 467	Dec. 9, 1873	380	126	4	628
Journal and shaft-bearing, Frictionless.....	J. Eccles	141, 129	July 22, 1873	722	240	4	95
Journal, Anti-friction.....	M. E. Dayton	138, 011	Apr. 22, 1873	678	214 215	3	446
Journal-box.....	S. Aland	136, 198	Feb. 25, 1873	752	243	3	224
Journal-box.....	J. A. Althouse	139, 287	May 27, 1873	766	243	3	590
Journal-box.....	J. R. Morris	138, 916	May 13, 1873	405	127	3	541
Journal-box lining.....	S. Gwynn	138, 641	May 6, 1873	153	49	3	510
Journal-box lining.....	S. Gwynn	138, 642	May 6, 1873	154	49	3	510
Journal-box lining.....	S. Gwynn	138, 643	May 6, 1873	154	50	3	510
Journal-box lining.....	S. Gwynn	138, 644	May 6, 1873	155	50	3	510
Journal-box lining.....	S. Gwynn	138, 645	May 6, 1873	155	50	3	510
Journal-box lining.....	S. Gwynn	138, 646	May 6, 1873	156	50	3	510
Journal-box lining.....	S. Gwynn	140, 774	July 15, 1873	385	132	4	59
Journal-box lining.....	S. Gwynn	140, 775	July 15, 1873	386	132	4	59
Journal-box, Lubricating.....	J. Morin	146, 013	Dec. 30, 1873	903	292	4	705
Journal-box, Railway-car.....	R. N. Allen	140, 568	July 8, 1873	207	69	4	36
Journal-boxes, Machine for forming, shaping, and dressing.....	J. W. Cole	139, 773	June 10, 1873	316	98	3	650
Journal-boxes or bearings, Process of grinding.....	J. W. Cole	139, 772	June 10, 1873	315	98	3	650
Journal-boxes, Machine for dressing brasses of.....	G. Sanford	136, 338	Feb. 25, 1873	873	281	3	233
Journal, Car-axle.....	J. Whitaker	145, 035	Nov. 25, 1873	755	255	4	574
Journal, Lubricating.....	G. A. Chapman	142, 206	Aug. 26, 1873	742	244	4	222
Journal or shaft hanger.....	J. Whitaker	145, 264	Dec. 2, 1873	203	70	4	601
Journal-packing rack.....	W. H. Humphrey	142, 698	Sept. 9, 1873	335	112	4	261
Journal to feed-roller, Attaching.....	J. M. Amsden	142, 364	Sept. 2, 1873	39	13	4	245
Joiner, Universal.....	E. Passé	142, 348	Sept. 2, 1873	23	8, 9	4	244
Jug or pitcher, Molasses.....	M. J. Bennett	135, 260	Jan. 28, 1873	722	231	3	105
Jump-seat, Wagon.....	C. H. Howell	137, 681	Apr. 8, 1873	366	114	3	398
K.							
Kaleidoscope-object.....	C. G. Bush	143, 271	Sept. 30, 1873	832	286	4	359
Kerosene-heater.....	Z. B. and C. E. Grandy	141, 046	July 22, 1873	648	218	4	89
Kettle.....	W. J. Evans and W. Perry	139, 502	June 3, 1873	52	16	3	613
Kettle-lifter.....	E. A. Thissell	141, 020	July 22, 1873	628	211	4	88
Kettles and other hollow ware, Machine for making brass.....	F. J. Seymour	134, 938	Jan. 14, 1873	407	130	3	53
Key: See Door-key. Lock-key. Piano key. Telegraph-key. Telegraph transmitting-key. Tuning-key. Watch-key.							
Key-board instruments, Key-cap for.....	J. P. Lord	144, 399	Nov. 11, 1873	199	68	4	506
Key-board, Transposing.....	A. D. B. Wolff	142, 974	Sept. 16, 1873	579	196	4	312
Key-check.....	J. J. De Barry	135, 092	Jan. 21, 1873	549	179	3	79
Key, Clock and watch.....	P. J. Hoffiger	143, 285	Sept. 30, 1873	843	290	4	360
Key-fastener.....	W. Neracher	138, 272	Apr. 29, 1873	938	296	3	475
Key-hole guard.....	W. N. Hall	145, 865	Dec. 23, 1873	747	244	4	682
Key-hole guard.....	W. H. Taylor	141, 833	Aug. 12, 1873	386	126	4	174
Key, Machine for forming spring.....	M. Deering	143, 226	Sept. 30, 1873	794	274	4	355
Key-ring.....	W. T. Jenks	135, 712	Feb. 11, 1873	306	97	3	164
Kiln: See Brick-kiln. Drying-kiln. Lime-kiln. Malt-kiln.							
Kiln.....	R. Connable	137, 180	Mar. 25, 1873	752	249	3	335
King-bolt and plate, Clip.....	H. M. Beecher	139, 855	June 17, 1873	392	122	3	663

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King-bolt blank, Die for making.....	F. Van Patten	141, 679	Aug. 12, 1873	252	80	4	163
King-bolt blank, Die for swaging clip.....	F. Van Patten	141, 681	Aug. 12, 1873	253	81	4	163
King-bolt, Carriage.....	J. L. H. Mosier.....	136, 255	Feb. 26, 1873	799	259	3	228
King-bolt, Die for making clip for.....	A. Dillenbeck.....	136, 143	Feb. 25, 1873	710	229	3	221
King-bolt, Die for making clip for.....	F. Van Patten	141, 680	Aug. 12, 1873	253	80	4	163
King-bolt for perch-carriage.....	J. L. H. Mosier.....	138, 342	Apr. 29, 1873	1, 002	315	3	480
King-bolt for vehicles.....	J. Decble.....	144, 323	Nov. 4, 1873	126	42	4	468
Kitchen and ironing table.....	J. Good.....	143, 977	Oct. 28, 1873	562	187	4	454
Kite.....	C. J. Hardekopf.....	135, 987	Feb. 18, 1873	554	183	3	197
Knapsack.....	G. H. Palmer.....	139, 731	June 10, 1873	274	86	3	647
Kneading-board.....	H. P. Jones.....	144, 768	Nov. 18, 1873	518	175	4	543
Knife:							
<i>See</i> Butcher's knife.							
Butter-knife.							
Corn-knife.							
Cornstalk-knife.							
Drawing-knife.							
Folding-knife.							
Fruit-knife.							
Harvester-knife.							
Hay-knife.							
Pocket-knife.							
Pruning-knife.							
Putty-knife.							
Reaper and mower knife.							
Shoe-knife.							
Table-knife.							
Tobacco-knife.							
Knife.....	L. Eddy.....	140, 997	July 22, 1873	607	204	4	86
Knife and fork cleaner.....	E. Marwedel.....	140, 932	July 15, 1873	531	177	4	70
Knife-cleaner.....	H. C. Gilbert.....	136, 990	Mar. 12, 1873	571	191	3	309
Knife-cleaner.....	T. & L. Gingras.....	139, 057	May 20, 1873	536	169	3	564
Knife-cleaner.....	C. B. Sheldon.....	145, 909	Dec. 23, 1873	789	259	4	685
Knife handle, Pocket.....	J. W. Ayres.....	137, 648	Apr. 8, 1873	335	104	3	396
Knife-polisher.....	F. W. Tarble and H. W. Sawyer.....	136, 188	Feb. 25, 1873	746	240	3	223
Knife polisher and sharpener.....	T. Bootsmann.....	143, 871	Oct. 21, 1873	451	151	4	435
Knife-scourer.....	E. W. Haven.....	136, 598	Mar. 11, 1873	234	79	3	273
Knit-fabric.....	B. J. McGee.....	144, 915	Nov. 25, 1873	630	201	4	565
Knit-fabric and method of knitting.....	D. Bickford.....	136, 639	Mar. 11, 1873	269	90	3	276
Knit-fabrics, Machine for uniting selvages of.....	T. Beven.....	137, 997	Apr. 22, 1873	662	{ 309 210	3	445
Knit-fabrics, Machine for napping, brushing, &c., tubular.....	C. and I. Tompkins.....	140, 320	June 24, 1873	814	{ 257 258	3	706
Knitting-holder.....	H. P. Joy.....	141, 796	Aug. 12, 1873	356	117	4	172
Knitting-machine.....	J. M. Armour.....	136, 460	Mar. 4, 1873	109	37	3	254
Knitting-machine.....	C. Callahan.....	140, 809	July 15, 1873	416	{ 141 142	4	61
Knitting-machine.....	W. Campion and W. Campion.....	139, 114	May 20, 1873	589	{ 185 186	3	569
Knitting-machine.....	S. V. Essick.....	140, 691	July 8, 1873	309	106	4	45
Knitting-machine.....	H. Günther.....	134, 881	Jan. 14, 1873	356	113	3	49
Knitting-machine.....	J. Leonard.....	135, 823	Feb. 11, 1873	406	131	3	171
Knitting-machine.....	G. Merrill.....	140, 635	July 8, 1873	265	90	4	41
Knitting-machine.....	C. H. Platt and G. A. Stanbery.....	137, 568	Apr. 8, 1873	268	83	3	290
Knitting-machine.....	L. D. Sanborn.....	143, 468	Oct. 7, 1873	59	21	4	285
Knitting-machine.....	J. and J. Smith.....	140, 086	June 17, 1873	595	188	3	660
Knitting-machine.....	E. Tailbouis and A. Renevey.....	136, 012	Feb. 18, 1873	574	{ 189 190	3	198
Knitting-machine.....	O. F. Tripp.....	140, 800	July 15, 1873	408	139	4	61
Knitting-machine.....	O. Twombly.....	141, 836	Aug. 12, 1873	388	127	4	174
Knitting-machine.....	L. Woodward.....	145, 079	Dec. 2, 1873	38	12	4	588
Knitting-machine.....	C. H. Young.....	143, 051	Sept. 23, 1873	650	{ 222 223	4	327
Knitting-machine needle.....	C. H. Platt and G. A. Stanbery.....	136, 262	Feb. 25, 1873	808	261	3	228
Knitting-machine needles, Manufacture of.....	J. H. Bullard.....	140, 611	July 8, 1873	248	84	4	40
Knitting-machine, Register for tubular.....	D. A. Lehman.....	145, 509	Dec. 16, 1873	433	141	4	644
Knitting-machine, Set-up device for.....	H. L. Arnold.....	142, 429	Sept. 2, 1873	94	31	4	250
Knitting-machine, Welt-thread.....	C. Callahan.....	135, 625	Feb. 11, 1873	228	72	3	158
Knitting-machine weight hook.....	C. H. Koegel.....	137, 778	Apr. 15, 1873	466	145	3	419
Knitting-machine, Yarn take-up and tension-device for.....	H. L. Arnold.....	141, 534	Aug. 5, 1873	106	33	4	143
Knob, Door.....	H. H. Elwell.....	142, 451	Sept. 2, 1873	115	37	4	252
Knob guard, Door.....	H. Ahrend.....	137, 400	Apr. 1, 1873	107	35	3	365
Knob, Manufacture of door.....	J. Ottner.....	138, 758	May 13, 1873	271	84	3	529
Knob, Mold for casting metal.....	C. Rebstock and J. Ottner.....	134, 931	Jan. 14, 1873	400	128	3	52
Knob, Silvered-glass door.....	J. W. Haines.....	141, 504	Aug. 5, 1873	84	26	4	142
Knob-spindle.....	W. Varah.....	136, 795	Mar. 11, 1873	398	132	3	296
Knob to latch, Attaching.....	L. Michaels.....	143, 174	Sept. 23, 1873	742	255	4	335
Knob to spindle, Attaching.....	F. M. and J. B. Merriam.....	141, 285	July 29, 1873	685	290	4	116
Knob to spindle, Attaching.....	S. Selden.....	134, 708	Jan. 7, 1873	196	63	3	22
Knob to spindle, Attaching.....	H. J. B. Whipple.....	141, 408	July 29, 1873	1, 007	327	4	125
Knobs, &c., Plastic composition for manufacture of.....	H. E. Shepard.....	140, 735	July 8, 1873	347	114	4	48
Knobs to drawers, &c., Attaching.....	S. A. Brackett.....	144, 597	Nov. 18, 1873	374	126	4	532
Knock-down chair.....	C. R. Long.....	137, 613	Apr. 8, 1873	307	95	3	393
L.							
Label and seal for lock, Combined.....	E. J. Brooks.....	139, 764	June 10, 1873	308	95	3	649
Label, Bottle.....	H. Frank.....	135, 034	Jan. 21, 1873	506	163	3	76
Label for hat-lining, Ornamental.....	T. W. Bracher.....	145, 391	Dec. 9, 1873	316	106	4	623
Labeling-machine.....	C. W. Greene.....	136, 154	Feb. 25, 1873	719	232	3	221
Lace, ribbon, &c., case.....	M. Deitzler.....	137, 297	Apr. 1, 1873	17	5	3	358
Ladder.....	J. Eagon.....	141, 126	July 22, 1873	719	239	4	95
Ladder.....	A. P. Smith.....	146, 029	Dec. 30, 1873	914	296	4	706
Ladder, Adjustable step.....	J. J. Hardenbrook and S. Belford.....	139, 004	May 20, 1873	492	155	3	561

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Ladder, bench, and clothes frame, Combined step	H. H. Barker	145, 716	Dec. 23, 1873	621	204	4	672
Ladder chair, Step	H. Willgohe	139, 488	June 3, 1873	41	13	3	612
Ladder, Elevating	A. Miller	139, 175	May 20, 1873	651	203	3	574
Ladder, Extensible	J. C. Hearne and D. Adams	137, 679	Apr. 8, 1873	365	113	3	398
Ladder, Extension	W. O'Connor	137, 948	Apr. 15, 1873	606	191	3	431
Ladder, Extension	J. Pino	139, 689	June 10, 1873	229	73	3	643
Ladder, Extension step	L. B. Covert	138, 234	Apr. 29, 1873	900	284	3	472
Ladder, Extension step	A. W. and J. E. Walker	137, 040	Mar. 18, 1873	617	204	3	313
Ladder, Fire-escape	H. Lyles	136, 844	Mar. 18, 1873	450	149	3	300
Ladder, Fire-escape	W. W. Parsons	142, 409	Sept. 2, 1873	78	25	4	248
Ladder, Fire-escape	G. Pfeeger	143, 462	Oct. 7, 1873	55	19	4	385
Ladder, Fire-escape	J. S. Pierson	143, 182	Sept. 23, 1873	747	258	4	335
Ladder, Fire-escape	C. H. White	138, 304	Apr. 29, 1873	970	305	3	477
Ladder, Fireman's	M. Cronin	144, 956	Nov. 25, 1873	684	231	4	568
Ladder, Fireman's	P. Porta	142, 349	Sept. 2, 1873	24	9	4	244
Ladder, Fireman's extension	G. W. Harris	145, 967	Dec. 23, 1873	751	245	4	682
Ladder, Folding	J. M. White and A. J. Kee	137, 582	Apr. 8, 1873	223	87	3	391
Ladder, Fruit	A. Longcor and J. B. Longcor	140, 286	June 24, 1873	783	248	3	704
Ladder, Step	C. Frizell	140, 359	July 1, 1873	22	7	4	10
Ladder, Step	C. Frizell	140, 578	July 8, 1873	217	72	4	37
Ladder, Step	M. N. Lovell	136, 659	Mar. 11, 1873	284	95	3	277
Ladder, Step	A. W. O'Blenn	145, 522	Dec. 16, 1873	445	145	4	645
Ladder, Step	J. S. Oakley and B. M. Post	139, 183	May 20, 1873	657	205	3	574
Ladder, Step	S. Wright	138, 977	May 13, 1873	452	142	3	545
Ladies' work-stand	G. S. Manning	139, 591	June 3, 1873	128	42	3	619
Lamp	T. B. Atterbury	140, 988	July 22, 1873	599	203	4	85
Lamp	L. J. Atwood	135, 749	Feb. 11, 1873	334	107	3	166
Lamp	L. Berns	142, 609	Sept. 9, 1873	263	86	4	275
Lamp	W. S. Blaisdell and C. K. Young	142, 32	Sept. 2, 1873	95	32	4	250
Lamp	G. Brownlee	138, 070	Apr. 22, 1873	737	233	3	451
Lamp	R. Christy	141, 763	Aug. 12, 1873	322	105	4	169
Lamp	J. M. Clark	140, 764	July 15, 1873	377	129	4	58
Lamp	R. E. Dietz	144, 070	Oct. 28, 1873	644	212	4	461
Lamp	F. A. Flanagan	136, 427	Mar. 4, 1873	61	22	3	250
Lamp	R. Hitchcock	134, 547	Jan. 7, 1873	39	13	3	10
Lamp	R. Hitchcock	142, 103	Aug. 26, 1873	656	216	4	215
Lamp	R. Hitchcock	145, 176	Dec. 2, 1873	129	42	4	593
Lamp	J. H. Irwin	138, 653	May 6, 1873	163	52	3	511
Lamp	J. H. Irwin	138, 654	May 6, 1873	165	53	3	511
Lamp	F. Kampe	143, 452	Oct. 7, 1873	47	16	4	384
Lamp	J. Kirby, jr.	141, 933	Aug. 19, 1873	487	161	4	192
Lamp	J. E. Leighton	138, 509	May 6, 1873	36	12	3	500
Lamp	R. Marsh	139, 964	June 17, 1873	484	152	3	671
Lamp	C. Mayer	138, 812	May 13, 1873	318	98	3	533
Lamp	L. Michaels	136, 849	Mar. 18, 1873	455	151	3	300
Lamp	J. A. Pease	138, 185	Apr. 22, 1873	836	264	3	458
Lamp	J. A. Pease	144, 130	Oct. 28, 1873	692	229	4	465
Lamp	O. N. Perkins	144, 132	Oct. 28, 1873	693	230	4	465
Lamp	F. Rhind	142, 730	Sept. 9, 1873	363	122	4	283
Lamp	G. L. Simmons	136, 553	Mar. 4, 1873	182	59	3	266
Lamp	J. C. Wharton	142, 425	Sept. 2, 1873	90	30	4	249
Lamp	T. H. White and E. Knight	136, 573	Mar. 4, 1873	199	66	3	261
Lamp-bracket	L. Hull	142, 106	Aug. 26, 1873	660	216	4	215
Lamp-bracket	G. Jones	139, 582	June 3, 1873	118	39	3	618
Lamp, Candle	J. A. Pease	138, 925	May 13, 1873	412	129	3	541
Lamp, Car.	J. E. Cross	141, 856	Aug. 19, 1873	413	134	4	186
Lamp, Car.	J. L. Howard	143, 411	Oct. 7, 1873	12	4	4	382
Lamp-chimney cleaner	B. E. Chollar and J. G. Johannes	136, 704	Mar. 11, 1873	321	106	3	280
Lamp-chimney cleaner	R. G. Forsyth	137, 670	Apr. 8, 1873	358	111	3	397
Lamp-chimney cleaner	H. W. Prouty	135, 665	Feb. 11, 1873	263	83	3	160
Lamp-chimney, Glass mold for forming	M. H. Collins	135, 971	Mar. 18, 1873	555	184	3	308
Lamp-chimney supporter	W. Mears and H. Davies	140, 214	June 24, 1873	722	227	3	698
Lamp cooking-apparatus, Portable	A. M. Silber and F. White	136, 104	Feb. 18, 1873	656	214	3	204
Lamp-extinguisher	F. Hille	145, 870	Dec. 23, 1873	754	246	4	689
Lamp-extinguisher	R. Lange	139, 398	May 27, 1873	863	276	3	596
Lamp-extinguisher	W. D. Lindsley	141, 801	Aug. 12, 1873	360	118	4	179
Lamp-extinguisher	D. Pike and O. B. Graham	142, 508	Sept. 2, 1873	168	54	4	255
Lamp-extinguisher	F. C. Wireman	142, 067	Aug. 19, 1873	607	200	4	201
Lamp-filler	H. H. V. Lillie	138, 415	Apr. 29, 1873	1,063	334	3	485
Lamp fountains, Mold for glass	J. Wing	143, 864	Oct. 21, 1873	446	149	4	435
Lamp-heater	W. Friel	139, 140	May 20, 1873	617	193	3	571
Lamp, &c., Indicating filler for	J. A. Ryan	134, 819	Jan. 14, 1873	305	97	3	44
Lamp-lighting apparatus	M. A. Lynch	139, 255	May 27, 1873	734	232	3	588
Lamp, Magnesium	I. S. Russell and H. R. Russell	138, 346	Apr. 29, 1873	1,005	316	3	490
Lamp, Naval store-room or coach	J. J. Walton	140, 448	July 1, 1873	87	30	4	157
Lamp, Paraffine	H. Ryder	138, 441	Apr. 29, 1873	1,089	344	3	485
Lamp-post	L. A. Gonch	139, 504	June 3, 1873	53	17	3	613
Lamp-post attachment for supporting electrical wire	J. P. Tirrell	139, 630	June 3, 1873	159	53	3	622
Lamp, Safety apparatus for	C. J. Brown	135, 074	Jan. 21, 1873	538	175	3	78
Lamp-shade	W. Simons	137, 034	Mar. 18, 1873	612	202	3	313
Lamp-shade and drip-cup, Combined	J. S. and T. B. Atterbury	145, 548	Dec. 16, 1873	470	153	4	647
Lamp-shade holder	E. E. Conrad	135, 778	Feb. 11, 1873	359	115	3	168
Lamp-shade holder	M. W. House	141, 223	July 29, 1873	828	271	4	111
Lamp-shade or globe-holder	L. J. Atwood	141, 251	July 29, 1873	857	280	4	113
Lamp-shade supports, Process of making	W. N. Weedon	145, 702	Dec. 16, 1873	599	196	4	658
Lamp, Slide-pendant for hanging	J. A. Everts	145, 637	Dec. 16, 1873	542	178	4	653
Lamp, Street	M. B. Dyott	137, 538	Apr. 8, 1873	243	75	3	388
Lamp, Street	J. H. Eyrse	143, 600	Sept. 23, 1873	606	205	4	324
Lamp, Street	J. S. Hagarty	142, 693	Sept. 9, 1873	331	111	4	280

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Lamp, Street	J. F. Marsh	140, 149	June 24, 1873	668	210	3	694
Lamp, Street	J. G. Miner	140, 062	June 17, 1873	573	181	3	679
Lamp, Street	H. Hahe	142, 500	Sept. 2, 1873	161	52	4	255
Lamp, Supplying oil to street	R. V. De Guinon	140, 815	July 15, 1873	425	144	4	62
Lamp-wick	P. Martin	145, 667	Dec. 16, 1873	568	187	4	635
Lamp-wick, Process for treating	S. F. Sutherland	135, 252	Jan. 28, 1873	716	.....	3	105
Lamp-wick raiser	A. Combe	136, 034	Feb. 18, 1873	594	195	3	300
Lamp-wick trimmer	S. Naylor and A. Fairchild	142, 265	Aug. 26, 1873	790	261	4	296
Land-roller	W. H. Grow and C. M. Sloan	144, 272	Nov. 4, 1873	87	28	4	485
Land-roller	W. Williams	144, 489	Nov. 11, 1873	275	93	4	512
Land-roller	J. Woolridge	135, 191	Jan. 21, 1873	631	206	3	86
Lantern	H. Beebe	134, 631	Jan. 7, 1873	123	40	3	16
Lantern	W. J. Berry	142, 984	Sept. 23, 1873	592	201	3	323
Lantern	L. F. Betts	141, 311	July 29, 1873	908	298	4	119
Lantern	J. P. Connor and M. T. Hynes	138, 232	Apr. 29, 1873	898	283	3	472
Lantern	T. A. Davies	136, 218	Feb. 25, 1873	767	248	3	225
Lantern	E. K. Haynes	136, 994	Mar. 18, 1873	575	192	3	310
Lantern	E. K. Haynes	144, 200	Nov. 4, 1873	26	7	4	480
Lantern	S. Hughes	135, 711	Feb. 11, 1873	305	97	3	164
Lantern	G. B. Isham	138, 805	May 13, 1873	311	96	3	533
Lantern	J. Knitz	146, 079	Dec. 30, 1873	957	309	4	709
Lantern	A. Loeffelholz and A. Prier	137, 223	Mar. 25, 1873	794	282	3	338
Lantern	W. McKay	141, 008	July 22, 1873	616	208	4	87
Lantern	S. Naylor	141, 162	July 22, 1873	757	249	4	98
Lantern	T. Smith	139, 030	May 30, 1873	510	161	3	562
Lantern	W. Westlake	142, 134	Aug. 26, 1873	683	224	4	217
Lantern, Decorative	C. C. E. Schwartz	142, 520	Sept. 2, 1873	177	58	4	256
Lantern-guard	T. Smith	136, 782	Mar. 11, 1873	387	127	3	285
Lantern, Magic	A. G. Buzby	139, 665	June 17, 1873	402	126	3	664
Lantern, Magic	A. G. Buzby	144, 314	Nov. 4, 1873	116	39	4	498
Lantern, Magic	P. Diehl	136, 142	Feb. 25, 1873	709	229	3	221
Lantern, Ship's	H. Saunders	135, 371	Jan. 28, 1873	690	265	3	113
Lantern, Ship's	H. Saunders	138, 532	May 6, 1873	59	30	3	502
Lantern, Signal	S. W. Clark and W. R. Sykes	140, 015	June 17, 1873	526	167	3	674
Lantern, Signal	T. A. Davies	135, 783	Feb. 11, 1873	363	117	3	168
Lantern, Signal	H. B. Fernald	142, 223	Aug. 26, 1873	756	249	4	223
Lantern, Signal	S. H. Miller	142, 257	Aug. 26, 1873	784	258	4	225
Lantern, Signal	S. H. Miller	144, 554	Nov. 11, 1873	331	{ 111 112 }	4	516
Lantern, Signal	L. W. Shaler	143, 425	Oct. 7, 1873	27	10	4	383
Lap-board	S. Mahan	135, 040	Jan. 21, 1873	511	165	3	76
Lap-board	G. K. Proctor	140, 074	June 17, 1873	592	184	3	679
Lap-board	E. J. Sprague	140, 313	June 24, 1873	805	255	3	706
Lard and tallow, Drying	A. Smith	142, 743	Sept. 9, 1873	375	.....	4	284
Lard, Apparatus and process for rendering	W. C. Marshall	137, 698	Apr. 8, 1873	382	118	3	399
Last	W. J. B. Mills	137, 616	Apr. 8, 1873	309	96	3	393
Last	I. N. C. Saville	139, 196	May 30, 1873	670	210	3	575
Last and shoe holder	B. J. Tayman	139, 343	May 27, 1873	806	{ 257 258 }	3	594
Last-block fastener	D. Haurd	140, 827	July 15, 1873	434	147	4	63
Last-block fastener	N. R. Streeter	144, 368	Nov. 4, 1873	163	54	4	492
Last-block fastener	N. R. Streeter	145, 028	Nov. 25, 1873	748	253	4	573
Last-block fastener	L. S. Wright	142, 603	Sept. 9, 1873	238	85	4	275
Last-block fastening	J. A. Heckenbach and A. Haertle	140, 038	June 17, 1873	551	174	3	677
Last-block holder	D. Daniels	141, 123	July 22, 1873	716	238	4	95
Last, Boot and shoe	W. H. Rounds	137, 799	Apr. 15, 1873	484	151	3	421
Last, Boot and shoe	F. Ware, Jr.	142, 539	Sept. 2, 1873	195	63	4	257
Last, Form-plate for bottom of shoe	J. G. Ross	140, 078	June 17, 1873	585	185	3	679
Last, Shoe	P. P. Paul	145, 124	Dec. 2, 1873	79	25	4	591
Laster, Shank	W. H. Hanna	144, 903	Nov. 25, 1873	639	217	4	564
Laster, Shank	R. B. Perkins	138, 926	May 13, 1873	414	129	3	542
Laster, Shoemaker's shank	J. H. Bean	136, 896	Mar. 18, 1873	494	164	3	303
Lasting boots and shoes	J. Brackett	141, 420	Aug. 5, 1873	9	2	4	136
Lasting boots and shoes	R. C. Lambart	135, 133	Jan. 21, 1873	586	190	3	82
Lasting boots and shoes	J. C. Wightman	136, 476	Mar. 4, 1873	167	36	3	254
Lasting boots and shoes, Machine for	C. W. Glidden	136, 317	Feb. 25, 1873	854	215	3	212
Lasting boots and shoes, Machinery for	A. C. Carey	146, 043	Dec. 30, 1873	924	300	4	707
Lasting boots and shoes, Machinery for	C. H. Trask and H. F. Wheeler	142, 657	Sept. 9, 1873	301	99, 100	4	278
Lasting-jack for boots, &c	J. C. Drew	145, 407	Dec. 9, 1873	332	111	4	624
Lasting-machine	C. W. Glidden	135, 111	Jan. 21, 1873	565	184	3	81
Lasting-machine	C. W. Glidden	140, 285	June 24, 1873	763	241	3	708
Lasting-machine, Boot and shoe	C. W. Glidden	135, 539	Feb. 4, 1873	136	42, 43	3	138
Lasting-machine, Boot and shoe	C. W. Glidden	135, 540	Feb. 4, 1873	137	43, 44	3	138
Lasting mechanism	L. R. Blake	143, 322	Sept. 30, 1873	876	300	4	362
Lasting-tool	J. H. Bean	141, 255	July 29, 1873	960	281	4	114
Lasting-tool	L. R. Blake	136, 300	Feb. 25, 1873	841	272	3	231
Lasting-tool	C. W. Glidden	136, 318	Feb. 25, 1873	855	275	3	232
Latch and door check, Combined	R. L. Omeneetter	145, 523	Dec. 16, 1873	446	146	4	645
Latch and lock, Combined	A. M. Adams	141, 193	July 29, 1873	797	261	4	109
Latch and lock, Combined	A. J. Hollembach	136, 723	Mar. 11, 1873	337	112	3	281
Latch and lock, Combined	G. Müller	136, 448	Mar. 4, 1873	81	28	3	252
Latch, Door	O. B. Rand	140, 307	June 24, 1873	800	254	3	705
Latch, Door	O. B. Rand	144, 288	Nov. 4, 1873	97	32	4	486
Latch, Door	F. Stowe	144, 931	Nov. 25, 1873	663	225	4	556
Latch, Door-locking	E. Halsey	143, 692	Oct. 14, 1873	273	90	4	411
Latch for coach-door	J. Thielemann	139, 485	June 3, 1873	39	12	3	612
Latch, Gate	J. R. Finley	134, 877	Jan. 14, 1873	352	112	3	48
Latch, Gate	G. N. Sharp	145, 368	Dec. 9, 1873	295	99	4	621
Latch, Gate, &c	C. Roberts	136, 183	Feb. 25, 1873	741	239	3	223
Latch-handle, Door	J. Ambrun and E. Olfemann	138, 112	Apr. 22, 1873	769	244	3	453
Latch, Handle-plate for door	F. Corbin	138, 802	May 13, 1873	363	112	3	537
Latch, Knob	J. M. A. Dew	136, 141	Feb. 25, 1873	709	228	3	220

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Latch, Knob	A. Heyse	141, 714	Aug. 12, 1873	279	91	4	166
Latch, Knob	E. Parker	135, 147	Jan. 21, 1873	597	194	3	83
Latch, Mortise-door	W. T. Munger	136, 680	May 6, 1873	190	60	3	513
Latch, Reversible	W. T. Munger	136, 919	May 13, 1873	406	126	3	541
Latch, Reversible knob	W. H. Andrews	137, 166	Mar. 25, 1873	738	245	3	334
Latch, Reversible knob	B. Erbe	141, 430	Aug. 5, 1873	18	5	4	136
Latch, Reversible knob	C. S. Jennings	137, 685	Apr. 8, 1873	369	115	3	398
Latch, Reversible knob	C. Moody	141, 883	Aug. 19, 1873	447	146	4	188
Latch, Reversible knob	R. L. Webb	137, 159	Mar. 25, 1873	732	243	3	333
Latch, Reversible knob	A. F. Whiting	137, 271	Mar. 25, 1873	837	275	3	341
Latch, Reversible knob	A. F. Whiting	137, 272	Mar. 25, 1873	838	275	3	341
Lath-machine	S. P. Brower and W. H. Knox	143, 325	Sept. 30, 1873	879	300	4	362
Lath-machine	T. Bruno	145, 466	Dec. 16, 1873	406	{ 133 134 }	4	642
Lath-machine	S. B. Rittenhouse	136, 162	Feb. 25, 1873	740	236	3	293
Lath-bolting machine	J. C. McIntyre	142, 489	Sept. 2, 1873	153	49, 50	4	254
Lath-sawing machine	G. P. Appleton	140, 570	July 8, 1873	911	70	4	37
Lath-sawing machine	S. P. Brower	134, 846	Jan. 14, 1873	326	104	3	46
Lath-sawing machine	A. Rodgers	140, 647	July 8, 1873	276	93	4	42
Lath-sawing machine	J. M. Stowell	136, 944	Mar. 18, 1873	534	177	3	306
Lathe	D. Heer	141, 347	July 29, 1873	945	308	4	121
Lathe-boring attachment	F. B. Williams	138, 460	Apr. 29, 1873	1, 105	349	3	488
Lathe-carrier	F. Ferrin	137, 298	Apr. 1, 1873	17	5	3	358
Lathe-centering device	H. Gray	143, 014	Aug. 19, 1873	554	183	4	197
Lathe-dog	C. L. Wickham	139, 305	Apr. 29, 1873	972	305	3	477
Lathe for turning hubs	J. Z. Wagner and H. R. Fry	138, 303	Apr. 29, 1873	970	304	3	477
Lathe for turning spools	A. T. Wing	142, 314	Aug. 26, 1873	828	275	4	289
Lathe for turning tobacco-pipes	C. Krapf	141, 279	July 29, 1873	890	288	4	116
Lathe for turning wood	O. S. Smiley and C. O. Small	139, 028	May 20, 1873	509	161	3	562
Lathe, Gear-cutting attachment to	W. P. Hopkins	143, 242	Sept. 30, 1873	808	278	4	356
Lathe, Metal-turning	T. O. Mills	144, 214	Nov. 4, 1873	40	12	4	481
Lathe, Metal-turning	E. F. and G. A. Barnes	135, 064	Jan. 21, 1873	532	172	3	78
Lathe, Potter's	W. Meek	141, 157	July 22, 1873	751	247	4	97
Lathe-rest	C. A. Bauer	136, 579	Mar. 11, 1873	220	73	3	272
Lathe slide-rest	C. Van Haagen	136, 794	Mar. 11, 1873	397	131	3	286
Lathe, Turning	J. P. Luther	141, 940	Aug. 19, 1873	492	162	4	192
Lathe, Watchmaker's	R. Cowles	134, 787	Jan. 14, 1873	274	89	3	42
Lathe, Watchmaker's	E. H. Kelly	144, 547	Nov. 11, 1873	396	110	4	516
Lathe, Watchmaker's	J. M. Oram	143, 458	Oct. 7, 1873	51	18	4	385
Lathe, Watchmaker's	C. V. Woerd	144, 178	Oct. 28, 1873	735	245	4	468
Lathe, Wood-turning	C. A. Blessing	137, 999	Apr. 22, 1873	665	{ 211 212 }	3	445
Lathe, Wood-turning	J. Chase	143, 221	Sept. 30, 1873	788	272	4	355
Lathe, Wood-turning	A. R. Park	139, 076	May 20, 1873	558	175	3	566
Lathe, Screw-cutting attachment for	W. Gleason	143, 898	Oct. 21, 1873	472	159	4	437
Lathe, Taper-turning attachment to	M. Neckermann	143, 296	Sept. 30, 1873	855	293	4	360
Lathe, Tool-holder for	L. Leder	145, 624	Dec. 16, 1873	583	191	4	656
Lathing, Metallic	T. O'Callahan	141, 945	Aug. 19, 1873	496	163	4	192
Lathing, Metallic	C. Welding	137, 773	Apr. 8, 1873	428	132	3	403
Lawn or garden sprinkler	H. E. Cooke	141, 632	Aug. 12, 1873	212	67	4	160
Lawn-seat	H. H. Grats	144, 533	Nov. 11, 1873	311	105	4	515
Lawn-seat	W. C. Medcalf	142, 927	Sept. 16, 1873	536	183	4	308
Leaching and tanning apparatus	C. Korn	137, 004	Mar. 18, 1873	584	194	3	310
Lead, Apparatus for refining and desilvering	G. Luco	145, 993	Nov. 25, 1873	716	242	4	571
Lead, Die for making sheet	N. York	140, 567	July 1, 1873	193	65	4	24
Lead-drier	A. D. Armstrong	145, 713	Dec. 23, 1873	619	203	4	671
Lead, Machine for making sheet	D. G. Batchelder	136, 124	Feb. 25, 1873	689	223	3	219
Lead, Manufacturing white	E. A. Boehne	142, 199	Aug. 26, 1873	736	.....	4	221
Lead-pencil and rubber-eraser, Combined	J. Illfelder	144, 337	Nov. 4, 1873	137	46	4	469
Lead, Process for the manufacture of white	A. P. Meylert	136, 446	Mar. 4, 1873	80	27	3	252
Leather and similar fabrics, Manufacture of artificial	T. J. Mayall	140, 209	June 24, 1873	717	226	3	698
Leather, Artificial	H. A. Clark	141, 117	July 22, 1873	711	.....	4	94
Leather, Bleaching buffed sole	H. W. Cottle	135, 632	Feb. 11, 1873	235	.....	3	158
Leather board, Manufacture of	S. Moore	139, 598	June 3, 1873	133	.....	3	620
Leather-boarding machine	O. Coogan	138, 133	Apr. 22, 1873	785	251	3	454
Leather, coloring	J. Koppitz and F. B. Mayor	142, 797	Sept. 16, 1873	431	.....	4	299
Leather-creasing roller	S. B. Randall	145, 240	Dec. 2, 1873	180	62	4	599
Leather crimping and folding machine	G. Platts and J. Walden	143, 783	Oct. 21, 1873	376	124	4	429
Leather-cutting machine	R. Crocker	135, 266	Jan. 28, 1873	726	232	3	106
Leather-cutting machine	N. Paquette	137, 952	Apr. 15, 1873	610	192	3	431
Leather-cutting tool	J. Demarest	139, 240	May 27, 1873	722	227	3	567
Leather-dressing compound	F. G. Bell	135, 310	Jan. 28, 1873	760	.....	3	109
Leather-dressing machine	J. A. Enos	138, 874	May 13, 1873	372	{ 116 117 }	3	538
Leather, Fabric prepared to imitate	H. A. Clark	143, 122	Sept. 23, 1873	705	.....	4	322
Leather-folding machinery	E. B. Stimpson	141, 398	July 29, 1873	996	{ 323 324 }	4	124
Leather, Machine for forming staple seams in	S. W. Shorey	136, 340	Feb. 25, 1873	675	222	3	224
Leather, Machine for pricking	G. C. Converse	135, 969	Feb. 18, 1873	537	178	3	195
Leather, Manufacture of	G. Rawle and W. N. Evans	141, 459	Aug. 5, 1873	45	.....	4	139
Leather-perforating machinery for harness-makers	L. D. Woodmansee	145, 543	Dec. 16, 1873	466	152	4	647
Leather, Preparing cloth, paper, &c., to imitate	H. A. Clark	141, 118	July 22, 1873	712	.....	4	94
Leather-preserving composition	J. Lamplugh	146, 090	Dec. 30, 1873	958	.....	4	709
Leather, Process for manufacture of artificial	H. A. Clark	141, 116	July 22, 1873	711	.....	4	94
Leather-remnants, Treating	B. C. Young	135, 615	Feb. 4, 1873	214	.....	3	144
Leather, Removing acids from	M. W. Fry	144, 328	Nov. 4, 1873	129	.....	4	469
Leather scouring, glassing, or setting machine	F. A. Lockwood	143, 829	Oct. 21, 1873	414	{ 138 139 }	4	432
Leather-shaving machine	D. Y. Haas	144, 273	Nov. 4, 1873	87	29	4	485
Leather skiving and splitting machine	P. D. Cummings	137, 163	Mar. 25, 1873	756	250	3	335
Leather-skiving machine	G. Andrews	143, 398	Oct. 7, 1873	1	1	4	381
Leather-skiving machine	J. H. Chandler	139, 495	June 3, 1873	47	15	3	612
Leather-skiving machine	E. B. Stimpson	138, 951	May 13, 1873	433	136	3	543
Leather-splitting machine	J. Goebel and J. Preis	144, 899	Nov. 25, 1873	636	216	4	564
Leather-splitting machine	A. F. Stowe	139, 744	June 10, 1873	288	89	3	648

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Leather-strap cutting and punching machine.....	J. F. Hollister.....	139,388	May 27, 1873	848	271	3	597
Leather-strap, Clasp for securing the ends of.....	O. O. Storle.....	139,626	June 3, 1873	156	52	3	622
Leather-strap, Machine for waving or embossing.....	D. H. Unger.....	143,477	Oct. 7, 1873	66	23	4	326
Leather-stretching frame.....	C. P. Oliver.....	135,836	Feb. 11, 1873	416	135	3	172
Leather, Tanning.....	R. Blako.....	144,500	Nov. 11, 1873	283	.....	4	513
Leather-trimming device.....	W. F. Foley.....	145,937	Dec. 16, 1873	836	272	4	699
Leather-trimming machine.....	S. H. Jones.....	140,631	July 8, 1873	261	89	4	41
Leather-washer, Annular.....	P. L. Gibbs.....	146,062	Dec. 30, 1873	945	305	4	708
Leather-work, Metal fastening material for.....	C. Keniston.....	145,658	Dec. 16, 1873	560	184	4	655
Leather-work, Seam for.....	C. Keniston.....	142,026	Aug. 19, 1873	566	187	4	198
Leather-work, Seam for.....	S. W. Shorey.....	139,429	May 27, 1873	889	286	3	600
Leather-working tool.....	J. S. Alexander.....	140,336	July 1, 1873	1	1	4	8
Leg, Artificial.....	B. F. Palmer.....	137,711	Apr. 8, 1873	394	122	3	400
Lemon-squeezer.....	A. Bigelow.....	136,023	Feb. 18, 1873	586	193	3	199
Lemon-squeezer.....	J. H. Mead.....	140,785	July 15, 1873	395	135	4	60
Lemon-squeezer.....	E. M. Sammis.....	142,414	Sept. 2, 1873	81	27	4	249
Lemon-squeezer, &c.....	A. Baasford.....	135,067	Jan. 21, 1873	534	173	3	78
Letter-box.....	B. B. Gurley.....	144,976	Nov. 25, 1873	700	236	4	569
Letter-box.....	A. Rosenatjerna.....	141,237	July 29, 1873	841	274	4	112
Letter-box alarm.....	A. Taylor.....	139,833	June 10, 1873	366	114	3	654
Letter-box, Post-office.....	W. H. Taylor.....	141,834	Aug. 12, 1873	387	196	4	174
Letter-box, Street.....	C. L. Evert and A. Johnson.....	136,313	Feb. 25, 1873	849	274	3	222
Letter-clip and paper-binder combined.....	G. W. McGill.....	145,809	Dec. 23, 1873	700	230	4	678
Letter sheet and envelope Combined.....	T. Orton.....	136,666	Mar. 11, 1873	291	97	3	278
Letters to stone, Securing.....	J. Vennall.....	142,421	Sept. 2, 1873	86	29	4	249
Levees, Inclined way for building.....	J. Bradford.....	140,459	July 1, 1873	95	33	4	16
Level, Grading.....	J. Thornley.....	143,942	Oct. 21, 1873	507	171	4	440
Level, Pendulum.....	A. C. L. Delsarte.....	142,005	Aug. 19, 1873	545	180	4	196
Level, Spirit.....	F. W. Marston.....	140,055	June 17, 1873	565	178	3	678
Lever, &c., Adjusting attachments to reversing.....	G. W. Jordan.....	137,374	Apr. 1, 1873	86	26	3	364
Lever escapement, Detached.....	S. E. Terry.....	140,560	July 1, 1873	188	63	4	23
Lever for drawing framed timber together.....	J. N. Eames.....	142,618	Sept. 9, 1873	270	88	4	276
Lid-lifter.....	W. Van Gaasbeek.....	146,035	Dec. 30, 1873	918	297	4	706
Life-boat.....	J. Adams.....	142,883	Sept. 16, 1873	499	170	4	305
Life-boat.....	E. A. Barrett.....	138,225	Apr. 29, 1873	692	222	3	471
Life-boat.....	W. A. Vail.....	141,609	Aug. 5, 1873	174	55, 56	4	149
Life-preserving cape.....	G. and C. Palmer.....	144,861	Nov. 11, 1873	337	113	4	517
Life-preserving float.....	T. Hosmer.....	136,436	Mar. 4, 1873	72	25	3	251
Life-preserving garment.....	E. R. Cogswell.....	141,631	Aug. 12, 1873	211	66	4	160
Life-preserving mattress.....	H. B. Mountain.....	136,749	Mar. 11, 1873	359	119	3	253
Life-preserving mattress.....	J. J. Woodfine.....	143,313	Sept. 30, 1873	869	297	4	362
Life-raft.....	W. B. Davies.....	135,784	Feb. 11, 1873	363	117	3	168
Life-raft, Float for.....	J. Mason and G. W. Rogers.....	142,401	Sept. 16, 1873	435	146	4	299
Lifting-jack.....	W. F. Arnold.....	134,625	Jan. 7, 1873	115	38	3	16
Lifting-jack.....	W. A. Brunker.....	139,041	May 30, 1873	520	164	3	563
Lifting-jack.....	I. A. Crippen.....	142,680	Sept. 9, 1873	321	107	4	280
Lifting-jack.....	W. M. Doty.....	138,078	Apr. 22, 1873	742	235	3	451
Lifting-jack.....	S. S. Eccleston.....	134,865	Jan. 14, 1873	343	109	3	48
Lifting-jack.....	J. S. Haldeman.....	137,363	Apr. 1, 1873	77	25	3	363
Lifting-jack.....	J. T. Hamilton and E. F. Conner.....	144,977	Nov. 25, 1873	700	226	4	569
Lifting-jack.....	J. H. Hinton.....	135,551	Feb. 4, 1873	147	47	3	139
Lifting-jack.....	D. L. H. Mitchell.....	140,063	June 17, 1873	574	181	3	679
Lifting-jack.....	T. W. H. Moseley.....	136,533	Mar. 4, 1873	163	52	3	258
Lifting-jack.....	D. Putnam.....	142,510	Sept. 2, 1873	169	55	4	255
Lifting-jack.....	J. W. Shankland.....	134,709	Jan. 7, 1873	197	64	3	22
Lifting-jack.....	S. Taylor.....	136,281	Feb. 25, 1873	825	266	3	230
Lifting-jack.....	H. H. Warren.....	138,059	Apr. 22, 1873	728	230	3	450
Lifting-jack, Trammel for.....	E. H. Hake.....	136,156	Feb. 25, 1873	720	233	3	221
Light:							
See Billiard-light.							
Deck-light.							
Drop-light.							
Head-light.							
Locomotive head-light.							
Sky-light.							
Vault-light.							
Light-house, Floating.....	J. B. Stoner.....	138,292	Apr. 29, 1873	957	{ 301 302 }	3	476
Light-house, Floating.....	J. B. Stoner.....	138,293	Apr. 29, 1873	959	302	3	476
Lightning-rod.....	J. Drew.....	145,851	Dec. 23, 1873	736	241	4	681
Lightning-rod.....	W. B. Munn.....	135,574	Feb. 4, 1873	167	54	3	141
Lightning-rod.....	J. S. White.....	143,862	Oct. 21, 1873	445	148	4	435
Lightning-rods, Coupling for tubular.....	J. W. Fritsch.....	145,641	Dec. 16, 1873	546	179	4	654
Lightning-rods, Coupling for tubular.....	J. H. Weston.....	139,841	June 10, 1873	374	116	3	655
● Lime for the manufacture of artificial stone, Treatment of.....	J. L. Rowland.....	137,323	Apr. 1, 1873	41	13	3	360
Lime-kiln.....	J. L. Messer.....	142,805	Sept. 16, 1873	436	147	4	299
Lime-kiln.....	L. Montgomery.....	144,555	Nov. 11, 1873	332	112	4	516
Lime-kiln.....	F. W. Raeder.....	135,045	Jan. 21, 1873	516	167	3	77
Lime, Manufacture of superphosphate of.....	B. Tanner.....	140,559	July 1, 1873	186	.....	4	23
Line loop.....	D. McMillan.....	141,804	Aug. 12, 1873	362	119	4	172
Liniment.....	J. Benda.....	138,313	Apr. 29, 1873	979	.....	3	478
Liniment.....	D. J. Gish.....	140,698	July 2, 1873	317	.....	4	45
Liniment.....	H. J. Kintz.....	134,898	Jan. 14, 1873	294	.....	3	44
Liniment.....	M. P. Munder.....	142,499	Sept. 2, 1873	161	.....	4	255
Liniment.....	W. E. Ross.....	137,624	Apr. 8, 1873	314	.....	3	394
Liniment, Piles.....	P. H. Steenberg.....	141,961	Aug. 18, 1873	508	.....	4	193
Link.....	R. C. Schenck, jr.....	136,550	Mar. 4, 1873	180	58	3	259
Link-motion engine, Reversing.....	T. L. Crowley.....	135,410	Feb. 4, 1873	16	5	3	129
Liquid, Apparatus for drawing effervescent.....	T. Warker.....	144,809	Nov. 18, 1873	551	187	4	546
Liquid cooler.....	H. Meldinger.....	136,445	Mar. 4, 1873	79	27	3	252
Liquid cooler.....	J. R. Neil.....	140,529	July 1, 1873	160	55	4	21
Liquid-cooling coil.....	W. Gee.....	143,689	Oct. 14, 1873	270	89	4	411
Liquid-freezer.....	F. Sajno.....	138,941	May 13, 1873	425	133	3	543
Liquid-measuring register.....	M. Springwater.....	137,155	Mar. 25, 1873	727	242	3	333

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Liquid-meter	T. A. and J. S. Curtis	145, 096	Dec. 2, 1873	52	17	4	589
Liquid-meter	F. A. Morley	137, 559	Apr. 8, 1873	261	80	3	390
Liquid-meter	A. M. White	136, 799	Mar. 11, 1873	400	133	3	287
Liquids, Apparatus for freezing	S. S. Fitch	143, 446	Oct. 7, 1873	42	15	4	384
Liquids by means of pipes, Heating	L. Grimm and J. Corvin	138, 082	Apr. 23, 1873	745		3	451
Liquids, gases, &c., Meter for measuring	J. J. Greenough	142, 336	Sept. 2, 1873	12	5	4	243
Liquids under pressure, Vessel for containing	S. Marks	138, 266	Apr. 29, 1873	932	294	3	474
Liquids with carbonic acid, Apparatus for charging	J. Matthews	141, 571	Aug. 5, 1873	139	44	4	146
Liquor, Apparatus for improving	C. Wolters and A. Rudigier	132, 776	May 13, 1873	266	88	3	531
Liquor-cooler	J. W. Collier	132, 478	May 6, 1873	12	4	3	498
Liquors, Apparatus for treating and ageing spirituous	G. Goewey	141, 554	Aug. 5, 1873	125	39	4	145
Lithographic press	B. Huber	145, 420	Dec. 9, 1873	343	114	4	625
Lithographic press	C. C. Maurice	139, 171	May 20, 1873	647	202	3	573
Lithographic printing-form	I. Reynolds	144, 796	Nov. 18, 1873	540	183	4	545
Lithographic prints to glass, Process of transferring	O. P. Wolfe	145, 472	Dec. 9, 1873	386		4	628
Lithographic stone	G. H. Moore and L. Bagger	141, 943	Aug. 19, 1873	494		4	192
Lithographic transferred print	O. P. Wolf	145, 606	Dec. 16, 1873	515		4	651
Loading apparatus, Cart	J. Byerly	140, 884	July 15, 1873	481	162	4	67
Lock:							
See Bag-lock.							
Berth-lock.							
Combination-lock.							
Door-lock.							
Drawer-lock.							
Fire-arm lock.							
Gun-lock.							
Hasp-lock.							
Hoop lock.							
Indicator-lock.							
Master-key lock.							
Nut-lock.							
Padlock-lock.							
Permutation-lock.							
Row-lock.							
Sash-lock.							
Seal-lock.							
Sewing-machine lock.							
Trunk-lock.							
Lock	C. Bodmer	135, 702	Feb. 11, 1873	297	94	3	163
Lock	F. Gorris	142, 335	Sept. 2, 1873	12	4	4	243
Lock	H. Stein	145, 370	Dec. 9, 1873	297	100	4	622
Lock-cutting machine	I. L. Penney	138, 815	May 13, 1873	321	99	3	534
Lock-key, Manufacture of	W. Wilcox	134, 577	Jan. 7, 1873	72	22	3	12
Locks, Seal for	F. W. Brooks	141, 110	July 22, 1873	707	236	4	94
Locket	S. J. Smith	144, 153	Oct. 28, 1873	710	236	4	466
Locomotive	J. S. French	144, 271	Nov. 4, 1873	85	28	4	485
Locomotive	W. S. Hudson	136, 729	Mar. 11, 1873	342	113	3	282
Locomotive ash-pan cleaner	A. O. Denio	141, 769	Aug. 12, 1873	328	108	4	170
Locomotive-boiler, Using anthracite coal dust or slack as fuel in.	A. Berney	136, 960	Mar. 18, 1873	545		3	307
Locomotive-engine smoke-stack	R. Frazer	143, 339	Sept. 30, 1873	890	305	4	363
Locomotive fire-box crown	H. C. Darby	140, 251	June 24, 1873	750	237	3	701
Locomotive furnace	A. J. Stevens	145, 819	Dec. 23, 1873	707	233	4	679
Locomotive head-light	W. Westlake	143, 550	Oct. 7, 1873	138	46	4	391
Locomotive, portable, and other steam-engines	L. Perkins	145, 525	Dec. 16, 1873	448	146	4	645
					147		
					342		
Locomotive recording instrument	J. D. Richardson	138, 437	Apr. 29, 1873	1, 084	343	3	487
Locomotive sanding-device	M. V. Nobles	137, 472	Apr. 1, 1873	174	55	3	271
Locomotive smoke and spark conveyer	E. A. C. Fox	142, 906	Sept. 16, 1873	518	176	4	306
Locomotive smoke-stack	J. V. Bishop	144, 884	Nov. 25, 1873	627	213	4	563
Locomotive smoke-stack	J. Hughes	142, 851	Sept. 16, 1873	474	161	4	303
Locomotive, Traction	T. S. Minnie	135, 240	Jan. 28, 1873	704	226	3	104
Locomotive window	J. H. Dinsmore	145, 790	Dec. 23, 1873	685	224	4	677
Locomotives, Machine for slotting links for	W. H. Denney	140, 121	June 24, 1873	644	202	3	692
Log-canting machine	A. Rodgers	142, 280	Aug. 26, 1873	801	265	4	227
Log-moving machine	G. M. Hinkley and A. Rodgers	139, 578	June 3, 1873	115	39	3	618
Log-rolling device	T. Emery	136, 145	Feb. 25, 1873	712	230	3	221
Log-turner	J. C. Moore	138, 270	Apr. 29, 1873	937	296	3	475
Log-turner	I. W. Pool	140, 386	July 1, 1873	44	15	4	11
Log-turner	E. Tarrant	141, 736	Aug. 12, 1873	297	97	4	167
Log-turner	J. Torrent	141, 739	Aug. 12, 1873	299	98	4	167
Log-turner	C. Van Vleck	141, 969	Aug. 19, 1873	513	169	4	194
Loom	A. Canis and F. Higgins	136, 133	Feb. 25, 1873	699	226	3	220
					227		
Loom	G. Crompton	140, 894	July 15, 1873	489	165	4	67
Loom	H. D. Davis	141, 262	July 29, 1873	865	283	4	114
					284		
Loom	J. C. Duckworth	137, 898	Apr. 15, 1873	566	177	3	427
					178		
Loom	C. J. Kane	137, 077	Mar. 25, 1873	665	220	3	328
					149		
Loom	L. J. Knowles	134, 992	Jan. 21, 1873	464	150	3	72
Loom	S. T. Thomas	134, 572	Jan. 7, 1873	66	20	3	12
Loom	S. T. Thomas	145, 316	Dec. 9, 1873	254	85	4	618
Loom	J. Zürcher	141, 907	Aug. 19, 1873	487	153	4	190
Loom beam and roller	G. L. Garsed	137, 672	Apr. 8, 1873	359	111	3	397
Loom-filling fork	J. H. Knowles	139, 251	May 27, 1873	732	231	3	598
Loom for weaving piled fabric	E. Pickford	139, 328	May 27, 1873	796	254	3	593
Loom for weaving piled fabrics	H. Skinner	146, 101	Dec. 30, 1873	979	316	4	711
					317		
Loom for weaving piled fabrics	J. C. Ellison	144, 077	Oct. 28, 1873	649	214	4	461
Loom for weaving slate, window-shades, &c.	E. B. Hastings, W. E. Nichols, and W. L. Merritt	135, 427	Feb. 4, 1873	32	9	3	130
Loom, Hair-cloth	J. Turple	139, 981	June 17, 1873	497	157	3	672

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Loom let-off mechanism	C. Gahren and L. Langlotz	138, 391	Apr. 29, 1873	1,040	328	3	483
Loom let-off mechanism	J. M. Linscott	141, 720	Aug. 12, 1873	283	93	4	166
Loom, Machine for shaping the elastic dents of comb for	M. Robinson	135, 444	Feb. 4, 1873	48	15, 16	3	131
Loom, Narrow-ware	R. B. Fowler	144, 610	Nov. 18, 1873	384	129	4	532
Loom-picker	S. Boora	143, 218	Sept. 30, 1873	784	271	4	354
Loom-picker	O. A. Sawyer	145, 905	Dec. 23, 1873	767	257	4	685
Loom-picker	W. Taylor	135, 253	Jan. 22, 1873	716	229	3	105
Loom-picking mechanism	L. E. Ross	137, 798	Apr. 15, 1873	463	151	3	490
Loom-picking mechanism	L. E. Ross	143, 257	Sept. 30, 1873	922	282	4	358
Loom-picking mechanism	W. Stearns	142, 592	Sept. 9, 1873	249	82	4	274
Loom-picking mechanism	J. Stever	140, 091	June 17, 1873	598	189	3	680
Loom-picking mechanism	A. Stockwell	136, 786	Mar. 11, 1873	390	129	3	286
Loom-picking mechanism	T. Townsend	141, 187	July 22, 1873	783	256	4	100
Loom-picking stick-check	R. Davis	141, 496	Aug. 5, 1873	78	25	4	141
Loom, Power	J. Shinn	137, 252	Mar. 25, 1873	690	269	3	340
Loom-shedding mechanism	G. Crompton	140, 476	July 1, 1873	113	38	4	17
Loom-shedding mechanism	G. Crompton	140, 682	July 8, 1873	304	102	4	44
Loom-shedding mechanism	G. Crompton	141, 768	Aug. 12, 1873	328	107	4	170
Loom-shedding mechanism	C. H. Landenberger and H. Atkinson	145, 216	Dec. 2, 1873	159	55	4	568
Loom-shedding mechanism	J. Lomas	137, 937	Apr. 15, 1873	597	188	3	430
Loom-shedding mechanism	E. Redfearn	141, 589	Aug. 5, 1873	152	49	4	147
Loom-shedding mechanism	I. L. Wilber	144, 176	Oct. 28, 1873	733	244 245	4	468
Loom-shuttle	E. P. Ball	145, 831	Dec. 23, 1873	717	236	4	680
Loom-shuttle	F. and A. J. Blanding	134, 971	Jan. 21, 1873	447	143	3	71
Loom-shuttle	J. Brown	142, 373	Sept. 2, 1873	46	16	4	246
Loom-shuttle	H. H. Bryant	134, 848	Jan. 14, 1873	328	105	3	46
Loom-shuttle	N. D. Chapman	144, 657	Nov. 18, 1873	426	144	4	536
Loom-shuttle	D. C. G. Field	136, 715	Mar. 11, 1873	330	109	3	221
Loom-shuttle	M. F. Fields	143, 976	Oct. 28, 1873	562	186	4	454
Loom-shuttle	T. Martin	135, 652	Feb. 11, 1873	251	79	3	159
Loom-shuttle	T. K. McIntyre	141, 803	Aug. 12, 1873	361	119	4	172
Loom-shuttle	C. L. F. Pfefferkorn and W. Aust	143, 927	Oct. 21, 1873	495	167	4	439
Loom-shuttle	C. K. Sawyer and G. F. Wright	135, 446	Feb. 4, 1873	51	17	3	131
Loom-shuttle	W. Tucker	140, 098	June 17, 1873	604	190	3	681
Loom, Shuttle-actuating mechanism for	J. R. Norfolk	144, 218	Nov. 4, 1873	43	13	4	481
Loom-shuttle binder	G. B. Hammond and J. A. Tucker	138, 020	Apr. 22, 1873	688	217	3	447
Loom, Shuttle-box mechanism for	W. Atkinson and C. C. Klein	135, 748	Feb. 11, 1873	333	107	3	166
Loom, Shuttle-box mechanism for	R. B. Goodyear	139, 384	May 27, 1873	842	269	3	597
Loom-shuttle guard	C. H. Hudson	137, 551	Apr. 8, 1873	255	78	3	389
Loom-shuttle guard	E. M. Stevens	145, 763	Dec. 23, 1873	665	217	4	675
Loom-shuttle guide	J. B. Bancroft	134, 837	Jan. 14, 1873	320	102	3	46
Loom-shuttle guide	J. B. Bancroft	145, 925	Dec. 30, 1873	825	269	4	698
Loom-shuttle motion	A. Gartenmann	136, 501	Mar. 4, 1873	129	42	3	256
Loom-shuttle relief mechanism	W. C. Macomber	145, 882	Dec. 23, 1873	766	250	4	683
Loom-stop mechanism	C. E. Barnes	138, 987	May 20, 1873	475	149	3	560
Loom-stop mechanism	W. Edson	139, 560	June 3, 1873	102	34	3	617
Loom-stop mechanism	T. Isherwood and W. Nuttall	138, 883	May 13, 1873	388	121	3	539
Loom-stop mechanism	J. J. Switzer	136, 880	Mar. 18, 1873	479	150	3	302
Loom-stop mechanism	H. F. Wheeler and W. O. Wakefield	143, 552	Oct. 7, 1873	139	46	4	391
Loom-stopping mechanism	L. J. Knowles	142, 401	Sept. 2, 1873	72	24	4	248
Loom-temple	N. I. Allen and E. S. Stimpson	144, 647	Nov. 18, 1873	421	141	4	535
Loom-temple	N. Chapman	138, 004	Apr. 22, 1873	672	213	3	445
Loom-temple	N. Chapman	140, 013	June 17, 1873	524	166	3	674
Loom-temple	N. Chapman	144, 507	Nov. 11, 1873	288	98	4	513
Loom-temple	F. J. Dutcher	136, 644	Mar. 11, 1873	274	91	3	276
Loom-temple	W. W. Dutcher	139, 884	June 17, 1873	421	131	3	666
Loom-temple	E. S. Stimpson	139, 929	June 17, 1873	459	144	3	669
Loom, Wire-weaving	S. Holdsworth	138, 090	Apr. 22, 1873	753	238	3	452
Looms, &c., Electrical stop for	G. F. Lutbery	142, 925	Sept. 16, 1873	534	182	4	308
Looms, Take-up mechanism for	S. Estes	137, 188	Mar. 25, 1873	761	251	3	336
Looms, Take-up mechanism for	C. Gahren	144, 756	Nov. 18, 1873	508	172	4	542
Lounge	W. H. Hart	143, 283	Sept. 30, 1873	842	290	4	359
Lounge	A. Heyer	145, 418	Dec. 9, 1873	341	114	4	625
Lounge	F. Krater	134, 752	Jan. 14, 1873	243	79	3	40
Lounge and bath-tub, Combined	C. Wendel	138, 457	Apr. 29, 1873	1,103	348	3	488
Lounge and bedstead, Combined	S. Higgins	139, 957	June 17, 1873	480	151	3	670
Lounge and chair, Combined	M. P. Robinson	145, 452	Dec. 9, 1873	366	122	4	697
Lounge, Folding	A. Lundberg	136, 843	Mar. 18, 1873	449	149	3	300
Lounge, Leg for folding	J. F. Tobey	138, 716	May 6, 1873	224	70	3	515
Lowering and hoisting apparatus, Self-breaking	W. Hart	142, 017	Aug. 19, 1873	556	184	4	197
Low-water alarm and indicator	J. Ross	137, 097	Mar. 25, 1873	679	226	3	329
Low-water alarm, Steam-boiler	J. R. Brown and W. A. Foskett	135, 510	Feb. 4, 1873	111	36	3	136
Low-water indicator	F. Steele	145, 369	Dec. 9, 1873	296	100	4	682
Low-water indicator and alarm	F. Strange	142, 181	Aug. 26, 1873	720	238	4	220
Low-water indicator and alarm for boiler	M. Ellwood	136, 646	Mar. 11, 1873	275	92	3	276
Lozenge-cutting machine	G. H. Coppling	144, 258	Nov. 4, 1873	76	24, 25	4	464
Lubricating compound	H. R. Hutchinson	134, 890	Jan. 14, 1873	364	119	3	49
Lubricating compound	S. Y. Love	143, 362	Sept. 30, 1873	919	292	4	365
Lubricating compound	J. B. Norris	145, 812	Dec. 23, 1873	702	222	4	678
Lubricating compound	E. Ront	136, 868	Mar. 18, 1873	468	155	3	301
Lubricating compound	N. D. Smith	144, 875	Nov. 25, 1873	621	200	4	562
Lubricating compound	E. A. Tonner	136, 945	Mar. 18, 1873	535	175	3	306
Lubricating cup	T. Cooper	138, 558	May 6, 1873	82	26	3	504
Lubricator:							
See Axle-lubricator.							
Car-axle lubricator.							
Cylinder-lubricator.							
Steam-lubricator.							
Steam-engine lubricator.							
Valve-lubricator.							
Wheel-lubricator.							

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Lubricator.....	H. V. Aiken.....	139, 266	May 27, 1873	765	242	3	590
Lubricator.....	B. F. Clemenshaw.....	135, 777	Feb. 11, 1873	358	115	3	168
Lubricator.....	J. Gates.....	138, 243	Apr. 29, 1873	907	266	3	473
Lubricator.....	F. Lunkenheimer and J. Meehan.....	138, 169	Apr. 22, 1873	815	259	3	457
Lubricator.....	E. McCoy.....	139, 407	May 27, 1873	871	279	3	599
Lubricator.....	W. Morris.....	138, 341	Apr. 29, 1873	1,001	315	3	480
Lubricator.....	J. A. Osenbrück.....	138, 274	Apr. 29, 1873	940	297	3	475
Lubricator.....	J. M. Power.....	134, 611	Jan. 7, 1873	105	34	3	15
Lubricator.....	J. M. Power.....	143, 639	Oct. 14, 1873	921	74	4	407
Lubricator.....	W. A. Pratt.....	143, 530	Oct. 7, 1873	114	39	4	390
Lubricator.....	D. T. Pray.....	141, 168	July 22, 1873	763	250	4	98
Lubricator.....	H. W. Regan.....	138, 436	Apr. 29, 1873	1,083	342	3	466
Lubricator.....	J. Ross.....	143, 482	Oct. 7, 1873	94	9	4	382
Lumber, Cutter for tonguing and grooving.....	D. Perrin.....	137, 861	Apr. 15, 1873	535	167	3	425
Lumber-drier.....	A. Edwards.....	134, 589	Jan. 7, 1873	25	8	3	9
Lumber-edging machine.....	W. G. Caldwell.....	141, 852	Aug. 19, 1873	410	134	4	186
Lumber for joiner's use, Prepared.....	J. Mullay.....	136, 332	Feb. 25, 1873	868	279	3	233
Lumber-marker.....	W. Merritt.....	143, 773	Oct. 21, 1873	367	121	4	428
Lumber-trimming machine.....	C. Lamb and T. J. Frazier.....	138, 505	May 6, 1873	30	10	3	500
Lunch-box.....	C. E. Lockwood.....	135, 651	Feb. 11, 1873	251	79	3	159
Lunch-box and shopping-bag, Combined.....	C. C. Cobleigh.....	144, 385	Nov. 11, 1873	189	64, 65	4	505
M.							
Machinery, Apparatus for preventing rapping noise in.....	G. Ames.....	139, 227	May 27, 1873	707	223	3	586
Machinery, Register for.....	S. F. Payne.....	144, 861	Nov. 25, 1873	611	208	4	561
Machinists' gage.....	S. H. Bellows.....	142, 761	Sept. 16, 1873	402	136	4	287
Magnet, Relay.....	T. A. Edison.....	141, 777	Aug. 12, 1873	335	110	4	170
Magnet, Reversible.....	J. L. Churchill.....	135, 690	Feb. 11, 1873	287	91	3	162
Magnesia, Making hydrate or milk of.....	C. L. Phillips and L. Reid.....	141, 167	July 22, 1873	761	.....	4	98
Mail-bag.....	T. J. Hardaway.....	139, 061	May 20, 1873	542	170	3	565
Mail-bag fastening.....	B. X. Blair.....	139, 536	June 3, 1873	77	26	3	615
Mail-bag fastening.....	J. A. Paul.....	140, 639	July 8, 1873	270	91	4	42
Mail-bag fastening.....	W. J. Stowell.....	134, 571	Jan. 7, 1873	65	20	3	12
Mail pouch holder and catcher, Railway.....	B. F. Bean.....	143, 657	Oct. 14, 1873	236	80	4	406
Main: See Water-main.							
Mallet.....	A. Holbrook.....	141, 930	Aug. 19, 1873	485	160	4	191
Mallet.....	S. M. Willis.....	140, 395	July 1, 1873	49	17	4	12
Mallet for driving tubes, &c.....	C. Stewart.....	145, 537	Dec. 16, 1873	461	151	4	646
Malt-drier.....	J. G. Schiffer.....	146, 025	Dec. 30, 1873	912	295	4	705
Malt-drier.....	P. Schuff.....	142, 946	Sept. 16, 1873	554	188	4	309
Malt-kiln.....	J. Gecmen.....	137, 194	Mar. 25, 1873	769	254	3	336
Malt-kiln stirrer.....	E. Schmidt.....	138, 288	Apr. 29, 1873	955	300	3	476
Malt-polishing machine.....	C. Stoll.....	140, 316	June 24, 1873	810	256	3	706
Malt-polishing machine.....	W. W. Stoll.....	145, 027	Nov. 25, 1873	747	252	4	573
Malt-steep.....	W. W. Stoll.....	143, 938	Oct. 21, 1873	504	170	4	439
Manhole-cover, Device for securing.....	J. J. Craven.....	140, 893	July 15, 1873	488	165	4	67
Mandrel, Buffing.....	G. B. Dunham.....	137, 187	Mar. 25, 1873	760	251	3	335
Mandrel, Buffing.....	N. S. Thompson.....	141, 523	Aug. 5, 1873	98	30	4	143
Mandrel, Expanding.....	J. D. Smith.....	138, 947	May 13, 1873	430	135	3	543
Mandrel, Tube-welding.....	H. K. Flagler.....	142, 622	Sept. 9, 1873	273	89	4	276
Manganese, ferro-manganese, and spiegeleisen, Manu- facture of.....	O. Bolton, jr.....	141, 419	Aug. 5, 1873	8	.....	4	135
Manger, Automatic.....	D. A. Townsend.....	136, 192	Feb. 25, 1873	748	241	3	223
Manger, Horse.....	J. C. Higgins.....	134, 601	Jan. 7, 1873	98	31	3	15
Mangle.....	R. A. Duncan.....	142, 997	Sept. 23, 1873	603	205	4	324
Mangle.....	E. Gundlach.....	144, 671	Nov. 18, 1873	435	147	4	536
Mangling or wringing machine.....	T. Hall and J. Newton.....	139, 574	June 3, 1873	112	37	3	618
Mantel, False.....	J. T. Fleeharty.....	139, 137	May 20, 1873	614	192	3	570
Map, Dissected.....	C. J. Higgins.....	142, 338	Sept. 2, 1873	14	5	4	243
Map-exhibitor and cabinet.....	W. A. and G. Rico.....	143, 717	Oct. 14, 1873	298	96, 99	4	413
Marble, Artificial.....	B. Auguste.....	140, 668	July 8, 1873	291	.....	4	43
Marble, granite, &c., Process for cleaning.....	J. Sawyer.....	145, 971	Dec. 30, 1873	868	.....	4	702
Marble, Machine for molding.....	J. Finn.....	134, 532	Jan. 7, 1873	27	9	3	9
Marble, Making artificial.....	C. F. Barker.....	141, 629	Aug. 12, 1873	261	.....	4	164
Marble-molding machine.....	J. Finn.....	141, 213	July 29, 1873	821	268	4	111
Marble, Process of manufacturing and veining artificial.....	F. H. Hall.....	145, 345	Dec. 9, 1873	279	.....	4	620
Marble slabs, Machine for molding the edges of.....	J. Finn.....	138, 079	Apr. 22, 1873	743	235	3	451
Marine drag.....	J. C. Beals.....	143, 318	Sept. 30, 1873	873	299	4	362
Marker, Corn-ground.....	J. H. Rynerson.....	144, 146	Oct. 28, 1873	704	234	4	466
Marker, Corn-row.....	A. Cooke and D. W. Cross.....	139, 546	June 3, 1873	86	30	3	616
Marker, Land.....	G. W. Betts.....	141, 913	Aug. 19, 1873	472	155	4	190
Marker, Land.....	J. Cuff.....	135, 965	Feb. 11, 1873	292	92	3	162
Marker, seed-planter, and cultivator.....	C. H. and F. Logan.....	145, 220	Dec. 2, 1873	163	56	4	598
Martingale.....	R. R. Miller.....	135, 657	Feb. 11, 1873	255	81	3	160
Martingale.....	F. G. Moody.....	142, 261	Aug. 26, 1873	786	259	4	226
Mason's hod.....	B. C. Monroe.....	145, 675	Dec. 16, 1873	575	189	4	656
Mast for vessels, Hinged.....	J. E. Hammond.....	145, 648	Dec. 16, 1873	552	181	4	654
Master-key lock.....	A. Rankin.....	141, 381	July 29, 1873	979	318	4	123
Mastic, Composition.....	A. Thiele.....	142, 595	Sept. 9, 1873	251	.....	4	274
Mat: See Rubber-mat.							
Match-box.....	J. Holtz.....	141, 793	Aug. 12, 1873	354	116	4	171
Match-box.....	J. Matthias.....	144, 404	Nov. 11, 1873	204	69	4	506
Match-box.....	A. Meyersberg.....	141, 581	Aug. 5, 1873	146	47	4	147
Match-box.....	M. L. Orum.....	144, 283	Nov. 4, 1873	94	31	4	486
Match-box.....	O. Faddock.....	134, 764	Jan. 14, 1873	252	82	3	41
Match-box.....	C. Frahl.....	140, 949	July 15, 1873	548	184	4	72
Match-composition.....	J. F. Babcock, W. A. Leonard, and E. B. Crane.....	136, 953	Mar. 18, 1873	541	.....	3	307
Match-cutting machine.....	E. D. Cummings, M. Smith, and J. C. Jordan.....	139, 457	June 3, 1873	11	3, 4	3	610
Match-cutting machine.....	T. G. Murphy.....	134, 565	Jan. 7, 1873	59	18	3	12
Match-safe.....	L. Darozir.....	134, 523	Jan. 7, 1873	19	6	3	9
Match-safe.....	J. and A. Helm.....	144, 615	Nov. 18, 1873	390	131	4	533
Match-safe.....	C. H. Leggett.....	138, 261	Apr. 29, 1873	928	293	3	474
Match-sticks, Machine for making.....	F. Zais.....	136, 893	Mar. 18, 1873	491	163	3	303

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Matches, Manufacture of friction	C. F. Bonhack	141,483	Aug. 5, 1873	64	20	4	140
Matches, Manufacturing	O. H. Hicks	137,840	Apr. 15, 1873	520		3	423
Matter, Treating refuse	C. Whittier	143,482	Oct. 7, 1873	69	24	4	386
Mattress	T. Roller	137,030	Mar. 18, 1873	608	201	3	312
Mattress	H. E. Smith	139,202	May 20, 1873	675	212	3	576
Mattress-frame, Elastic fabric	J. E. Whittlesey and J. W. C. Peters	142,827	Sept. 16, 1873	455	154	4	301
Mattress-frame, Wire	G. V. and W. I. Bunker	145,553	Dec. 16, 1873	474	155	4	648
Mattress-frame, Wire	J. G. Smith	136,271	Feb. 25, 1873	816	263	3	229
Mattress-frame, Woven-wire	D. J. Powers	136,180	Feb. 25, 1873	739	238	3	223
Mattress, seat, &c., Flexible support for	C. Pullinger	137,718	Apr. 8, 1873	404	134	3	401
Mattress, seat, &c., Spring-coupling for	W. B. Judson	134,893	Jan. 14, 1873	368	117	3	49
Mattress, Spring	H. A. Gaston	137,673	Apr. 8, 1873	360	112	3	398
Mattress, Spring	D. N. Sellig	145,597	Dec. 16, 1873	508	167	4	650
Mattress-stuffing, &c., Process for preparing moss for	A. Rock	134,562	Jan. 7, 1873	57		3	11
Mattresses, Tightening device for woven-wire	D. J. Powers	142,940	Sept. 16, 1873	550	186	4	309
Mattress, Wire	E. Parker	139,077	May 20, 1873	560	175	3	566
Mattress, Wire	D. J. Powers	144,564	Nov. 11, 1873	339	114	4	517
Mattress, Wire	J. G. Smith	145,249	Dec. 2, 1873	189	65	4	600
Measure and register, Grain	R. B. Clark	136,643	Mar. 11, 1873	272	91	3	276
Measure, Cloth	C. V. Hemenway	135,804	Feb. 11, 1873	391	126	3	170
Measure, Hatter's head	F. A. Fenton	144,606	Nov. 18, 1873	381	128	4	532
Measure, Liquid	W. L. Weaver and A. W. Johnson	145,377	Dec. 9, 1873	303	102	4	622
Measure, Lumber	F. S. Baldwin	138,310	Apr. 29, 1873	976	307	3	478
Measure, Tailor's	J. Beaudry	143,556	Oct. 14, 1873	153	51	4	401
Measure, Tailor's	J. A. Johnston	140,507	July 1, 1873	141	48	4	90
Measure, Tape	H. B. Tyler	140,745	July 8, 1873	359	121	4	49
Measurement, Apparatus for electric	L. Bradley	134,636	Jan. 7, 1873	198	41	3	17
Measuring-can	A. W. Tice and N. F. Smalley	144,713	Nov. 18, 1873	471	159	4	539
Measuring-can, Oil, &c.	W. B. Sherman	136,103	Feb. 18, 1873	655	214	3	204
Measuring-device, Cloth	O. R. Holbrook	142,787	Sept. 16, 1873	424	143	4	298
Measuring-funnel	T. E. Cropper	137,182	Mar. 25, 1873	755	250	3	335
Measuring-register, Cloth	S. Crocker	137,829	Apr. 15, 1873	507	158	3	422
Measuring-rod and divider, Combined extension	G. H. Discher	144,264	Nov. 4, 1873	80	26	4	484
Measuring-wheel	T. R. Way	135,185	Jan. 21, 1873	627	204	3	86
Measuring-wheel for wagon-tires	T. Whiting	138,829	May 13, 1873	333	102	3	535
Meat and vegetable cutter	M. L. Edwards	139,501	June 3, 1873	51	16	3	613
Meat and vegetable cutter	J. R. Hall and C. H. Ellis	140,824	July 15, 1873	431	146	4	63
Meat-chopper	J. Battey	135,258	Jan. 28, 1873	720	230	3	105
Meat-chopper	O. Gardner	140,696	July 8, 1873	316	107	4	45
Meat-chopper	J. A. Hard	137,074	Mar. 25, 1873	661	219	3	328
Meat-chopper	H. P. Rankin	140,950	July 15, 1873	548	184	4	72
Meat-chopper	A. R. Silver	141,731	Aug. 12, 1873	292	95	4	167
Meat-chopping machine	G. Spielhahn	136,624	Mar. 11, 1873	258	87	3	275
Meat-crusher	A. J. Crane	135,781	Feb. 11, 1873	361	116	3	168
Meat, Curing and packing	I. Atkinson	134,965	Jan. 21, 1873	440		3	71
Meat-holder	S. Beissel	145,329	Dec. 9, 1873	267	89	4	619
Meat-mangle	S. D. Ingham	143,158	Sept. 23, 1873	729	251	4	334
Meat or fruit press	L. S. Starrett	137,803	Apr. 15, 1873	467	152	3	421
Meat-press	J. I. Danforth	144,322	Nov. 4, 1873	124	41	4	488
Mechanical power	E. W. Morton	136,088	Feb. 18, 1873	641	210	3	203
Mechanical power	C. Van Derzee	141,741	Aug. 12, 1873	300	98	4	167
Medical compound for neutralizing the taste of cod-liver oil	C. D. Bradley	141,030	July 22, 1873	636		4	88
Medicated candy	S. B. Colton	134,979	Jan. 21, 1873	453		3	72
Medicated pad or belt	A. F. Cooper	144,315	Nov. 4, 1873	117	40	4	488
Medicated paper	C. J. Eames	134,983	Jan. 21, 1873	457		3	72
Medicine	J. P. Barnett	143,399	Oct. 7, 1873	2		4	381
Medicine	A. Brown	138,473	May 6, 1873	7		3	498
Medicine	J. Conzelman	139,045	May 20, 1873	522		3	563
Medicine	G. Déclat	145,850	Dec. 23, 1873	735		4	681
Medicine	S. Field	145,560	Dec. 16, 1873	479		4	648
Medicine	A. Fuqua	140,408	July 1, 1873	58		4	13
Medicine	H. Gahn	137,542	Apr. 8, 1873	247		3	388
Medicine	T. Morley	134,762	Jan. 14, 1873	251		3	41
Medicine	G. F. Munro	145,002	Nov. 25, 1873	723		4	571
Medicine	S. E. Paddock	142,408	Sept. 2, 1873	77		4	248
Medicine	J. L. Putegnat	136,937	Mar. 18, 1873	529		3	306
Medicine	H. Themel	736,680	Mar. 11, 1873	303		3	279
Medicine	T. T. Wright	140,866	July 15, 1873	465		4	65
Medicine and apparatus for cure of asthma	J. Pinchard	137,093	Mar. 25, 1873	676	225	3	329
Medicine and medicated food	J. M. O. Tamin	136,678	Mar. 11, 1873	302		3	278
Medicine, Bitters	L. Kappler	145,062	Dec. 2, 1873	20		4	587
Medicine, Bitters for chills and fever	T. B. Owens	139,185	May 20, 1873	660		3	574
Medicine, Blood-purifier	D. Parlow	138,759	May 13, 1873	272		3	529
Medicine-case	M. O. Baldwin	142,887	Sept. 16, 1873	502	171	4	305
Medicine-case	W. H. Cutler	136,973	Mar. 18, 1873	557	185	3	308
Medicine, Catarrh	J. A. Carpenter	135,077	Jan. 21, 1873	540		3	79
Medicine, Catarrh	W. V. Green and J. M. Kintzel	139,951	June 17, 1873	475		3	670
Medicine, Cholera	A. Racciot	140,642	July 8, 1873	272		4	42
Medicine, Consumption	W. H. H. White	140,329	June 24, 1873	823		3	707
Medicine, Diphtheria	H. Pruden	140,163	June 24, 1873	680		3	695
Medicine, Fever and ague	W. Campbell	134,639	Jan. 7, 1873	131		3	17
Medicine for kidney diseases	W. A. Ruth	137,488	Apr. 1, 1873	193		3	373
Medicine for skin diseases	A. B. Simpson	136,554	Mar. 4, 1873	183		3	260
Medicine for treating horses' hoofs, &c.	J. C. Burroughs	145,047	Dec. 2, 1873	5		4	586
Medicine, Horse, &c.	J. Andrews	134,721	Jan. 14, 1873	221		3	38
Medicine, Infant's	J. Febr	143,133	Sept. 23, 1873	712		4	322
Medicine, Liver disease	J. M. Cunningham	139,707	June 10, 1873	253		3	645
Medicine, Milk of magnesia	C. H. Phillips and L. Reid	138,282	Apr. 29, 1873	247		3	476
Medicine or eye-wash	F. Fawlewski and J. Schulz	145,749	Dec. 23, 1873	650		4	674
Medicine or liver-lozenge	S. Gilbert	145,498	Dec. 16, 1873	416		4	643
Medicine or opium-cure	N. H. Kellogg	143,164	Sept. 23, 1873	733		4	334
Medicine or skin-lotion	A. Field	140,126	June 24, 1873	648		3	692
Medicine or stomach-bitters	F. Stützel	143,427	Oct. 7, 1873	29		4	383

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Medicine, Rheumatism.....	G. Lucy.....	138, 335	Apr. 29, 1873	996		3	479
Mensuration, Apparatus for teaching.....	J. Harrington.....	137, 075	Mar. 25, 1873	662	{ 219 220 }	3	328
Metal, Anti-friction.....	G. S. Hunt.....	136, 163	Feb. 25, 1873	725		3	222
Metal bars, Machine for bending and twisting.....	S. Holmes.....	142, 018	Aug. 19, 1873	557	{ 184 185 }	4	197
Metal bars, Machine for breaking.....	W. Richter.....	135, 364	Jan. 28, 1873	813	{ 262 263 }	3	113
Metal can for oil, &c.....	G. W. Banker.....	138, 986	May 20, 1873	474	149	3	560
Metal-cleaning compound.....	W. Z. Moore.....	144, 215	Nov. 4, 1873	41		4	481
Metal-coated ware.....	G. Booth.....	136, 025	Feb. 18, 1873	587		3	199
Metal, Coloring.....	J. Kintz.....	139, 319	May 27, 1873	790		3	592
Metal-drilling machine.....	A. Woodworth.....	145, 923	Dec. 21, 1873	801	{ 262 263 }	4	686
Metal, &c., Furnace for reheating.....	H. Chisholm.....	136, 413	Mar. 4, 1873	52	18, 19	3	250
Metal-melting furnace.....	J. Harrison.....	141, 139	July 22, 1873	732	243	4	96
Metal pipe, roofing, &c., Composition for coating.....	J. Specht.....	134, 822	Jan. 14, 1873	308		3	45
Metal-rolling machinery.....	W. George and W. F. Durfee.....	139, 000	May 20, 1873	487	154	3	561
Metal-separator.....	S. J. Peet.....	138, 276	Apr. 29, 1873	942	297	3	475
Metal tube, Apparatus for brazing.....	T. G. Gorman and N. W. Peregoy.....	137, 068	Mar. 25, 1873	654	217	3	328
Metal-working machine, Compound.....	G. L. Jones.....	142, 398	Sept. 2, 1873	70	23	4	248
Metal-working machine, Compound.....	H. B. Sevey.....	142, 588	Sept. 9, 1873	245	81	4	273
Metal-working machine, Compound.....	H. B. Sevey.....	143, 722	Oct. 14, 1873	304	100	4	413
Metals, Apparatus for testing the tensile strength of.....	T. Olsen.....	142, 937	Sept. 16, 1873	547	186	4	309
Metals, Compound for cleaning polished.....	M. McGlenn.....	141, 156	July 22, 1873	751		4	97
Metals in liquid state, Apparatus for compressing cast.....	H. W. Barnum.....	145, 325	Dec. 9, 1873	264	88	4	619
Metallic-band, Machine for re-rolling.....	C. W. Chapman.....	136, 585	Mar. 11, 1873	225	75	3	272
Metallic bars, tubes, &c., Furnace for heating.....	S. P. M. Tasker.....	135, 674	Feb. 11, 1873	273	86	3	161
Metallic bracket.....	A. D. Judd.....	145, 351	Dec. 9, 1873	284	95	4	620
Metallic can for meat, paint, &c.....	E. M. Wood.....	136, 890	Mar. 18, 1873	488	162	3	303
Metallic clasp.....	C. Marshall.....	140, 207	June 24, 1873	716	226	3	698
Metallic fabric for scouring and percolating purposes.....	A. J. Vaudegrift.....	134, 619	Jan. 7, 1873	110	36	3	16
Metallic moulds, Process in casting in.....	J. Williams.....	138, 775	May 13, 1873	286		3	531
Metallic surfaces, Device for producing pearl finish on.....	B. D. Beiderhase and C. Witteck.....	134, 581	Jan. 7, 1873	78	25	3	13
Metallic surfaces, Device for producing satin finish on.....	B. D. Beiderhase and C. Witteck.....	134, 582	Jan. 7, 1873	79	25	3	13
Metallic tubing, Machine for making.....	J. Huggins.....	145, 421	Dec. 9, 1873	344	115	4	625
Metallic washer.....	M. G. Hubbard.....	135, 809	Feb. 11, 1873	394	127	3	170
Metallic furnace.....	G. Perry and J. Webb.....	138, 523	May 6, 1873	51	17	3	501
Metallurgic furnace, Apparatus for condensing and purifying smoke of.....	W. J. Johnson.....	136, 066	Feb. 18, 1873	623	{ 204 205 }	3	202
Metallurgic furnace, Draft-apparatus for.....	G. Wingate.....	144, 585	Nov. 11, 1873	357	120	4	518
Metallurgic-furnace lining.....	S. Landowne.....	137, 554	Apr. 8, 1873	257	79	3	389
Metallurgic gas-furnace.....	J. M. Hartman.....	141, 002	July 22, 1873	611	206	4	86
Metallurgic gas-furnace.....	W. C. Wren.....	140, 606	July 8, 1873	243	82	4	39
Meter: See Fluid-meter. Gas-meter. Liquid-meter. Rotary meter. Water-meter. Way-meter.							
Metronome.....	J. A. Heckenbach.....	136, 435	Mar. 4, 1873	71	25	3	251
Micrometer-gage.....	A. Bonnaz.....	141, 915	Aug. 19, 1873	473	155	4	190
Middlings-bolt.....	A. G. H. and W. Mowbray.....	144, 783	Nov. 18, 1873	529	180	4	544
Middlings-purifier.....	J. Bandon and J. Wiggins, jr.....	143, 490	Oct. 7, 1873	78	26	4	387
Middlings-purifier.....	F. Bleckman.....	143, 118	Sept. 23, 1873	701	241	4	332
Middlings-purifier.....	W. A. Clarke.....	144, 017	Oct. 28, 1873	600	{ 198 199 }	4	457
Middlings-purifier.....	J. H. Dedrick.....	142, 086	Aug. 26, 1873	640	{ 210 211 }	4	214
Middlings-purifier.....	C. S. Fuller.....	144, 329	Nov. 4, 1873	129	43, 44	4	489
Middlings-purifier.....	C. S. Fuller and H. J. Burdick.....	144, 056	Oct. 28, 1873	632	208	4	460
Middlings-purifier.....	A. R. Guilder.....	145, 170	Dec. 2, 1873	122	40, 41	4	595
Middlings-purifier.....	C. M. Hardenbergh, A. L. Miner, and W. J. Fender.....	139, 386	May 27, 1873	844	270	3	597
Middlings-purifier.....	A. Herr.....	141, 557	Aug. 5, 1873	127	40	4	145
Middlings-purifier.....	J. Hollingsworth.....	143, 346	Sept. 30, 1873	903	307	4	364
Middlings-purifier.....	A. Hunter and C. E. Whitmore.....	137, 207	Mar. 25, 1873	780	{ 257 258 }	3	337
Middlings-purifier.....	A. Hunter and C. E. Whitmore.....	142, 022	Aug. 19, 1873	561	186	4	192
Middlings-purifier.....	A. Hunter and C. E. Whitmore.....	142, 023	Aug. 19, 1873	562	186	4	198
Middlings-purifier.....	W. W. Huntley and A. P. Holcomb.....	135, 810	Feb. 11, 1873	395	{ 127 128 }	3	170
Middlings-purifier.....	C. Jauney.....	134, 750	Jan. 14, 1873	242	78	3	40
Middlings-purifier.....	N. Lacroix.....	139, 397	May 27, 1873	859	{ 274 275 276 }	3	598
Middlings-purifier.....	E. N. Lacroix.....	139, 585	June 3, 1873	121	40	3	619
Middlings-purifier.....	E. N. Lacroix.....	144, 988	Nov. 25, 1873	710	240	4	570
Middlings-purifier.....	C. E. McNeal.....	135, 571	Feb. 4, 1873	164	53	3	140
Middlings-purifier.....	G. Parker.....	144, 697	Nov. 18, 1873	459	155	4	538
Middlings-purifier.....	L. S. Reynolds.....	142, 729	Sept. 9, 1873	362	122	4	283
Middlings-purifier.....	I. Schofield.....	145, 906	Dec. 23, 1873	787	{ 257 258 }	4	685
Middlings-purifier.....	E. P. Welch.....	135, 952	Feb. 18, 1873	524	171	3	194
Middlings-purifier.....	E. P. Welch.....	135, 953	Feb. 18, 1873	525	172	3	194
Middlings-purifier.....	J. W. Wilson.....	139, 843	June 10, 1873	375	116	3	655
Middlings-purifiers, Feeding device for.....	R. Craik.....	143, 887	Oct. 21, 1873	465	156	4	436
Middlings-purifiers, Screen for.....	W. W. Huntley.....	143, 014	Sept. 23, 1873	617	210	4	325
Middlings, Purifying.....	W. W. Huntley and A. P. Holcomb.....	135, 811	Feb. 11, 1873	396		3	170
Middlings receiver, cooler, and duster.....	A. Hunter and C. E. Whitmore.....	137, 449	Apr. 1, 1873	151	49	3	369
Middlings-separator.....	R. L. Downton.....	143, 442	Oct. 7, 1873	39	14	4	384
Middlings-separator.....	A. R. Guilder.....	138, 019	Apr. 22, 1873	686	217	3	446

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Middlings-separator	H. P. Jones	138, 408	Apr. 29, 1873	1, 056	332	3	484
Milk and cream cooler	H. C. Baldwin	141, 688	Aug. 12, 1873	260	84	4	164
Milk and cream cooler	J. Prince and N. D. Martin	136, 542	Mar. 4, 1873	174	55	3	259
Milk-boiler	O. Zwicker	144, 819	Nov. 18, 1873	559	190	4	547
Milk-boiler alarm	S. Mangold	139, 072	May 20, 1873	554	174	3	566
Milk-can	J. F. Case	145, 334	Dec. 9, 1873	270	91	4	619
Milk-can, Metallic bottom for	T. M. Bell	134, 723	Jan. 14, 1873	222	71	3	38
Milk, Condensed	G. and J. G. Borden	144, 311	Nov. 4, 1873	114	.....	4	487
Milk-cooler	W. O. Campbell	136, 584	Mar. 11, 1873	224	75	3	272
Milk-cooler	S. F. Cowles	136, 215	Feb. 25, 1873	765	247	3	225
Milk-cooler	A. J. Crane and D. J. Hadley	144, 835	Nov. 25, 1873	586	209	4	559
Milk-cooler	C. A. Douglass	144, 448	Nov. 11, 1873	240	81	4	509
Milk-cooler	C. Graves, G. C. Powers, and C. O. Graves.	145, 732	Dec. 23, 1873	637	208	4	673
Milk-cooler	J. F. Hawkins	149, 919	July 15, 1873	516	173	4	69
Milk-cooler	W. Hodgdon	138, 088	Apr. 22, 1873	751	238	3	452
Milk-cooler	R. P. Main	146, 084	Dec. 30, 1873	061	310	4	710
Milk-cooler	E. Martin	144, 343	Nov. 4, 1873	142	47	4	490
Milk-cooler	W. D. McDonald	137, 557	Apr. 8, 1873	260	80	3	369
Milk-cooler	F. S. Oakes	135, 284	Jan. 28, 1873	740	238	3	107
Milk-cooler	J. Pearl	143, 840	Oct. 21, 1873	425	142	4	433
Milk-cooler	D. Smith	144, 572	Nov. 11, 1873	347	117	4	518
Milk-cooler	S. Spencer	135, 169	Jan. 21, 1873	613	200	3	74
Milk cooling and transporting apparatus	E. D. Gird	136, 150	Feb. 25, 1873	715	231	3	221
Milk, Preserving and condensing	G. and J. G. Borden	144, 310	Nov. 4, 1873	113	.....	4	487
Milk, Process of preserving	L. F. Kirchofer	141, 878	Aug. 19, 1873	443	.....	4	188
Milk-safe	J. P. Dale	139, 120	May 20, 1873	596	187	3	569
Mill:							
<i>See</i> Boring-mill.							
Cider-mill.							
Clay-mill.							
Coffee-mill.							
Crushing-mill.							
Fanning-mill.							
Flour-mill.							
Fulling-mill.							
Grinding-mill.							
Horn-mill.							
Paint-mill.							
Pug-mill.							
Quartz-mill.							
Rolling-mill.							
Saw-mill.							
Smut-mill.							
Starch-mill.							
Wind-mill.							
Mill-pick	J. Cummings	140, 118	June 24, 1873	642	202	3	692
Mill-pick	E. S. Forgy	138, 080	Apr. 22, 1873	744	236	3	451
Mill-pick	T. R. Way	137, 116	Mar. 25, 1873	696	231	3	331
Mill-pick	M. N. Young	142, 321	Aug. 26, 1873	834	277	4	230
Mill-pick, Combination	J. W. Nance and D. Lillard	139, 806	June 10, 1873	345	107	3	652
Mill-spindle	J. A. Hafner	146, 063	Dec. 30, 1873	946	305	4	708
Milling-machine	B. Lawrence	138, 260	Apr. 29, 1873	927	292	3	474
Milling-machine	G. T. Pillings	141, 012	July 22, 1873	620	209	4	87
Millstone-balance	G. W. Wilson	135, 740	Feb. 11, 1873	326	104	3	185
Millstone bush and spindle	R. S. Cathcart	137, 418	Apr. 1, 1873	123	40	3	367
Millstone cooling-device	J. J. Roth	143, 258	Sept. 30, 1873	823	282	4	358
Millstone cooling-device	E. D. Shanton and S. Shaver	138, 050	Apr. 22, 1873	720	228	3	449
Millstone-dress	J. P. Harris	138, 021	Apr. 22, 1873	688	217	3	447
Millstone dressing-machine	W. Farrow	142, 000	Aug. 19, 1873	548	181	4	197
Millstone dressing-machine	J. B. Harris	137, 367	Apr. 1, 1873	78	25	3	363
Millstone dressing-machine	F. A. Hoyt	136, 517	Mar. 4, 1873	146	47	3	257
Millstone dressing-machine	J. W. Parish	141, 288	July 29, 1873	886	291	4	116
Millstone dressing-machine	L. Randolph	141, 949	Aug. 19, 1873	499	164	4	193
Millstone dressing-machine	S. Shive and D. Savage	141, 392	July 29, 1873	990	321	4	134
Millstone dressing-machine, Diamond	F. S. Davenport	142, 153	Aug. 26, 1873	698	230	4	218
Millstone dressing-machine, Diamond	D. Larer	144, 851	Nov. 25, 1873	601	204	4	560
Millstone-driver	J. Planck	136, 863	Mar. 18, 1873	465	154	3	301
Millstone-pick	T. R. Way	141, 613	Aug. 5, 1873	178	57	4	149
Millstone-pick stock	F. Trump	137, 979	Apr. 15, 1873	634	200	3	433
Millstone-spindle, Oiling	J. J. Chubb	138, 074	Apr. 22, 1873	740	234	3	451
Millstone tram and level, Combined	J. Hutchins	135, 812	Feb. 11, 1873	397	128	3	170
Millstones, Device for adjusting	A. W. Winall	135, 393	Jan. 28, 1873	837	270	3	115
Millstones, Device for adjusting	A. W. Winall	137, 748	Apr. 8, 1873	433	133	3	403
Millstones, Device for leveling	W. Ring	139, 479	June 3, 1873	32	10	3	611
Millstones, Hanging	A. W. Winall	139, 642	June 3, 1873	173	57	3	623
Millstones, Staff-gage for dressing	L. B. Woolever	135, 956	Feb. 18, 1873	526	172	3	195
Minerals, Bit for boring	D. Shoemaker	142, 949	Sept. 16, 1873	556	188	4	310
Miner's bar	R. B. Platt	138, 098	Apr. 22, 1873	758	241	3	452
Miner's pick	R. K. Walton	144, 808	Nov. 18, 1873	551	187	4	546
Mirror, Hand	J. F. Dohan	145, 729	Dec. 23, 1873	634	207	4	673
Mirror-holder	W. Simpson	140, 851	July 15, 1873	453	154	4	64
Mirror, Window	A. and A. Olander	137, 383	Apr. 1, 1873	91	30	3	364
Mirror, Window	H. Voss and H. P. Brandt	141, 476	Aug. 5, 1873	60	18	4	140
Mirrors, &c., Adjustable-hanger for	J. Wright	145, 825	Dec. 23, 1873	713	234	4	679
Mirrors, Method of adjusting signaling	M. M. Kenney	138, 162	Apr. 22, 1873	810	258	3	456
Miter-box	C. Caton	139, 867	June 17, 1873	404	126	3	664
Miter-box	J. A. McKinstry and W. Walden	135, 832	Feb. 11, 1873	413	134	3	171
Miter-box	G. M. Stevens	140, 873	July 15, 1873	454	154	4	64
Miter-box	J. P. Tierney	142, 878	Sept. 16, 1873	495	169	4	304
Miter-box for cutting printer's rules	T. H. Mead	144, 406	Nov. 11, 1873	205	69	4	507
Miter-machine	D. Bull	140, 763	July 15, 1873	376	128	4	58
Miter-machine	T. Pooley	145, 751	Dec. 23, 1873	651	214	4	674
Mitering-machine	F. D. Green	140, 267	June 24, 1873	765	242	3	702

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Mitering-machine.....	C. Loetscher.....	145,354	Dec. 9, 1873	286	95	4	621
Mitering-machine.....	J. H. Van Ness.....	143,265	Sept. 30, 1873	823	284	4	358
Mitten.....	F. L. Oakley.....	138,273	Apr. 29, 1873	939	296	3	475
Mitten, Knit.....	O. F. Tripp.....	142,301	Aug. 26, 1873	819	271	4	228
Mixing-machine.....	J. W. Stockwell.....	140,171	June 24, 1873	687	216	3	695
Moccasin.....	T. Hersey.....	135,548	Feb. 4, 1873	144	46	3	139
Moccasin.....	A. Murgesson.....	142,252	Aug. 26, 1873	790	257	4	225
Mold:							
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Bottle-mold.							
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Glase-mold.							
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Ingot-mold.							
Metallic mold.							
Pipe-mold.							
Sealing-mold.							
Stereotype-mold.							
Suppository-mold.							
Molds, Device for blackwashing.....	J. B. Aston.....	142,661	Sept. 9, 1873	306	101	4	279
Molder's draw-spike.....	R. A. Thompson.....	137,637	Apr. 8, 1873	327	101	3	395
Molder's flask.....	C. Truesdale.....	138,960	May 13, 1873	440	138	3	544
Molder's pot or ladle.....	J. McCleary.....	136,927	Mar. 18, 1873	520	171	3	305
Molding apparatus.....	W. C. Amish.....	145,828	Dec. 23, 1873	715	235	4	679
Molding, Cutter-head for.....	E. H. Hinners.....	140,626	July 2, 1873	259	86	4	41
Molding-machine.....	W. J. Boda.....	142,890	Sept. 16, 1873	504	172	4	305
Molding-machine.....	G. W. Gheen.....	138,015	Apr. 22, 1873	682	216	3	446
Molding-machine.....	N. Jenkins.....	145,804	Dec. 23, 1873	695	228	4	678
Molding-machine cutter-head.....	J. Alloways.....	142,548	Sept. 9, 1873	212	69	4	271
Molding pipe.....	A. W. A. Logen.....	141,150	July 22, 1873	743	245	4	97
Molding plastic articles, Composition for.....	C. Legg.....	136,658	Mar. 11, 1873	283	.....	3	277
Molding sand, Apparatus for crushing, grinding, and mixing.....	J. O. Hancin.....	136,721	Mar. 11, 1873	336	111	3	281
Moldings, Apparatus for filling, polishing, and varnishing.....	M. Hamburger, I. J. Siskind, and A. Klein.....	134,599	Jan. 7, 1873	95	31	3	14
Moldings, Rolled iron.....	M. M. Manley and S. Sellers.....	134,553	Jan. 7, 1873	48	15	3	11
Mole-trap.....	R. I. Huggins.....	146,003	Dec. 30, 1873	892	289	4	704
Monument.....	J. C. Taylor.....	145,254	Dec. 2, 1873	193	67	4	600
Mop and mop-ringer, Combined.....	J. L. Boyden.....	135,400	Feb. 4, 1873	5	2	3	128
Mop-head.....	J. W. Barbour.....	135,753	Feb. 11, 1873	340	109	3	166
Mop-head.....	C. B. Clark.....	145,397	Dec. 9, 1873	322	109	4	624
Mop-head.....	J. Davis.....	142,328	Sept. 2, 1873	6	2	4	242
Mop-head.....	W. Duncan.....	134,739	Jan. 14, 1873	233	75	3	39
Mop-head.....	D. W. Marston and J. S. Skinner.....	145,958	Dec. 30, 1873	854	278	4	701
Mop-head.....	G. W. Wheat.....	135,679	Feb. 11, 1873	276	87	3	161
Mop-holder.....	C. L. Haines.....	136,912	Mar. 18, 1873	506	167	3	304
Mop-holder.....	E. M. Maramore.....	143,633	Oct. 14, 1873	217	73	4	407
Mop-wringer.....	A. W. Bunnell.....	144,828	Nov. 25, 1873	578	197	4	559
Mop-wringer.....	J. H. Newton.....	140,216	June 24, 1873	724	228	3	699
Mop wringer and scrubber combined.....	W. R. Winter.....	140,566	July 1, 1873	192	65	4	24
Mortar-mixer.....	A. A. Hoagland and W. Mickel.....	143,575	Oct. 14, 1873	167	56	4	402
Mortar-mixer.....	C. Pierce.....	141,947	Aug. 19, 1873	497	164	4	192
Mortar-mixer.....	C. W. Wasson.....	136,571	Mar. 4, 1873	197	65	3	261
Mortar mixer and grinder.....	E. Spaulding.....	139,338	May 27, 1873	802	256	3	594
Mortising-machine.....	J. Driver.....	140,257	June 24, 1873	756	239	3	701
Mortising-machine.....	E. Hammond.....	138,649	May 6, 1873	159	51	3	510
Mortising-machine.....	L. Houston.....	135,337	Jan. 28, 1873	789	255	3	111
Mortising-machine.....	E. J. Houston.....	135,917	Feb. 18, 1873	497	161	3	192
Mortising-machine.....	G. Muschar.....	134,815	Jan. 14, 1873	298	96	3	44
Mortising-machine.....	G. F. Outten.....	137,950	Apr. 15, 1873	608	191	3	431
Mortising-machine.....	J. H. Stahl.....	135,604	Feb. 4, 1873	201	62	3	143
Mortising-tool.....	H. K. Forbis.....	146,058	Dec. 30, 1873	943	304	4	708
Motion, Apparatus for preventing back.....	A. H. and J. H. Race.....	143,252	Sept. 30, 1873	817	280	4	357
Motion, Apparatus for reproducing.....	C. T. Chester.....	139,294	May 27, 1873	771	245	3	591
Motion, Converting rotary motion of a shaft into reciprocating.....	J. B. Siner.....	136,675	Mar. 11, 1873	300	99	3	278
Motion, Device for converting.....	W. M. Cox.....	145,931	Dec. 30, 1873	829	270	4	699
Motion, Device for converting.....	J. P. Taylor.....	145,599	Dec. 16, 1873	510	167	4	651
Motion, Device for converting.....	H. Wheeler.....	145,540	Dec. 16, 1873	463	151	4	647
Motion, Device for converting circular into reciprocating.....	L. Dame.....	135,697	Feb. 11, 1873	293	93	3	163
Motion, Device for transferring.....	W. H. Benson.....	140,878	July 15, 1873	473	160	4	66
Motion for machinery, Electrical stop.....	E. Maertens.....	140,287	June 24, 1873	783	248	3	704
Motion, Mechanical movement for converting oscillating into rotary.....	J. Peabody.....	135,288	Jan. 28, 1873	743	239	3	107
Motive-power.....	G. Meyer.....	137,256	Apr. 15, 1873	529	166	3	494
Motive-power, Device for transmitting.....	R. T. Smith.....	135,293	Jan. 28, 1873	747	241	3	108
Motive-power engines, Mode of recovering and regenerating steam in.....	F. M. H. Motard.....	142,038	Aug. 19, 1873	579	191	4	199
Motive-power, Spring.....	T. B. Fogarty.....	134,533	Jan. 7, 1873	28	9	3	9
Motor:							
<i>See</i> Air-motor.							
Churn-motor.							
Electro-magnetic motor.							
Fluid-motor.							
Hydraulic motor.							
Sewing-machine motor.							

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Motor	M. Comstock	138, 737	May 13, 1873	253	79	3	528
Motor	L. H. Dean	145, 490	Dec. 16, 1873	410	135	4	642
Motor	L. E. Truesdell	136, 286	Feb. 25, 1873	828	268	3	220
Motor-engine	T. D. Richardson	137, 865	Apr. 15, 1873	539	168	3	425
Motor for driving machinery	A. N. Proctor	142, 041	Aug. 19, 1873	583	192	4	199
Movement, Mechanical	J. Armstrong	142, 365	Sept. 2, 1873	39	14	4	245
Movement, Mechanical	C. W. Carr	135, 263	Jan. 28, 1873	724	231	3	106
Movement, Mechanical	J. H. Cranston	145, 402	Dec. 9, 1873	326	110	4	624
Movement, Mechanical	J. Dangier	140, 683	July 8, 1873	305	103	4	44
Movement, Mechanical	J. B. Doolittle	139, 499	June 3, 1873	50	16	3	613
Movement, Mechanical	H. Eickemeyer	139, 379	May 27, 1873	636	268	3	596
Movement, Mechanical	E. C. Hopping	137, 924	Apr. 15, 1873	587	185	3	429
Movement, Mechanical	L. V. Lewis	141, 800	Aug. 12, 1873	360	118	4	172
Movement, Mechanical	C. Meiners	138, 424	Apr. 29, 1873	1, 075	339	3	486
Movement, Mechanical	W. Oliver	142, 578	Sept. 9, 1873	238	77	4	273
Movement, Mechanical	W. Park	134, 766	Jan. 14, 1873	254	83	3	41
Movement, Mechanical	A. G. Waterhouse	137, 115	Mar. 25, 1873	695	231	3	331
Movements, Apparatus for producing intermittent rotative.	R. C. Reynolds	140, 951	July 15, 1873	549	184	4	72
Mower, Lawn	W. Allen	144, 725	Nov. 18, 1873	481	163	4	540
Mower, Lawn	T. Coldwell and G. L. Chadborn	136, 969	Mar. 18, 1873	553	184	3	308
Mower, Lawn	S. D. King	135, 563	Feb. 4, 1873	155	50	3	140
Mower, Lawn	S. D. King	137, 691	Apr. 8, 1873	376	117	3	399
Mower, Lawn	W. Sellers	143, 787	Oct. 21, 1873	379	126	4	429
Mower, Lawn	T. Soetbeer	139, 741	June 10, 1873	286	89	3	648
Mowing-machine	C. Colahan	140, 890	July 15, 1873	485	164	4	67
Mowing-machine	E. C. Hopping	145, 872	Dec. 23, 1873	755	246	4	682
Mowing-machine	W. A. Kirby	142, 111	Aug. 26, 1873	663	218	4	216
Mowing-machine	H. Michaux	136, 380	Mar. 4, 1873	26	9	3	247
Mowing-machine	H. Michaux	143, 025	Sept. 23, 1873	626	213	4	325
Mowing-machine	W. S. Stone	142, 053	Aug. 19, 1873	597	196	4	200
Mowing-machine	W. V. Walker	141, 611	Aug. 5, 1873	176	56	4	149
Mowing-machine	G. W. N. Yost	137, 817	Apr. 15, 1873	498	156	3	422
Mowing-machine knife-grinder	M. W. Knox	134, 809	Jan. 14, 1873	294	95	3	44
Mucilage	A. Kloczewski and D. Mindeleff	137, 213	Mar. 25, 1873	787	337	3	337
Mucilage-cup	J. E. Crosby	145, 155	Dec. 2, 1873	108	35	4	594
Muff	R. M. Seldis	135, 163	Jan. 21, 1873	609	198	3	84
Muff-lining	C. F. Butterworth	139, 942	June 17, 1873	470	147	3	670
Muff-stand	L. Bergtold	145, 330	Dec. 9, 1873	268	90	4	619
Music blackboard	O. B. Brown and H. G. Carey	145, 622	Dec. 16, 1873	529	173	4	652
Music-box cylinder, Manufacture of	A. Frankfeld	144, 084	Oct. 28, 1873	657	216	4	462
Music-desk, Piano	M. Doherty	134, 860	Jan. 14, 1873	337	108	3	47
Music-leaf turner	G. Dominy	135, 322	Jan. 28, 1873	771	249 } 250 } 251 }	3	110
Music-leaf turner	J. H. Gerry	139, 141	May 20, 1873	618	193	3	571
Music-leaf turner	J. B. Geyser	138, 631	May 6, 1873	144	47	3	509
Music-leaf turner	N. P. Hall	141, 644	Aug. 12, 1873	220	70	4	161
Music-leaf turner	L. F. Morawetz	134, 557	Jan. 7, 1873	51	16	3	11
Music-leaf turner	A. Rosenfeld	137, 797	Apr. 15, 1873	482	151	3	420
Music-leaf turner	G. W. White	140, 664	July 8, 1873	288	97	4	43
Music-notation	J. P. Powell	141, 013	July 22, 1873	622	209	4	87
Music-notation	E. P. Stewart	138, 104	Apr. 22, 1873	763	242	3	453
Music-rack	C. L. Ely	134, 530	Jan. 7, 1873	26	8	3	9
Music-stand	O. Schulze	140, 547	July 1, 1873	174	59	4	22
Musical blackboard	J. M. Thomson and J. Cordley	132, 714	May 6, 1873	221	69	3	515
Musical instrument	M. Cannon	139, 293	May 27, 1873	771	244	3	591
Musical instrument	W. Leigh	137, 219	Mar. 25, 1873	791	261	3	338
Musical instrument	A. Schoenhut	137, 243	Mar. 25, 1873	812	267	3	339
Musical instrument	J. and H. W. Whitney, jr	137, 643	Apr. 8, 1873	332	102	3	395
Musical instruments, Electro-pneumatic action for	W. F. and H. Schmoele, jr	145, 532	Dec. 16, 1873	457	149	4	646
Musical instruments, Pedal for	H. Haas	143, 509	Oct. 7, 1873	93	33	4	388
Musical instruments, Sounding-board bridge for	G. Woods	138, 725	May 6, 1873	232	72	3	516
Musical instruments, Sounding-plate for	A. Schoenhut	144, 148	Oct. 28, 1873	706	234	4	466
Musical wind-instrument	I. Fiske	138, 389	Apr. 29, 1873	1, 039	327	3	483
Musical wind-instrument	I. Fiske	143, 134	Sept. 23, 1873	712	244	4	333
Musical wind-instrument	G. E. Parker	140, 069	June 17, 1873	578	183	3	679
Musquito-canopy	W. Bourquigon	143, 119	Sept. 23, 1873	702	241	4	332
Mustard-pot	T. M. Schleier	135, 595	Feb. 4, 1873	191	59	3	142
N.							
Nail:							
See Capped nail.							
Cut-nail							
Horseshoe-nail.							
Picture-nail.							
Shoe-nail.							
Nail	W. N. Hall	135, 114	Jan. 21, 1873	567	184	3	81
Nail	B. T. Nichols	141, 810	Aug. 12, 1873	367	120	4	173
Nail-assorting apparatus	J. Coyne	139, 542	June 3, 1873	89	30	3	616
Nail-assorting machine	B. Berclander	138, 783	May 13, 1873	292	90	3	531
Nail-clincher	J. Kunz	134, 680	Jan. 7, 1873	172	56	3	20
Nail-cutting machine	C. W. Glidden	135, 797	Feb. 11, 1873	380	123	3	169
Nail-cutting machine	S. P. Hollis and H. P. Chess	135, 915	Feb. 18, 1873	495	161	3	192
Nail-cutting machine	M. Thibault	145, 696	Dec. 16, 1873	592	194	4	657
Nail-delivering machine	S. S. Putnam	145, 755	Dec. 23, 1873	657	215	4	675
Nail-distributor	A. Morrison	144, 407	Nov. 11, 1873	205	69	4	507
Nail-distributing machine	C. M. Chase	134, 852	Jan. 14, 1873	331	106	3	47
Nail-driving machine	A. Smith	145, 818	Dec. 23, 1873	707	232	4	679
Nail-extractor	G. J. Capewell	143, 496	Oct. 7, 1873	83	28	4	387
Nail-extractor	D. R. Moreland and C. Blocher	137, 945	Apr. 15, 1873	604	190	3	431
Nail-extractor	G. C. Taft	145, 975	Dec. 30, 1873	870	282	4	702
Nail machine, Cut	W. Haddock	144, 845	Nov. 25, 1873	596	203	4	560
Nail machine, Cut	E. A. Kimball	145, 504	Dec. 16, 1873	422	138 } 139 }	4	643

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Nail machine, Cut	J. Russell	144,220	Nov. 4, 1873	54	16	4	482
Nail-plate feeder	J. McNeeley	143,022	Sept. 23, 1873	624	212	4	325
Nail-plate feeder	S. K. Paden	137,710	Apr. 8, 1873	393	122	3	400
Nail-plate feeder	J. Poulson	145,681	Dec. 16, 1873	580	190	4	656
Nail-plate, Mechanism for feeding	R. C. Grant	136,235	Feb. 25, 1873	779	252	3	226
Nail selecting and delivering machine	A. Knowlton	135,345	Jan. 28, 1873	796	257	3	111
Nail selecting and delivering machine	A. Knowlton	136,074	Feb. 18, 1873	630	207	3	203
Nail-separating apparatus	A. Morrison	143,246	Sept. 30, 1873	811	279	4	357
Nail-separating device	H. B. Chess	145,720	Dec. 23, 1873	625	205	4	672
Nail-separating machine	B. Bevelander	135,312	Jan. 28, 1873	761	245 246	3	109
Napkin-holder and clasp, Child's table	D. Essex	136,146	Feb. 25, 1873	713	230	3	221
Neck-tie	R. R. Parker	138,097	Apr. 22, 1873	758	241	3	452
Neck-tie fastening	J. A. Hard	140,412	July 1, 1873	60	21	4	13
Neck-tie supporter	A. Komp	140,049	June 17, 1873	559	177	3	677
Neck-tie supporter	E. Peltz	136,538	Mar. 4, 1873	169	54	3	259
Needle and shuttle threader and knife	J. Slack	143,726	Oct. 14, 1873	308	101	4	413
Needle-case	W. J. Marchant and H. B. Hart	142,639	Sept. 9, 1873	286	94	4	277
Needle-case	G. Wempe	134,829	Jan. 14, 1873	313	100	3	45
Needle-cushion	W. H. Bixler	140,609	July 8, 1873	246	83	4	40
Needle-making machine	F. W. Mallett	138,419	Apr. 29, 1873	1,065 335 337	3	485	
Needle, Manufacture of latch	T. T. Mayne	140,150	June 24, 1873	669	210	3	694
Needle-setter, threader, and cutter	A. Johnston	135,479	Feb. 4, 1873	80	25	3	134
Needle-sharpening device	R. S. Barnum and H. C. Goodrich	142,552	Sept. 9, 1873	215	70	4	271
Needle-threader	F. R. Gaspray	144,974	Nov. 25, 1873	698	236	4	569
Needle-threading hook	H. Wells	145,978	Dec. 30, 1873	873	283	4	702
Needles, Machine for forming the hooks of machine	N. Paine	142,853	Sept. 16, 1873	483	163	4	303
Net-frame, Mosquito	N. Peterson and R. Roescher	136,456	Mar. 4, 1873	87	30	3	252
Net, Portable fly and mosquito	T. M. Prentiss	144,792	Nov. 18, 1873	536	183	4	545
Nickel-plating	I. Adams, jr.	136,634	Mar. 11, 1873	265		3	276
Nippers, &c., Cutting	P. Broadbooks	144,734	Nov. 18, 1873	488	165 166	4	541
Nitro-glycerine, Can for transporting	A. Hamar	137,439	Apr. 1, 1873	144	47	3	369
Nitro-glycerine, Manufacture of	A. Hamar	137,440	Apr. 1, 1873	144	47	3	369
Non-freezing battery	E. H. Ashcroft	145,143	Dec. 2, 1873	98	32	4	593
Nozzle for drawing liquors, Cut-off	F. C. Edwards	142,383	Sept. 2, 1873	58	19	4	246
Nozzle for hose-pipe, Stop	J. N. Allen	144,942	Nov. 25, 1873	672	228	4	567
Nozzle for locomotive, Exhaust	G. W. Richardson	136,619	Mar. 11, 1873	251	84	3	275
Nozzle, Hose	E. A. Day	136,309	Feb. 25, 1873	846	273	3	231
Nozzle, Hose-pipe	B. A. Berryman and A. B. Wakefield	137,881	Apr. 15, 1873	550	172	3	426
Nozzle, Hose-pipe	F. E. Hall	141,787	Aug. 12, 1873	348	115	4	171
Nozzle, Oil-can	G. H. Perkins	145,898	Dec. 23, 1873	780	255	4	624
Nozzle, Pump	C. O. Wilson	136,478	Mar. 4, 1873	108	36	3	254
Nozzle, Steam	W. Ebbitt	140,902	July 15, 1873	510	168	4	68
Nubia and vail, Combined	J. W. Tuttle	145,977	Dec. 30, 1873	872	283	4	702
Number printer, Consecutive	R. M. Evans	144,196	Nov. 4, 1873	22	6	4	480
Numbering heads	C. W. Dickinson	140,899	July 15, 1873	495	167	4	68
Numbering-machine	J. D. Smith	145,598	Dec. 16, 1873	508	167	4	650
Nursery-gate	J. W. Boughton	139,232	May 27, 1873	716	225	3	586
Nursery-gate	E. A. Tuttle	141,677	Aug. 12, 1873	250	79	4	163
Nut	F. L. Delfer	134,649	Jan. 7, 1873	141	45	3	18
Nut	W. Van Anden	137,395	Apr. 1, 1873	104	34	3	365
Nut, Adjustable	J. Russell	136,184	Feb. 25, 1873	741	239	3	223
Nut and bolt fastening	J. T. Antill and W. J. Sloan	141,980	Aug. 19, 1873	532	173	4	195
Nut and bolt fastening	P. F. King	141,877	Aug. 19, 1873	443	144	4	188
Nut and bolt fastening	E. B. Wingate	134,963	Jan. 14, 1873	427	136	3	54
Nut and coffee roaster	D. T. Gale	139,054	May 20, 1873	532	168	3	564
Nut and washer machine	W. R. Wilbur	139,696	June 10, 1873	244	77	3	644
Nut fastening washer	H. P. Hood	134,990	Jan. 21, 1873	463	148	3	72
Nut for securing piston-head to piston-rod	J. Wheelock	140,328	June 24, 1873	822	261	3	707
Nut-lock	J. M. Allison	137,646	Apr. 8, 1873	334	103	3	395
Nut-lock	M. L. Ballard	137,401	Apr. 1, 1873	108	35	3	366
Nut-lock	W. H. Bowman	144,886	Nov. 25, 1873	628	213	4	563
Nut-lock	E. A. Cooper	144,511	Nov. 11, 1873	291	98	4	514
Nut-lock	E. Czarniecki	140,119	June 24, 1873	643	202	3	692
Nut-lock	B. W. Davis	136,906	Mar. 18, 1873	502	166	3	304
Nut-lock	C. Dittman	144,964	Nov. 25, 1873	690	233	4	568
Nut-lock	H. W. Dopp	142,215	Aug. 26, 1873	748	247	4	222
Nut-lock	J. R. Eichenberger and C. G. Binkly	137,426	Apr. 1, 1873	131	42	3	367
Nut-lock	M. Hays	137,919	Apr. 15, 1873	584	184	3	429
Nut-lock	H. P. Hood and W. Coombs	135,553	Feb. 4, 1873	148	47	3	139
Nut-lock	C. A. Howard	144,905	Nov. 25, 1873	641	218	4	564
Nut-lock	A. C. Hull and J. S. Brown	139,467	June 3, 1873	21	7	3	610
Nut-lock	E. Kaylor	145,427	Dec. 9, 1873	349	117	4	625
Nut-lock	G. W. Keen	137,453	Apr. 1, 1873	155	50	3	369
Nut-lock	L. Leeds	146,081	Dec. 30, 1873	958	309	4	709
Nut-lock	K. H. Loomis	142,709	Sept. 9, 1873	344	116	4	222
Nut-lock	H. C. Lowe	142,858	Sept. 16, 1873	480	164	4	303
Nut-lock	L. J. Miller	138,268	Apr. 29, 1873	934	295	3	475
Nut-lock	I. E. Nagle	137,382	Apr. 1, 1873	91	30	3	364
Nut-lock	W. H. Nichols	135,242	Jan. 28, 1873	707	226	3	104
Nut-lock	S. Peatfield	144,131	Oct. 28, 1873	693	230	4	465
Nut-lock	A. Porter	139,280	May 27, 1873	739	234	3	588
Nut-lock	J. A. Reed	140,644	July 8, 1873	273	92	4	42
Nut-lock	D. Sawyer	143,097	Sept. 23, 1873	685	236	4	330
Nut-lock	A. C. Smith	146,102	Dec. 30, 1873	983	317	4	711
Nut-lock	J. B. Sweetland	146,106	Dec. 30, 1873	985	318	4	711
Nut-lock	C. H. Taylor	142,877	Sept. 16, 1873	494	169	4	304
Nut-lock	D. O. Thompson and B. A. Rice	135,864	Feb. 11, 1873	436	142	3	173
Nut-lock	F. P. Thompson	141,403	July 29, 1873	1,001	325	4	125
Nut-lock	E. Turner	137,513	Apr. 1, 1873	216	66	3	374
Nut-lock	W. B. Wait	138,214	Apr. 22, 1873	858	272	3	460

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Nut-lock	C. R. Watrous	146, 113	Dec. 30, 1873	992	380	4	712
Nut-lock	A. Williams	134, 781	Jan. 14, 1873	267	87	3	42
Nut-lock washer	M. F. McIntyre	136, 848	Mar. 18, 1873	454	150	3	300
Nut-locking device	J. Wetmore	135, 052	Jan. 21, 1873	523	169	3	77
Nut machine	J. Brauu	138, 066	Apr. 22, 1873	733	232	3	450
Nut, Rubber jam	W. Todd	134, 823	Jan. 14, 1873	309	98	3	45
Nut-tapping machine	S. W. Putnam, jr	140, 727	July 8, 1873	340	115	4	47
Nut-tapping machine	S. W. Putnam, jr	142, 511	Sept. 2, 1873	170	55	4	255
Nut-threading machine	O. P. and L. W. Briggs	137, 757	Apr. 15, 1873	445	138 139	3	417
Nuts and bolts, Machine for dressing	J. Kohler	135, 131	Jan. 21, 1873	584	190	3	82
Nuts, Device for dressing sides of	I. Doeg	144, 265	Nov. 4, 1873	81	26	4	464
O.							
Oakum, Machine for twisting	L. and C. Howard	135, 338	Jan. 28, 1873	791	256	3	111
Oakum with tar, &c., Coating	J. F. Stairs	146, 105	Dec. 30, 1873	985	318	4	711
Offal and manufacturing fertilizers, Treating	J. J. Storer	135, 383	Jan. 28, 1873	830	263	3	114
Offal and manufacturing fertilizers, Treating	J. J. Storer	136, 943	Mar. 18, 1873	533	176	3	306
Offal, Apparatus for treating	J. N. B. Bond	139, 759	June 10, 1873	302	93	3	649
Offal, Apparatus for treating	W. L. Bradley	134, 844	Jan. 14, 1873	325	104	3	46
Offal, Apparatus for treating	A. Edwards	135, 324	Jan. 28, 1873	775	251	3	110
Offal, Apparatus for treating	J. A. Slater	135, 733	Feb. 11, 1873	321	103	3	165
Offal-dryer	M. Anderson	139, 528	June 3, 1873	72	24	3	615
Office table and bed, Combined	D. Walker	135, 021	Jan. 21, 1873	495	159	3	75
Oil and paint can	J. T. Williams	136, 575	Mar. 4, 1873	200	67	3	261
Oil, Apparatus for testing hydro-carbon	J. B. Blair	139, 654	June 10, 1873	197	64	3	641
Oil, Apparatus for treating linseed	D. D. Templeton	136, 881	Mar. 18, 1873	466	159	3	302
Oil-cabinet	T. Miller	144, 856	Nov. 25, 1873	607	206	4	561
Oil-cakes, Mold for	R. MacDonald	144, 400	Nov. 11, 1873	200	68	4	506
Oil-can	J. E. Auld	141, 619	Aug. 12, 1873	200	63	4	159
Oil-can	G. H. Chinnock	142, 613	Sept. 9, 1873	265	87	4	275
Oil-can	J. R. Cole	141, 920	Aug. 19, 1873	476	156	4	191
Oil-can	W. G. Cowell	143, 810	Oct. 21, 1873	400	133	4	431
Oil-can	W. A. Foster	143, 567	Oct. 14, 1873	160	53	4	402
Oil-can	W. R. Hallock	145, 999	Dec. 30, 1873	889	288	4	704
Oil-can	M. W. House	141, 924	July 29, 1873	829	271	4	111
Oil-can	H. Keller	139, 318	May 27, 1873	790	251	3	592
Oil-can	A. P. Quinby	136, 544	Mar. 4, 1873	175	56	3	259
Oil-can	H. M. Smith	139, 927	June 17, 1873	438	143	3	669
Oil-can	O. H. Warren	143, 107	Sept. 23, 1873	693	238	4	331
Oil-can	F. C. Wilson	141, 615	Aug. 5, 1873	179	57	4	150
Oil can and torch, Combined	W. Keller	136, 738	Mar. 11, 1873	349	116	3	262
Oil-can, Apparatus for filling	E. F. Wilder	135, 680	Feb. 11, 1873	277	87	3	161
Oil-can stopper	L. R. Boyd	134, 842	Jan. 14, 1873	323	103	3	46
Oil-cloth printing-machine	C. Rommel	137, 962	Apr. 15, 1873	618	195	3	432
Oil-cloth printing-machine	W. E. Worth	145, 379	Dec. 9, 1873	304	102	4	622
Oil, Composition paint	J. McCafferty	137, 854	Apr. 15, 1873	531	173	3	424
Oil-cup	A. T. Ballantine	143, 216	Sept. 30, 1873	783	271	4	354
Oil dripping-can	L. R. Boyd	135, 072	Jan. 21, 1873	537	174	3	78
Oiler	C. E. and Z. B. Grandy	137, 361	Apr. 1, 1873	76	25	3	363
Oiler for steam-engines	A. Worden	141, 304	July 29, 1873	902	286	4	117
Oiler, Pneumatic	C. E. Decker	141, 703	Aug. 12, 1873	270	88	4	165
Oil from can, Apparatus for drawing	J. G. Evenden	140, 022	June 17, 1873	534	169	3	675
Oil from petroleum, Lubricating	J. K. Truax	137, 157	Mar. 25, 1873	730	233	3	333
Oil for paint, &c., Treating	D. D. Cattanch	146, 044	Dec. 30, 1873	928	303	4	707
Oil-press	W. M. Force	136, 716	Mar. 11, 1873	331	109	3	281
Oil purifying and filtering apparatus	D. M. Lamb	144, 621	Nov. 18, 1873	396	132	4	533
Oils, &c., Cask for transporting	W. Jenkins	144, 103	Oct. 28, 1873	671	222	4	463
Oil-tank, Self-measuring	J. Schalk, jr	139, 084	May 20, 1873	564	177	3	566
Oil-tool extractor	S. Buckley and P. H. Lawrence	140, 345	July 1, 1873	10	3	4	9
Oil to render it drying, Treating cotton-seed	H. Goldman	141, 503	Aug. 5, 1873	84	27	4	142
Oil, Wood-finishing compound or	F. Webster	138, 109	Apr. 22, 1873	767	253	3	453
Ointment	M. A. Curtis	136, 308	Feb. 25, 1873	845	281	3	231
Ointment	J. G. Hucks	139, 315	May 27, 1873	788	259	3	592
Ointment, Rheumatic	J. Geemen	135, 983	Feb. 18, 1873	549	183	3	196
Oleine from fatty matters, Extracting	C. F. A. Simonin	144, 000	Oct. 28, 1873	525	194	4	456
Ordnance and projectile therefor	B. O. Pole	143, 251	Sept. 30, 1873	816	280	4	357
Ordnance, Breech-loading	C. Gordon	138, 146	Apr. 22, 1873	795	254	3	455
Ore and manufacturing iron and steel, Apparatus for treating	E. Peckham	140, 158	June 24, 1873	675	312	3	695
Ore-concentrator	J. A. Peer	142, 646	Sept. 9, 1873	291	96	4	277
Ore-crushing stamp	J. M. McFarland	140, 425	July 1, 1873	69	25	4	14
Ore grinding and crushing mill, Feeder for	C. P. Stanford	139, 204	May 20, 1873	676	212	3	576
Ore grinding and crushing mill, Feeder for	C. P. Stanford	139, 523	June 3, 1873	67	23	3	614
Ore, Jigger for separating	W. H. Plumb	140, 535	July 1, 1873	164	56	4	22
Ore-pulverizer	S. Garduer	144, 330	Nov. 4, 1873	130	44	4	469
Ore-reducing furnace	J. H. Boyd	144, 184	Nov. 4, 1873	8	2	4	479
Ore-reducing furnace	J. H. Boyd	144, 186	Nov. 4, 1873	11	3	4	479
Ore-reducing furnace, Apparatus for feeding fuel to	J. H. Boyd	144, 185	Nov. 4, 1873	10	3	4	479
Ore-reducing furnace, Iron	J. Wilson	145, 471	Dec. 9, 1873	384	127	4	622
Ore roasting and smelting furnace	L. Stevens	141, 181	July 22, 1873	778	254 255	4	99
Ore roasting and treating furnace	Z. A. Willard	134, 782	Jan. 14, 1873	267	87	3	48
Ore, Rotating blanket-slucies for washing	W. H. Patton	142, 271	Aug. 26, 1873	795	262	4	226
Ores and metals, Flux for treating	P. N. Mackay	145, 580	Dec. 16, 1873	494	161	4	649
Ore-separator	H. Bradford	143, 492	Oct. 7, 1873	80	27	4	387
Ore-separator	H. Minot	145, 441	Dec. 9, 1873	359	120	4	626
Ore-separator, concentrator, and amalgamator	H. H. Eames	139, 556	June 3, 1873	95	32	3	617
Ore, Separating precious metals from	S. W. Kirk	144, 772	Nov. 18, 1873	521	173	4	544
Ores, Flux for smelting	S. D. Young	142, 126	Aug. 26, 1873	724	239	4	220
Ores, Furnace for chloridizing	I. M. Phelps	136, 261	Feb. 25, 1873	806	261	3	228
Ores, Reducing	J. H. Boyd	143, 662	Oct. 14, 1873	240	81	4	409
Ore-stamp	L. D. Webb	143, 480	Oct. 7, 1873	68	24	4	386
Ore-stamp feeder	J. D. Cusenbary and J. A. Mars	140, 250	June 24, 1873	750	237	3	701

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Ore-stamp feeder	J. Tullock	144, 714	Nov. 18, 1873	472	160	4	539
Ores, Stamp for crushing	G. D. Crocker	141, 493	Aug. 5, 1873	77	24	4	141
Ore-stamp mill	G. S. Olin	142, 172	Aug. 26, 1873	712	236	4	219
Ore-stamp, Sectional cam for	J. M. Thompson	140, 318	June 24, 1873	812	257	3	706
Ore, sulphurets, animal matter, paints, &c., Apparatus for treating.	H. H. and C. J. Eames	139, 664	June 10, 1873	205	67	3	642
Ore, Treating	M. Laffin	141, 147	July 22, 1873	741		4	97
Ore-washer	R. Gidley	139, 570	June 3, 1873	109	36	3	618
Ore-washer	I. T. Halstead	142, 248	Sept. 16, 1873	473	161	4	302
Ore-washer	W. Hooper	139, 390	May 27, 1873	850	272	3	598
Ore-washer	J. A. Peer	142, 647	Sept. 9, 1873	292	96	4	277
Ore-washer	R. Solliday	138, 948	May 13, 1873	431	135	3	543
Ore-washer	R. Solliday	145, 455	Dec. 9, 1873	370	123	4	627
Ore-washer	S. Wheeler	145, 771	Dec. 23, 1873	671	219	4	676
Ore-washer	T. Wren	138, 307	Apr. 29, 1873	974	306	3	478
Ore-washer, Gudgeon or bearing for	S. Thomas	142, 530	Sept. 2, 1873	187	61	4	257
Organ action, Pneumatic	T. Winaus	143, 602	Oct. 14, 1873	187	63, 64	4	404
Organ action, Reed	W. N. Manning	144, 781	Nov. 18, 1873	528	179	4	544
Organ case, Cabinet	A. J. Lorenzen	134, 569	Jan. 7, 1873	64	19	3	12
Organ-coupler	R. E. Letton	141, 444	Aug. 5, 1873	31	10	4	137
Organ, Fall for parlor	W. O. Trowbridge	144, 167	Oct. 28, 1873	724	242	4	467
Organ free-reed	H. E. Hodgson	14, 792	Aug. 12, 1873	354	116	4	171
Organ, Operating-stops of	H. R. Moore	136, 661	Mar. 11, 1873	289	96	3	277
Organ, Reed	C. Austin	135, 875	Feb. 18, 1873	464	149	3	190
Organ, Reed	R. Burdett	135, 687	Feb. 11, 1873	286	90	3	162
Organ, Reed	R. Burdett	144, 382	Nov. 11, 1873	186	64	4	505
Organ, Reed	S. J. Crockett	139, 874	June 17, 1873	411	128	3	665
Organ, Reed	A. Dreher	137, 350	Apr. 1, 1873	67	21	3	362
Organ, Reed	L. K. Fuller	139, 666	June 10, 1873	207	68	3	642
Organ, Reed	L. K. Fuller	142, 690	Sept. 9, 1873	329	110	4	280
Organ, Reed	W. H. Gerrish	134, 536	Jan. 7, 1873	31	10	3	10
Organ, Reed	W. J. Kent	142, 399	Sept. 2, 1873	70	23	4	248
Organ, Reed	W. J. Kent	144, 549	Nov. 11, 1873	327	110	4	516
Organ, Reed	R. E. Letton	134, 754	Jan. 14, 1873	244	80	3	40
Organ, Reed	R. E. Letton	141, 510	Aug. 5, 1873	89	28	4	142
Organ, Reed	M. C. Morgau	139, 912	June 17, 1873	446	139	3	668
Organ, Reed	E. Oakes	136, 614	Mar. 11, 1873	245	83	3	274
Organ, Reed	C. W. Palmer	139, 913	June 17, 1873	447	139	3	668
Organ, Reed	J. A. Smith	141, 468	Aug. 5, 1873	52	16	4	139
Organ, Reed	A. J. Lorenzen	139, 483	June 3, 1873	37	12	3	612
Organ, Reed	G. Woods	134, 830	Jan. 14, 1873	314	100	3	45
Organ, Reed	G. Woods	145, 078	Dec. 2, 1873	36	11, 12	4	588
Organ-reed, Adjustable tongue for	M. Procopé	143, 093	Sept. 23, 1873	682	234	4	330
Organ reed-board	W. Munroe	144, 121	Oct. 28, 1873	685	227	4	464
Organ reed-board	A. W. Wilcox	140, 750	July 8, 1873	363	123	4	49
Organ reed, Reed	M. O. Nichols	144, 409	Nov. 11, 1873	207	70	4	507
Organ reed, Reed	J. R. Perry	135, 581	Feb. 4, 1873	179	56	3	141
Organ reed, Reed	J. A. Smith	141, 469	Aug. 5, 1873	54	17	4	139
Organ-stop action	I. T. Packard	140, 381	July 1, 1873	39	13	4	11
Organ stop-action, Reed	J. A. Smith	137, 103	Mar. 25, 1873	683	227	3	330
Organ stop-action, Reed	J. A. Smith	141, 282	July 29, 1873	882	289	4	116
Organ swell, Reed	J. A. Smith	137, 101	Mar. 25, 1873	682	227	3	330
Organ-treadle	W. T. Doremus	135, 974	Feb. 18, 1873	540	179	3	196
Oscillating chair	M. T. Boulton	135, 515	Feb. 4, 1873	108	35	3	136
Ovals, Apparatus for turning	J. Williams	140, 300	June 24, 1873	824	262	5	707
Oven and range combined, Baker's	J. J. Figgott	138, 042	Apr. 22, 1873	711	225	3	449
Oven, Baker's	D. Donald	140, 686	July 8, 1873	307	104	4	44
Oven, Baker's	D. McKenzie	139, 802	June 10, 1873	340	105	3	652
Oven, Baker's	D. McKenzie	143, 522	Oct. 7, 1873	105	36, 37	4	389
Oven, Baker's	J. Rayney and W. Cairns	136, 546	Mar. 4, 1873	177	56, 57	3	259
Oven, Baker's	C. Robbins	137, 961	Apr. 15, 1873	617	194, 195	3	432
Oven for cooking-stove, Supplementary	C. O. Lino	142, 483	Sept. 2, 1873	144	47	4	253
Oven-reel	A. Crumble	142, 003	Aug. 19, 1873	544	180	4	196
Overflow-alarm	T. Mayes	144, 687	Nov. 18, 1873	450	152	4	538
Overall	E. Weil	143, 947	Oct. 21, 1873	512	172	4	440
Overshoe	G. Watkinson	144, 810	Nov. 18, 1873	552	187	4	546
Ox-shoe, Die for forming	J. Deeble	145, 633	Dec. 16, 1873	539	177	4	653
Ox-shoe, Machine for making	R. French	145, 561	Dec. 16, 1873	479	157	4	648
Ox-shoe, Machine for making	W. Hamilton	136, 915	Mar. 18, 1873	509	168	3	304
Oyster-can	C. H. Dexter	141, 124	July 22, 1873	717	239	4	95
Oyster-dredge	W. C. Hornfager and M. Fitzgibbons	141, 439	Aug. 5, 1873	26	8	4	137
Oyster-dredge	I. A. Ketchum	138, 164	Apr. 22, 1873	811	258	3	457
Oyster-dredge	J. Walmer	144, 169	Oct. 28, 1873	726	242	4	468
Oyster-dredge, Machine for raising	W. T. Howard	137, 550	Apr. 8, 1873	253	78	3	389
Oyster-opener	D. M. Cleary	144, 063	Oct. 28, 1873	639	210	4	460
Oyster-packing can	L. R. Comstock	135, 083	Jan. 21, 1873	543	177	3	79
Oyster-steaming vessel	C. S. Collins	136, 588	Mar. 11, 1873	227	76	3	273
Oyster-winder	W. H. Kanne	136, 737	Mar. 11, 1873	348	115	3	282
Ozone, Apparatus for making	C. H. Johnson	135, 226	Jan. 28, 1873	689	221	3	103
Ozone-generator	R. Henage	136, 511	Mar. 4, 1873	139	45	3	257
Ozone-generator	R. Henage	136, 512	Mar. 4, 1873	141	46	3	257
P.							
Package band and fastener	F. R. Hunt	137, 000	Mar. 18, 1873	581	193	3	310
Package-register	G. W. Moore	137, 211	Mar. 25, 1873	800	264	3	338
Packing-box	D. L. Bartlett	139, 106	May 20, 1873	582	182	3	568
Packing-box	L. A. Fullgraf	135, 108	Jan. 21, 1873	562	183	3	81
Packing-case	E. A. Pharo	135, 583	Feb. 4, 1873	80	56	3	141
Packing for hydrants, pumps, &c	J. W. Murphy	142, 264	Aug. 26, 1873	789	260	4	226
Packing for journals, shafting, &c., Lubricating	S. Baxendale	145, 384	Dec. 9, 1873	308		4	623
Packing for piston and stop-valve	P. Gifford	138, 633	May 6, 1873	146	47	3	509
Packing for piston-rod, &c., Metallic	J. C. Furness	138, 627	May 6, 1873	139	45	3	509

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Packing for piston-rods and valve-stems.....	W. Heston	141, 052	July 22, 1873	652	220	4	90
Packing for piston-rods, &c., Metallic.....	F. W. Pettee	135, 663	Feb. 11, 1873	262	82	3	160
Packing-machine.....	A. Ralph	142, 651	Sept. 9, 1873	295	97	4	278
Packing, Metallic piston.....	W. A. Boyden	143, 956	Oct. 28, 1873	544	180	4	453
Packing, Metallic piston.....	J. Massey	142, 640	Sept. 9, 1873	287	94	4	277
Packing or show-case.....	G. G. Bates	142, 073	Aug. 26, 1873	630	207	4	213
Packing, Piston.....	G. R. Babbitt and W. A. Harris	136, 405	Mar. 4, 1873	46	16	3	249
Packing, Piston.....	C. S. Barry	140, 608	July 8, 1873	245	83	4	39
Packing, Piston.....	J. C. Budd	143, 057	Sept. 23, 1873	656	225	4	328
Packing, Piston.....	J. W. Carey	140, 244	June 24, 1873	746	235	3	701
Packing, Piston.....	C. A. Hodge	142, 914	Sept. 16, 1873	525	178	4	307
Packing, Piston.....	T. J. Mayall	143, 705	Oct. 14, 1873	288	95	4	412
Packing, Piston.....	C. E. Perkins	138, 690	May 6, 1873	196	62	3	513
Packing, Piston-rod.....	J. F. Hermance	137, 444	Apr. 1, 1873	148	48	3	369
Packing, Piston-rod, &c.....	L. Katzenstein	135, 127	Jan. 21, 1873	580	189	3	82
Packing, Piston-rod.....	T. Lord	137, 783	Apr. 15, 1873	470	147	3	419
Packing, Piston-rod.....	W. W. Vanderbilt	140, 973	July 15, 1873	572	192	4	74
Packing, Well.....	J. H. Luthor	134, 995	Jan. 21, 1873	468	150	3	73
Packings, &c., Rubber compound for the manufacture of.	C. L. Frink	142, 908	Sept. 16, 1873	520		4	307
Pad:							
<i>See</i> Bosom-pad.							
Bronzing-pad.							
Collar-pad.							
Harness-pad.							
Harness coach-pad.							
Harness saddle-pad.							
Harness and saddle pad.							
Horse foot-pad.							
Ink-pad.							
Inking-pad.							
Medicated pad.							
Shoulder-pad.							
Truss-pad.							
Paddle-float, Means of adjusting.....	J. B. Baptista	142, 835	Sept. 16, 1873	462	156	4	302
Paddle, Revolving.....	J. W. McDermott	135, 653	Feb. 11, 1873	252	80	3	159
Paddle-wheel.....	I. Atkins	142, 322	Sept. 2, 1873	1	1	4	242
Paddle-wheel.....	J. C. Chaffee	138, 856	May 13, 1873	359	111	3	537
Paddle-wheel.....	A. C. Fletcher	145, 857	Dec. 23, 1873	741	242	4	681
Paddle-wheel.....	T. J. Walker and H. H. Holbrook	134, 620	Jan. 7, 1873	111	37	3	16
Paddle-wheel, Feathering.....	G. K. Glenn	141, 135	July 22, 1873	729	242	4	96
Paddle-wheel, Feathering.....	A. Lefebvre	138, 900	May 13, 1873	393	123	3	540
Padlock.....	F. Egge	145, 853	Dec. 23, 1873	738	241	4	681
Padlock.....	H. Essex	140, 617	July 8, 1873	252	85	4	40
Padlock, &c.....	D. K. Miller	143, 990	Oct. 28, 1873	572	190	4	455
Padlock, Combination.....	W. N. Hall	145, 864	Dec. 23, 1873	747	244	4	682
Padlock, Combination.....	J. Kittle	135, 992	Feb. 18, 1873	558	184	3	197
Padlock, Combination.....	W. C. Langeman	144, 114	Oct. 28, 1873	679	225	4	464
Pail and commode, Combined slop.....	G. Howland	136, 999	Mar. 18, 1873	581	193	3	310
Pail, Dinner.....	E. C. Luks	138, 569	May 6, 1873	93	29	3	505
Pail, Dinner.....	F. Molan	137, 230	Mar. 25, 1873	799	264	3	338
Pail, Dinner.....	R. S. Squires	138, 946	Feb. 18, 1873	520	170	3	194
Pail, Folding.....	A. Du Chateau and J. D. Williams	144, 893	Nov. 25, 1873	632	215	4	563
Pail, Milking.....	A. J. Johnson	142, 917	Sept. 16, 1873	526	179	4	307
Pail, Milking.....	G. T. Lincoln	139, 679	June 10, 1873	220	71	3	643
Pail, Milking.....	H. Springer	137, 731	Apr. 8, 1873	415	127	3	402
Pails, &c., Non-conducting filling for walls of dinner.	O. M. Spiller	144, 232	Nov. 4, 1873	57	17	4	482
Paint.....	J. Lucas	141, 802	Aug. 12, 1873	361		4	172
Paint, &c., Box or can for.....	H. Tucker	139, 214	May 20, 1873	684	215	3	576
Paint-can.....	G. H. Chinnoek	142, 612	Sept. 9, 1873	264	87	4	275
Paint-can.....	J. R. Cole	145, 400	Dec. 9, 1873	324	109	4	624
Paint-can.....	J. W. Masury	145, 670	Dec. 16, 1873	570	187	4	656
Paint-can.....	H. Miller	136, 085	Feb. 18, 1873	639	209	3	203
Paint-can.....	H. Miller	145, 440	Dec. 9, 1873	358	120	4	626
Paint-can.....	O. E. Walker	142, 971	Sept. 16, 1873	576	195	4	311
Paint-can and device for removing its contents	F. L. Miller	145, 439	Dec. 9, 1873	357	119	4	626
Paint, Can for packing and transporting.....	H. Tucker	134, 947	Jan. 14, 1873	414	132	3	53
Paint-can, Metal.....	G. H. Chinnoek	139, 868	June 17, 1873	404	126	3	664
Paint-can, Metal.....	G. H. Chinnoek	139, 869	June 17, 1873	405	127	3	664
Paint-can, Sealing.....	J. F. Walter, jr.	140, 748	July 8, 1873	361	122	4	49
Paint-compound.....	C. Campbell	141, 544	Aug. 5, 1873	118		4	145
Paint-compound.....	H. Nelson	139, 729	June 10, 1873	272		3	647
Paint-compound.....	J. Quarterman	143, 841	Oct. 21, 1873	426		4	433
Paint-compound.....	C. A. Sitzler	145, 130	Dec. 2, 1873	89		4	592
Paint-compound.....	F. A. Stall	141, 897	Aug. 19, 1873	458		4	189
Paint-compound.....	J. S. Vosseller	135, 049	Jan. 21, 1873	521		3	77
Paint, Compound for mixing.....	J. L. Newell	141, 231	July 29, 1873	836		4	112
Paint, Fire-proof.....	C. P. Crossman	134, 522	Jan. 7, 1873	19		3	9
Paint for oil-barrels, &c.....	W. L. Elkins	140, 817	July 15, 1873	426		4	62
Paint for roofing, wood, metals, &c.....	J. C. and C. M. Bills	140, 991	July 22, 1873	601		4	85
Paint-grinding mill.....	T. R. Kingdon and L. P. Dodge	136, 838	Mar. 18, 1873	446	148	3	299
Paint-mill.....	R. Byrne	144, 656	Nov. 18, 1873	426	143	4	536
Paint vessel and package.....	J. W. Masury	141, 061	July 22, 1873	659	222	4	90
Painters, Composition-filling for.....	R. Sharp	141, 518	Aug. 5, 1873	95		4	143
Painters' jack, Carriage.....	A. G. Rykert	135, 593	Feb. 4, 1873	169	59	3	142
Painters' pot.....	T. E. Costello	137, 423	Apr. 1, 1873	128	42	3	367
Painters' stand, Carriage.....	J. Burch	135, 771	Feb. 11, 1873	354	113	3	167
Painting barrels, casks, &c., Machine for.....	W. Burnet and G. B. Fisher	141, 542	Aug. 5, 1873	114	36	4	144
Painting, Oil.....	J. C. Walker	134, 827	Jan. 14, 1873	313		3	45
Pan:							
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Dish-pan.							
Dust-pan.							
Evaporating-pan.							
Scale-pan.							
Sheet-metal-pan.							
Stew-pan.							
Vacuum-pan.							
Pans, Machine for forming.	E. Kuessner	145,660	Dec. 16, 1873	561	184	4	665
Panel-moulding machine.	C. H. Williamson and J. H. Allyn	136,800	Mar. 11, 1873	401	123	3	287
Panel-raising machine	F. D. Green	142,015	Aug. 19, 1873	555	183 184	4	197
Panel, Wooden	E. Maitre	145,221	Dec. 2, 1873	164	56	4	598
Pannier	J. S. Colby	141,854	Aug. 19, 1873	411	134	4	186
Pantaloon	F. T. Hoyt	140,197	June 24, 1873	710	223	3	697
Pantaloon	E. T. Taylor	143,792	Oct. 21, 1873	383	127	4	430
Pantaloon, Steaming and drying apparatus for shaping.	E. B. Viets	144,644	Nov. 18, 1873	419	140	4	535
Pantaloon-stretcher	L. Kaltenbacher	142,025	Aug. 19, 1873	565	187	4	198
Pantaloon-stretcher	J. D. Ryan	144,703	Nov. 18, 1873	463	137	4	539
Pantaloon-tree	M. Taine	140,172	June 24, 1873	688	216	3	696
Pantaloon-tree	E. B. Viets	139,283	May 27, 1873	763	242	3	590
Pantaloon, &c., Waistband-fastening for	J. A. Haarvig	144,334	Nov. 4, 1873	134	45	4	489
Paper	H. E. Wagner	138,302	Apr. 29, 1873	969	3	4	477
Paper and card-board to fix marks by metallic pencils, Treating.	H. M. Johnston	144,678	Nov. 18, 1873	441	4	4	537
Paper bag	L. D. Benner	143,321	Sept. 30, 1873	875	299	4	362
Paper bag	G. H. Chinnock	139,870	June 17, 1873	406	127	3	665
Paper bag	O. W. Stow	144,238	Nov. 4, 1873	62	19	4	483
Paper-bag machine	H. G. Armstrong	139,104	May 20, 1873	580	182	3	568
Paper-bag machine	L. D. Benner	138,844	May 13, 1873	347	107 108	3	536
Paper-bag machine	L. C. Crowell	143,674	Oct. 14, 1873	250	84	4	409
Paper-bag machine	T. Hotchkiss	135,275	Jan. 28, 1873	732	235 236	3	106
Paper-bag machine	W. Liddell	143,358	Sept. 30, 1873	913	310	4	365
Paper-bag machine	M. Murphy	135,145	Jan. 21, 1873	595	194	3	83
Paper-bag machine	J. S. Ostrander	143,925	Oct. 21, 1873	493	166 167	4	439
Paper-bag machine	J. P. Raymond	145,125	Dec. 2, 1873	80	25, 26	4	592
Paper bags, Machine for making	C. F. Annan	134,580	Jan. 7, 1873	75	24	3	13
Paper bag-making machine	G. Dunham	141,862	Aug. 19, 1873	419	136 140	4	187
Paper bags, Method of constructing.	L. C. Crowell	137,533	Apr. 8, 1873	239	73	3	288
Paper box	M. W. Dillingham	135,469	Feb. 4, 1873	71	22	3	133
Paper box	E. M. Slayton	144,800	Nov. 18, 1873	344	185	4	545
Paper box	G. K. Snow	140,736	July 8, 1873	348	117	4	48
Paper-box fastening	D. Crannell	144,513	Nov. 11, 1873	293	99	4	514
Paper box, Machine for making.	G. L. Jaeger	136,246	Feb. 25, 1873	789	255 256	3	227
Paper-clip	T. Orton	139,019	May 20, 1873	504	158	3	562
Paper-clip	M. A. Wheeler	139,285	May 27, 1873	765	242	3	590
Paper collar	C. A. Brown	138,849	May 13, 1873	352	109	3	536
Paper-collar machinery, Die for	G. Harrington and G. D. Rollins	139,146	May 20, 1873	622	194	3	571
Paper-cutter, Rotary	H. S. Miller	139,176	May 20, 1873	653	204	3	574
Paper-cutting machine	G. A. Walker	145,464	Dec. 9, 1873	377	125	4	628
Paper-cutting machine, Clamp for	E. T. Hazeltine and C. Park	137,920	Apr. 15, 1873	584	184	3	429
Paper, Designer's	A. Akeroyd	145,269	Dec. 9, 1873	213	73	4	615
Paper, Die for cutting out ornamental forms of	A. Delkescamp	137,063	Mar. 25, 1873	648	215	3	327
Paper-drier	E. A. Seeley	143,999	Oct. 29, 1873	585	194	4	456
Paper-feeding machine	J. T. Ashley	138,983	May 20, 1873	471	148	3	559
Paper-feeding machine	J. T. and F. Ashley	143,740	Oct. 21, 1873	337	113	4	426
Paper-feeding machine	M. Piedra	136,668	Mar. 11, 1873	292	98	3	278
Paper-feeding machine	S. Scholfield and C. E. Baker	135,597	Feb. 4, 1873	193	60	3	142
Paper-feeding machine	S. Scholfield and C. E. Baker	135,598	Feb. 4, 1873	194	60	3	142
Paper-feeding machine	S. Scholfield and C. E. Baker	135,599	Feb. 4, 1873	197	61	3	143
Paper-feeding machine	C. M. Wielings	145,542	Dec. 16, 1873	465	152	4	647
Paper folding, cutting, and trimming machine	C. Chambers, jr.	141,487	Aug. 5, 1873	67	21	4	140
Paper-folding machine	C. Chambers, jr., and W. Mendham.	141,489	Aug. 5, 1873	71	22, 23	4	140
Paper-folding machine	C. Chambers, jr., and W. Mendham.	141,490	Aug. 5, 1873	73	23	4	141
Paper-folding machine	R. J. Stuart	144,160	Oct. 28, 1873	717	239 240	4	467
Paper-folding machine	G. W. D. Upton	141,405	July 29, 1873	1,004	326	4	125
Paper-folding machine	A. Washburn	141,742	Aug. 12, 1873	301	99	4	168
Paper-folding machines, Packing and carrying device for.	W. Farrington	141,501	Aug. 5, 1873	82	26	4	142
Paper-folding machines, Packing-box for	C. Chambers, jr.	141,486	Aug. 5, 1873	66	21	4	140
Paper-folding machine, Packing-device for	C. Clark	141,491	Aug. 5, 1873	75	23	4	141
Paper folding, pasting, and inserting machine	C. Chambers, jr.	141,488	Aug. 5, 1873	69	22	4	140
Paper for bank-notes, &c., Safety	J. Jameson	137,775	Apr. 15, 1873	463	3	4	419
Paper from grain, Process of manufacturing	C. V. and J. Stehlin and H. A. Hahaan.	144,294	Nov. 4, 1873	102	4	4	486
Paper-holder shelf	G. V. Hawkins	144,763	Nov. 18, 1873	514	174	4	543
Paper-machine	C. Whealen	144,172	Oct. 28, 1873	728	243	4	468
Paper-machine, Apparatus for repairing knotter, strainer, or screen plates of.	J. Robertson	140,166	June 24, 1873	682	214	3	695
Paper-machine belt-guide	R. Hutton	140,418	July 1, 1873	64	23	4	13
Paper-machine, Dandy-roller for	J. Whitehead	143,801	Oct. 21, 1873	393	130	4	430
Paper-machine, Stuff-regulator for	D. Hamel	144,902	Nov. 25, 1873	639	217	4	564
Paper-machine, Suction-apparatus for	W. McLaughlin	138,173	Apr. 22, 1873	821	261	3	457
Paper-making machine	N. Keely	141,358	July 29, 1873	959	312	4	122

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Paper-product	J. L. Kendall	144,548	Nov. 11, 1873	327	110	4	516
Paper-pulp engine	S. Moore and R. H. Hurlbnt	144,557	Nov. 11, 1873	333	112	4	517
Paper-pulp, Manufacture of	C. D. Brown and E. B. Denison	145,620	Dec. 16, 1873	528		4	652
Paper-pulp, Process of disintegrating woody fiber for	T. B. Armitage	142,550	Sept. 9, 1873	213		4	271
Paper-pulp, Treating fibrous substances for	A. Ungerer	143,546	Oct. 7, 1873	132	44	4	391
Paper-pulp washing-machine	S. and J. Deacon	145,159	Dec. 2, 1873	112	37	4	594
Paper-pulp, Wood-grinder for	M. S. and M. E. Otis	144,354	Nov. 4, 1873	152	50	4	491
Paper-shears	W. P. Deane	139,373	May 27, 1873	829	266	3	596
Paper-sizing	P. Grady	134,797	Jan. 14, 1873	222		3	440
Paper-stock, Manufacture of	H. T. Sturdevant	143,940	Oct. 21, 1873	506	171	4	433
Paper-stock, Process of treating fibrous substances for	T. Routledge	137,484	Apr. 1, 1873	185	58	3	372
Paper-stock, Treating fibrous substances in the manufacture of	T. Routledge	141,016	July 22, 1873	624	210	4	87
Paper-stock washing-machine	G. L. Lovett	137,696	Apr. 8, 1873	381	118	3	399
Paper-weight and sponge-holder combined	D. R. Manning	145,883	Dec. 23, 1873	767	250	4	681
Parer, Apple	G. Bergner	135,622	Feb. 11, 1873	226	71	3	157
Parer, Apple	W. A. C. Oaks	141,070	July 22, 1873	669	225	4	91
Parer, corer, and slicer, Apple	J. Stewart and W. Campbell	140,315	June 24, 1873	807	226	3	706
Parer, corer, &c., Apple	G. W. Bennett	136,206	Feb. 25, 1873	757	245	3	224
Parer, Fruit	A. Turnbull and R. L. Webb	139,237	June 10, 1873	370	115	3	654
Passenger and freight elevator	S. Nash	141,513	Aug. 5, 1873	91	28	4	142
Passenger-register	S. L. Cooper	141,492	Aug. 5, 1873	76	24	4	114
Paste, Apparatus for making	G. G. Noah	138,519	May 6, 1873	48	16	3	501
Pattern:							
<i>See</i> Dress-pattern.							
Embroidery-pattern.							
Pipe-pattern.							
Pipe-elbow pattern.							
Patterns, Manufacture of plaster	J. Semple	143,384	Sept. 30, 1873	936	317	4	367
Patterns to supporting-plates, Attaching	J. H. Harper	134,663	Jan. 7, 1873	156	51	3	19
Pavement	S. J. Davenport and J. Ward	143,965	Oct. 22, 1873	550	182	4	453
Pavement	W. H. De Valin	144,748	Nov. 18, 1873	500	170	4	542
Pavement	W. Kilburn	140,835	July 15, 1873	439	149	4	63
Pavement	M. E. Worrell	134,622	Jan. 7, 1873	113	37	3	16
Pavement, Composition	N. B. Abbott	139,848	June 17, 1873	387	121	3	663
Pavement, Composition	D. C. Heller	138,023	Apr. 22, 1873	689	218	3	447
Pavement, Composition for	G. L. Eagan	139,127	May 20, 1873	605		3	570
Pavement, Composition for	S. J. Whiting	142,601	Sept. 9, 1873	258		4	274
Pavement, Concrete	G. W. Dean	142,444	Sept. 2, 1873	110	35	4	251
Pavement, Laying cement	A. F. Shyma	140,956	July 15, 1873	553	185	4	72
Pavement, Laying concrete	J. W. and H. W. Krause, jr	138,030	Apr. 22, 1873	700	221	3	448
Pavement, Laying concrete	J. W. Snyder	139,272	May 27, 1873	752	238	3	589
Pavement, Stone	A. Meckert	136,747	Mar. 11, 1873	358	118	3	283
Pavement, Stone	T. D. Owens	143,587	Oct. 14, 1873	116	60	4	403
Pavement, Wood	M. H. Alexander	135,460	Feb. 4, 1873	65	20	3	132
Pavement, Wood	J. Q. Felt	134,985	Jan. 21, 1873	459	147	3	72
Pavement, Wood	E. W. Ferrin	146,019	Dec. 30, 1873	908	294	4	705
Pavement, Wood	H. M. Stow	137,973	Apr. 15, 1873	629	198	3	432
Pavement, Wood	C. Wheeler, jr	136,572	Mar. 4, 1873	198	66	3	261
Paving composition	A. Thiele	142,594	Sept. 9, 1873	251		4	274
Peach-cutter	W. J. Hill	139,714	June 10, 1873	257	81	3	645
Peaches, Boxes for assorting	E. W. Lockwood	136,252	Feb. 25, 1873	736	258	3	227
Peanut-hotter	D. Kellogg	144,108	Oct. 28, 1873	675	223	4	464
Peat-machine	H. and H. Clayton, jr., and F. Howlett	143,617	Oct. 14, 1873	203	69	4	406
Peg-cutter	C. H. Bacon	145,714	Dec. 23, 1873	620	203	4	672
Peg-cutter	A. Whittemore	145,469	Dec. 9, 1873	342	126	4	628
Peg-cutter, Hand	P. Summter	140,399	July 8, 1873	235	83	4	39
Peg-cutting machine for boots and shoes	A. Whittemore	140,803	July 15, 1873	411	139	4	61
Peg-float	P. A. Schoellhorn	136,551	Mar. 4, 1873	181	58	3	260
Peg-raap	J. W. Foard	135,419	Feb. 4, 1873	24	7	3	129
Pegs in boots and shoes, Machine for inserting screw	A. Cavalli	137,288	Apr. 1, 1873	8	3	3	358
Pegs, Machine for cutting out	J. D. Vinneedge	139,441	May 27, 1873	898	289	3	601
Pegging and trimming machine, Shoe	R. E. Draper	137,897	Apr. 15, 1873	564	177	3	427
Pegging-machine	G. W. Mauson	136,743	Mar. 11, 1873	355	117	3	283
Pegging-machine	G. L. Roberts	145,900	Dec. 23, 1873	781	255	4	684
Pegging-machine, Boot and shoe	E. Woodward	135,681	Feb. 11, 1873	278	88	3	161
Pegging-machine for boots and shoes	T. T. Prosser	145,754	Dec. 23, 1873	654	214	4	674
Pen and pencil case	F. Edgell	137,900	Apr. 15, 1873	570	179	3	428
Pen and pencil case	J. H. Knapp	142,243	Aug. 26, 1873	773	254	4	225
Pen and pencil case	C. H. Straightoff	143,859	Oct. 21, 1873	443	147	4	434
Pen, Fountain	J. Goodyear	140,771	July 15, 1873	382	131	4	59
Pen, Fountain	H. N. Hamilton	145,102	Dec. 2, 1873	59	19	4	390
Pen-holder	A. T. Cross	140,478	July 1, 1873	114	39	4	17
Pen-holder	J. S. Orndorff	141,287	July 29, 1873	886	290	4	116
Pen, Marking	D. S. Holman	143,347	Sept. 30, 1873	905	307	4	364
Pen, Ruling	W. O. Hickok	140,272	June 24, 1873	771	243	3	703
Pen-wiper	H. S. Ball	145,778	Dec. 23, 1873	677	221	4	676
Pen-wiper	J. H. Kidder	142,480	Sept. 2, 1873	141	46	4	253
Pen, Writing	R. H. Chiun	135,080	Jan. 21, 1873	542	176	3	79
Pen, Writing	J. Holland	135,118	Jan. 21, 1873	569	185	3	81
Pencil-case	A. T. Cross	140,477	July 1, 1873	114	39	4	17
Pencil-case	S. S. Rembert	140,842	July 15, 1873	444	151	4	64
Pencil-finishing machine	T. H. Miller	140,946	July 15, 1873	545	183	4	72
Pencil-holder	G. A. Smith	135,603	Feb. 4, 1873	200	62	3	143
Pencil, Lead	J. Gray	136,319	Feb. 25, 1873	856	275	3	232
Pencil, Lead	P. Hufeland	136,122	Feb. 18, 1873	671	219	3	305
Pencil, Lead	T. H. Miller	137,689	Mar. 18, 1873	674	224	3	329
Pencil-sharpener	E. M. Crandall	136,590	Mar. 11, 1873	228	77	3	213
Pencil-sharpener	A. E. Schatz	138,943	May 13, 1873	426	134	3	543
Perambulator	A. W. Richards	136,867	Mar. 18, 1873	468	155	3	301
Percolating purposes, Metallic fabric for scouring grain and	A. J. Vandegrift	135,608	Feb. 4, 1873	205	63	3	143

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Permutation-lock	E. W. Brettell	136,963	Mar. 18, 1873	548	{ 181 182	3	308
Permutation-lock	H. Gross	144,670	Nov. 18, 1873	434	147	4	536
Permutation-lock	H. Gross	145,171	Dec. 2, 1873	124	41	4	595
Permutation-lock	P. W. Hall	142,695	Sept. 9, 1873	332	{ 111 112	4	261
Permutation-lock	S. Miller	145,223	Dec. 2, 1873	166	57	4	598
Permutation-lock	E. Stockwell	142,529	Sept. 2, 1873	185	61	4	257
Permutation-lock	T. B. Worrell	135,957	Feb. 18, 1873	527	{ 173 174	3	195
Permutation-lock, Tumbler for	E. W. Brettell	145,618	Dec. 16, 1873	526	173	4	652
Pessary	E. P. Banning, sr	141,253	July 29, 1873	858	280	4	114
Pessary	C. E. Flack	145,854	Dec. 23, 1873	738	241	4	681
Pessary	O. M. Muncaster	141,069	July 22, 1873	668	224	4	91
Pessary-adjuster	O. M. Muncaster	136,449	Mar. 4, 1873	82	28	3	252
Petroleum, Apparatus and process for treating	S. Van Syckel	143,945	Oct. 21, 1873	510	172	4	440
Petroleum, Device for burning	F. A. Hull	135,476	Feb. 4, 1873	78	24	3	133
Petroleum, Treating heavy	J. J. Looney	139,009	May 20, 1873	496	.....	3	561
Phosphates, Manufacture of acid	H. Storch and F. M. Lyte	137,635	Apr. 8, 1873	321	.....	3	395
Photograph-burnisher	C. B. Conant	145,152	Dec. 2, 1873	105	34, 35	4	594
Photograph-burnisher	W. G. Entrekui	145,161	Dec. 2, 1873	114	37	4	594
Photograph-burnishing press	W. G. Entrekui and J. Bramble, jr.	139,132	May 20, 1873	608	190	3	570
Photograph chair, Child's	M. H. Prescott, jr.	138,329	May 27, 1873	796	254	3	593
Photograph-washing machine	L. V. Moulton	141,658	Aug. 12, 1873	233	73	4	162
Photographs, Guide for cutting out	J. Schofield	138,202	Apr. 22, 1873	850	269	3	460
Photographs, Roller-press for polishing	N. S. Bowditch	140,456	July 1, 1873	94	32	4	16
Photographic apparatus	W. A. Leggo	138,663	May 6, 1873	173	55, 56	3	511
Photographic back-ground	J. Buchtel	145,487	Dec. 16, 1873	407	134	4	642
Photographic back-ground	A. B. Costello	145,557	Dec. 16, 1873	477	156	4	648
Photographic cameo-embossing press	E. B. Barker	143,608	Oct. 14, 1873	195	66	4	405
Photographic camera	E. P. Spahn	139,090	May 20, 1873	569	178	3	567
Photographic monocular glasses	A. J. Dallemagne and L. Triboulet	146,052	Dec. 30, 1873	937	302	4	708
Photographic negative	J. Kirk	136,439	Mar. 4, 1873	74	.....	3	251
Photographic negative bath, Method of heating	H. J. Sunter	137,110	Mar. 25, 1873	691	230	3	330
Photographic negative, Process of retouching	D. H. Wright	144,723	Nov. 18, 1873	478	162	4	540
Photographic pictures, Guide for cutting	L. T. Young	145,711	Dec. 16, 1873	607	198	4	659
Photographic plate-holder	H. T. Anthony	138,359	Apr. 29, 1873	1,015	319	3	481
Photographic plate-holder	J. Buchtel	134,512	Jan. 7, 1873	10	4	3	8
Photographic plate-holder	W. Lewis	138,414	Apr. 29, 1873	1,062	334	3	485
Photographic plate-holder	A. Semmendinger	145,020	Nov. 25, 1873	738	249	4	572
Photographic printing-frame	W. H. Jacoby	143,577	Oct. 14, 1873	168	56, 57	4	403
Photographic sky-light	C. D. Masher	137,790	Apr. 15, 1873	475	149	3	420
Photography	E. L. Bergstresser	140,001	June 17, 1873	514	163	3	673
Photography	W. H. Hill	141,351	July 29, 1873	952	.....	4	121
Physical culture, Apparatus for	G. B. Windship	134,578	Jan. 7, 1873	72	23	3	12
Piano	G. C. Manner	141,152	July 22, 1873	745	246	4	97
Piano-action	F. Koth	143,986	Oct. 28, 1873	570	180	4	455
Piano-action	R. Kroter	145,879	Dec. 22, 1873	762	249	4	683
Piano-action	L. Kühner	135,820	Feb. 11, 1873	404	130	3	171
Piano-action	E. G. Newman and P. Anderson	140,428	July 1, 1873	71	25	4	14
Piano-action	F. L. Trayser	143,647	Oct. 14, 1873	228	77	4	408
Piano action, Upright	R. Kroter	137,005	Mar. 18, 1873	585	195	3	310
Piano action, Upright	G. C. Manner	137,377	Apr. 1, 1873	87	28	3	364
Piano and organ attachment	L. J. Frémaux	145,793	Dec. 23, 1873	687	225	4	677
Piano and organ keys	C. F. L. Goffrie and J. H. Schucht	137,544	Apr. 8, 1873	249	76	3	389
Piano, Bell	C. G. Buttkerit	142,768	Sept. 16, 1873	407	137	4	297
Piano-forte	W. W. Bennett	142,194	Aug. 26, 1873	731	241	4	221
Piano-forte action	A. K. Hobard	145,417	Dec. 9, 1873	340	114	4	625
Piano-forte action	J. Shaudelle	134,940	Jan. 14, 1873	409	131	3	53
Piano-forte bridge	W. C. Ellis	138,012	Apr. 22, 1873	680	215	3	446
Piano-forte lid, Raising	H. N. Oliver	136,090	Feb. 18, 1873	643	210	3	203
Piano-forte, organ, &c., Key for	E. P. Needham	140,528	July 1, 1873	160	54	4	21
Piano-forte, Upright	G. H. Davis	143,967	Oct. 28, 1873	552	183	4	453
Piano, Grand	G. Steck	143,789	Oct. 21, 1873	381	126	4	429
Piano-hammers, Capping	I. Bullard	138,001	Apr. 22, 1873	670	212	3	445
Piano-key, Machine for shaping	M. Pratt	141,380	July 29, 1873	979	318	4	123
Piano-lid prop-stick	M. Doherty	139,125	May 20, 1873	603	189	3	570
Piano pedal-attachment	G. C. A. Class	138,857	May 13, 1873	359	111	3	537
Piano pedal-attachment	C. W. Held, jr. and A. M. Baugh	134,886	Jan. 14, 1873	361	115	3	49
Piano pedal-stool	T. Springer	146,103	Dec. 30, 1873	983	317	4	711
Piano sounding-board	T. Kater	135,126	Jan. 21, 1873	579	188	3	82
Piano sounding-board	C. F. T. Steinway	135,857	Feb. 11, 1873	432	140	3	173
Piano-string bridge	W. C. Ellis	144,842	Nov. 25, 1873	593	202	4	560
Piano-truck	F. B. McGregor	145,887	Dec. 23, 1873	769	251	4	684
Picture and card exhibitor	R. F. Bostian	142,370	Sept. 2, 1873	43	15	4	245
Picture and other frames, Corner-piece for	T. Callanau	138,611	May 6, 1873	123	41	3	508
Picture-frame	J. A. Burch	144,599	Nov. 18, 1873	375	127	4	532
Picture-frame	H. S. Hale	138,884	May 13, 1873	382	119	3	539
Picture-frame	F. Reifschneider	143,464	Oct. 7, 1873	57	20	4	385
Picture-frame	J. L. Warren and J. W. Adderley	143,861	Oct. 21, 1873	444	148	4	434
Picture-frame and exhibitor, Combined	B. Anyan	144,648	Nov. 18, 1873	422	141	4	535
Picture-frames, Device for hanging	T. C. Barnard	142,981	Sept. 23, 1873	590	200	4	323
Picture-frames, Wooden mat for	H. S. Hale	146,067	Dec. 30, 1873	948	306	4	709
Picture-hanger	F. W. Ely	142,156	Aug. 26, 1873	701	221	4	218
Picture-mounting machine	E. B. Christmas	137,656	Apr. 8, 1873	343	106	3	396
Picture-nail	G. Vintschger	136,566	Mar. 4, 1873	193	64	3	261
Pictures, Coloring	C. S. Mettais	134,693	Jan. 7, 1873	183	.....	3	21
Pick, Manufacturing	D. Collins	138,455	June 3, 1873	9	3	3	609
Pickets, Machine for pointing	H. Balcom	136,807	Mar. 18, 1873	422	140	3	297
Pickets, Machine for pointing	A. B. Corby	135,467	Feb. 4, 1873	69	22	3	133
Pickets, Machine for pointing	A. J. Sutherland	145,766	Dec. 23, 1873	667	218	4	676
Pier, Iron front for stone	T. S. Macomber	145,808	Dec. 23, 1873	700	229	4	678
Pier, Iron front for stone	J. Abbott	138,222	Apr. 29, 1873	889	281	3	471
Pigeon-hole	C. J. Clements and E. P. Fowler	137,892	Apr. 15, 1873	560	176	3	427
Pigeon trap	W. F. Parker	140,532	July 1, 1873	162	55	4	21

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Pigeon-trap.....	N. B. Tyler.....	139, 836	June 10, 1873	370	115	3	654
Pigments containing zinc and lead, Manufacture of.....	F. Osgood.....	137, 474	Apr. 1, 1873	176		3	371
Pigments, Manufacture of oxide of zinc for.....	F. Osgood.....	138, 684	May 6, 1873	193		3	513
Pigments, Manufacture of white lead for.....	E. Milner.....	140, 721	July 8, 1873	337		4	47
Pigments, Treating zinc-dross skimmings for the manufacture of.....	F. Osgood.....	138, 685	May 6, 1873	193		3	513
Pile-driver.....	S. E. Baker.....	139, 853	June 17, 1873	390	122	3	663
Pile-driver.....	C. H. Smith.....	141, 086	July 22, 1873	685	230	4	92
Pile-driver, Explosive.....	H. Vogler.....	137, 514	Apr. 1, 1873	216	66	3	374
Pile or caisson, Sinking pneumatic.....	F. E. Sickers.....	138, 945	May 13, 1873	427	134	3	543
Pile or fagot.....	J. Barker.....	142, 666	Sept. 9, 1873	311	103	4	279
Piles, Means for sinking broken.....	E. C. Boobar.....	145, 483	Dec. 16, 1873	404	133	4	642
Pile-supporter.....	C. West.....	142, 972	Sept. 16, 1873	577	195	4	311
Pill-making machine.....	C. B. Littlefield.....	137, 008	Mar. 18, 1873	589	196	3	311
Pillow-spread frame.....	P. W. Van Est.....	135, 389	Jan. 28, 1873	834	269	3	115
Pin:							
<i>See</i> Clothes-pin.....							
Curling-pin.....							
Dowel-pin.....							
Rafting-pin.....							
Tidy-pin.....							
Wooden pin.....							
Pinchers and grappling-tool, Combined adjustable.....	S. B. Dexter.....	136, 907	Mar. 18, 1873	503	166	3	304
Pinchers, Die for the manufacture of.....	W. E. Snediker.....	142, 955	Sept. 16, 1873	562	190	4	310
Pinchers, Hog-ringing.....	J. C. Schoettle.....	144, 867	Nov. 25, 1873	615	209	4	562
Pinchers, Shoemaker's.....	W. H. Hanna.....	141, 047	July 22, 1873	648	218	4	89
Pine-leaves for use in the arts, Treating.....	C. E. Ramus.....	136, 671	Mar. 11, 1873	296		3	278
Pipe:							
<i>See</i> Asphalt-pipe.....							
Blow-pipe.....							
Cement-lined pipe.....							
Cigar-shaped pipe.....							
Dip-pipe.....							
Drain-pipe.....							
Earthen pipe.....							
Earthenware-pipe.....							
Fire-pipe.....							
Gas-pipe.....							
Hoe-pipe.....							
Molding-pipe.....							
Smoking-pipe.....							
Stove-pipe.....							
Tobacco-pipe.....							
Water-pipe.....							
Pipe and oil-well tubing, Coupling for.....	D. Jones.....	142, 792	Sept. 16, 1873	427	144	4	299
Pipe-coupling.....	D. Ashworth.....	144, 943	Nov. 25, 1873	673	228	4	567
Pipe-coupling.....	J. Conner.....	136, 365	Mar. 4, 1873	11	4	3	246
Pipe-coupling.....	W. B. Dunning.....	143, 229	Sept. 30, 1873	797	275	4	355
Pipe-coupling.....	D. Myers.....	138, 515	May 6, 1873	44	15	3	501
Pipe-coupling.....	L. T. Scofield.....	141, 893	Aug. 19, 1873	455	148	4	189
Pipe-coupling.....	A. C. Sweetland.....	141, 830	Aug. 12, 1873	384	126	4	174
Pipe-coupling for railway-cars.....	M. Henszey, jr.....	139, 150	May 20, 1873	626	195	3	571
Pipe-cutting and threading machine.....	W. D. Chase.....	143, 273	Sept. 30, 1873	833	287	4	359
Pipe-cutting tool.....	C. E. Haynes.....	135, 644	Feb. 11, 1873	246	77, 78	3	159
Pipe, &c., Device for cutting.....	A. J. Pennock and T. A. Chandler.....	136, 004	Feb. 18, 1873	568	187, 188	3	198
Pipe-elbow, Machine for forming sheet-metal.....	H. B. Morrison.....	142, 929	Sept. 16, 1873	537	183	4	308
Pipe-elbow pattern.....	J. K. Home.....	141, 645	Aug. 12, 1873	221	70	4	161
Pipe-joint.....	J. Demarest.....	144, 663	Nov. 18, 1873	430	145	4	536
Pipe-joint.....	T. T. Prosser and G. C. Morgan.....	137, 717	Apr. 8, 1873	403	124	3	401
Pipe, Manufacture of.....	G. L. Eagan.....	142, 448	Sept. 2, 1873	113		4	251
Pipe mold, Cement.....	F. I. Sage.....	141, 388	July 29, 1873	987	320	4	124
Pipe mold, Earthen.....	P. McIntyre.....	138, 035	Apr. 22, 1873	706	223	3	448
Pipe mold, Earthen.....	P. McIntyre.....	142, 168	Aug. 26, 1873	709	234	4	219
Pipe or car coupling.....	A. G. Story.....	138, 822	May 13, 1873	325	101	3	534
Pipe patterns, Mold for plaster.....	N. P. Bowler.....	142, 765	Sept. 16, 1873	405	137	4	287
Pipe-stem.....	J. Davis.....	139, 880	June 17, 1873	417	130	3	665
Pipe-stems, Machine for bending.....	J. Harvey.....	139, 148	May 20, 1873	624	195	3	571
Pipe-tip, Machine for milling.....	A. R. Weiss.....	138, 825	May 13, 1873	329	101	3	534
Pipe trap, Cement.....	A. A. Lovell.....	144, 277	Nov. 4, 1873	90	30	4	485
Pipe-wrench.....	W. H. Burton.....	135, 773	Feb. 11, 1873	355	114	3	167
Pipe-wrench.....	D. D. Ingram.....	143, 908	Oct. 21, 1873	481	162	4	437
Pipe-wrench.....	G. P. Moloney.....	139, 177	May 20, 1873	654	204	3	574
Pipe-wrench.....	E. S. Moulton.....	136, 089	Feb. 18, 1873	642	210	3	203
Pipe-wrench.....	J. Rigg.....	139, 530	June 3, 1873	65	22	3	614
Pipe-wrench.....	G. Warsop.....	140, 561	July 1, 1873	189	63	4	23
Pipe-wrench.....	H. B. Wheatcroft.....	145, 263	Dec. 2, 1873	202	69	4	601
Pipe-wrench.....	T. Williams.....	136, 350	Feb. 25, 1873	885	285	3	224
Pipe-wrench, Self-adjusting.....	T. Williams.....	136, 351	Feb. 25, 1873	886	285	3	224
Pipes, Swing-joint for.....	J. R. Worswick and E. Lewis.....	136, 577	Mar. 4, 1873	202	67	3	261
Piston.....	C. B. Allen.....	142, 659	Sept. 9, 1873	304	101	4	278
Piston and packing.....	A. K. Rider.....	143, 255	Sept. 30, 1873	820	281	4	357
Piston-head, Device for centering.....	O. S. Howard.....	141, 221	July 29, 1873	827	270	4	111
Piston in rotary steam-engine, Mode of lubricating.....	S. W. Wickes.....	141, 845	Aug. 12, 1873	397	129	4	175
Piston-rod, &c., Rushing for.....	G. W. Welsh.....	134, 955	Jan. 14, 1873	420	134	3	54
Piston-rod, &c., Stuffing-box for.....	P. W. Richards.....	135, 589	Feb. 4, 1873	186	58	3	142
Pitcher-cover.....	W. Bradley.....	134, 586	Jan. 7, 1873	82	26	3	13
Pitcher, Ice.....	E. A. Parker.....	138, 686	May 6, 1873	194	61	3	513
Pitcher, Molasses.....	T. B. Atterbury.....	140, 236	June 24, 1873	739	233	3	700
Pitcher, Molasses.....	W. C. King.....	138, 501	May 6, 1873	28	10	3	500
Pitcher, Molasses.....	E. B. Manning.....	140, 515	July 1, 1873	148	51	4	20
Pitcher, Molasses.....	D. C. Ripley.....	140, 793	July 15, 1873	403	137	4	60
Pitcher, Molasses.....	H. Wright.....	139, 698	June 10, 1873	245	77	3	644
Pitcher top, Molasses.....	G. P. Lang, jr.....	136, 076	Feb. 18, 1873	631	207	3	203
Pitcher top, Molasses.....	G. P. Lang, jr.....	137, 139	Mar. 23, 1873	716	237	3	332

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Pitman	H. Aufdembrinke	136,690	Mar. 11, 1873	309	102	3	279
Pitman	J. H. Carothers	142,611	Sept. 9, 1873	264	87	4	275
Pitman	J. H. Holly and J. F. Robertson	145,947	Dec. 16, 1873	847	275	4	700
Pitman	J. Swan	143,475	Oct. 7, 1873	64	22	4	386
Pitman	O. F. Thomas	141,902	Aug. 19, 1873	462	151	4	190
Pitman-connection	J. A. Shephard	140,312	June 24, 1873	805	255	3	706
Pitman, Mode of adjusting the length of	N. C. Stiles	135,380	Jan. 28, 1873	828	207	3	114
Pitman-rod	S. N. Wate, jr.	143,648	Oct. 14, 1873	229	77	4	408
Pitman with shaft, Mode of connecting	R. Cleaveland	142,616	Sept. 9, 1873	269	88	4	275
Placards, &c., Device for suspending and exhibiting	E. Worrell and B. C. Moore	145,709	Dec. 16, 1873	606	198	4	658
Plane	J. C. Spencer	138,591	May 6, 1873	109	35	3	506
Plane, Bench	W. H. Brown and D. F. Williams	144,381	Nov. 11, 1873	185	63	4	505
Plane, Bench	C. H. Hardy	143,072	Sept. 23, 1873	666	228	4	328
Plane, Bench	G. W. Huber and A. E. Flickinger	145,106	Dec. 2, 1873	61	20	4	590
Plane, Carpenter's	J. A. Traut	136,469	Mar. 4, 1873	101	34	3	254
Plane, Combination	A. Johnson	146,004	Dec. 30, 1873	893	290	4	704
Plane, Crozing and chamfering	A. M. Stratton	141,828	Aug. 12, 1873	383	125	4	174
Plane for cutting cigar-lighters	W. H. Drips	142,216	Aug. 26, 1873	749	247	4	222
Plane-iron	E. Quaest	145,311	Dec. 9, 1873	252	84	4	618
Plane, Match	J. Edwards	139,710	June 10, 1873	255	80	3	645
Plane, Match	C. G. Miller	142,037	Aug. 19, 1873	579	190	4	199
Plane, Metallic	J. A. Baines	141,535	Aug. 5, 1873	108	33, 34	4	144
Plane, Metallic	J. F. Baldwin	144,223	Nov. 25, 1873	575	196	4	558
Plane, Molding	A. S. Robertson	135,046	Jan. 21, 1873	517	167	3	77
Plane, Rabbet	F. Smith	143,101	Sept. 23, 1873	688	237	4	330
Plane, Scraping	J. Jones	135,341	Jan. 28, 1873	792	256	3	111
Plane, Splint	H. L. Wengant	143,737	Oct. 14, 1873	317	106	4	414
Plane, Surfacing	G. E. Franklin	138,625	May 6, 1873	138	45	3	509
Planer and lathe, Belt-shifting mechanism for	T. Reeve	142,814	Sept. 16, 1873	443	150	4	300
Planing clapboards, Machine for	J. Atkins	136,201	Feb. 25, 1873	754	243	3	224
Planing-machine	J. Atkins	140,235	June 24, 1873	739	233	3	700
Planing-machine	A. H. Frank and G. Spire	143,232	Sept. 30, 1873	799	275	4	356
Planing-machine	L. Gould	138,244	Apr. 29, 1873	909	287	3	473
Planing-machine	L. Gould	144,199	Nov. 4, 1873	24	7	4	480
Planing-machine	W. H. Gray	142,460	Sept. 2, 1873	123	40	4	252
Planing-machine	F. B. Miles	142,493	Sept. 2, 1873	157	51	4	254
Planing-machine	J. Miller	142,495	Sept. 2, 1873	158	51, 52	4	254
Planing-machine	S. W. Nelson	142,936	Sept. 16, 1873	545	185	4	309
Planing-machine	J. Rankin	145,012	Nov. 25, 1873	731	247	4	572
Planing-machine	T. Shaw	135,941	Feb. 18, 1873	515	168	3	194
Planing-machine	A. H. Shipman	138,703	May 6, 1873	208	66	3	514
Planing-machine	J. Utter	143,734	Oct. 14, 1873	315	105	4	414
Planing-machine	J. P. Woodbury	138,462	Apr. 29, 1873	1, 107	349	3	488
Planing-machine	S. A. Woods	144,588	Nov. 11, 1873	359	121	4	519
Planing-machine cutter-head	E. G. Richards	142,731	Sept. 9, 1873	364	123	4	293
Planing-machine cutter-holder	W. Walkington	135,182	Jan. 21, 1873	624	204	3	86
Planing-machine feed-roll	S. Inman	135,224	Jan. 28, 1873	686	221	3	103
Planing-machine, Metal	R. Harper	141,049	July 22, 1873	650	219	4	89
Planing-machine, Metal	J. T. Kichner and W. Odenatt	143,080	Sept. 23, 1873	671	231	4	329
Planing-machine, Metal	G. C. Larned	141,006	July 22, 1873	615	208	4	87
Planing-machine, Shaving-conductor for	W. Weaver	145,375	Dec. 9, 1873	300	101	4	622
Planing-machine, &c., Suction-tube for	G. C. Westover	146,115	Dec. 30, 1873	994	321	4	712
Planing or molding machine, Cutter-head for	J. D. Kimball	142,794	Sept. 16, 1873	429	145	4	209
Planing the edges of sheet-metal, Machine for	G. B. Raudlett	145,593	Dec. 16, 1873	505	166	4	650
Plant-protector	T. R. Timby	135,173	Jan. 21, 1873	617	201	3	85
Planter and cultivator combined, Corn	G. De Vany, jr.	140,254	June 24, 1873	753	238	3	701
Planter and fertilizer-distributor, Seed	E. P. Jones	140,046	June 17, 1873	556	176	3	677
Planter and fertilizer-distributor, Seed	R. Montfort	143,832	Oct. 21, 1873	419	139	4	432
Planter and guano-distributor, Cotton-seed	C. G. Wilson	143,211	Sept. 23, 1873	774	267	4	338
Planter and plow, Combined corn	J. T. McElhinney	137,309	Apr. 1, 1873	27	8, 9	3	359
Planter and seeder combined, Corn	R. Cowan	134,855	Jan. 14, 1873	343	106	3	47
Planter, Corn	D. G. Boardman	136,961	Mar. 18, 1873	547	180	3	397
Planter, Corn	E. C. Brown	142,675	Sept. 9, 1873	318	106	4	279
Planter, Corn	A. C. and G. F. Burgner	135,521	Feb. 4, 1873	113	36	3	136
Planter, Corn	G. J. Carpenter	140,114	June 24, 1873	637	200	3	692
Planter, Corn	J. Case	145,396	Dec. 9, 1873	320	108	4	623
Planter, Corn	W. J. C. Crandall	134,521	Jan. 7, 1873	17	6	3	9
Planter, Corn	J. S. Davis	145,728	Dec. 23, 1873	633	207	4	673
Planter, Corn	S. Dixon	135,098	Jan. 21, 1873	533	180	3	80
Planter, Corn	W. A. Eastin	134,984	Jan. 21, 1873	458	146	3	72
Planter, Corn	J. P. Fulghum and L. L. Lawrence	140,493	July 1, 1873	127	44	4	19
Planter, Corn	E. C. Gage	146,060	Dec. 30, 1873	944	304	4	708
Planter, Corn	T. A. Galt and G. S. Tracy	140,031	June 17, 1873	540	171	3	676
Planter, Corn	G. D. Haworth	134,747	Jan. 14, 1873	239	77	3	40
Planter, Corn	G. Hayes	139,672	June 10, 1873	214	69	3	642
Planter, Corn	E. E. Henegan	143,450	Oct. 7, 1873	46	16	4	384
Planter, Corn	G. O. Houck	138,158	Apr. 22, 1873	806	257	3	456
Planter, Corn	W. House	143,905	Oct. 21, 1873	478	161	4	437
Planter, Corn	C. Hutchins	143,826	Oct. 21, 1873	411	137	4	432
Planter, Corn	J. Ingels and W. R. Mount	135,813	Feb. 11, 1873	398	128	3	170
Planter, Corn	J. Klar	145,952	Dec. 30, 1873	850	276	4	701
Planter, Corn	M. Knickerbocker	142,922	Sept. 16, 1873	531	181	4	308
Planter, Corn	L. Lacey	138,259	Apr. 29, 1873	926	292	3	474
Planter, Corn	J. G. La Fouto	144,989	Nov. 25, 1873	712	241	4	570
Planter, Corn	N. C. Lamb	142,706	Sept. 9, 1873	342	115	4	281
Planter, Corn	A. C. Martin	137,700	Apr. 8, 1873	384	119	3	400
Planter, Corn	A. C. Martin and R. Ferguson	145,115	Dec. 2, 1873	69	22	4	591
Planter, Corn	W. Mull	141,723	Aug. 12, 1873	286	93	4	166
Planter, Corn	J. Nitkey	137,563	Apr. 8, 1873	264	82	3	390
Planter, Corn	E. Parmentier	140,432	July 1, 1873	74	26	4	14
Planter, Corn	D. Pierson, J. W. Macy, and J. D. Moore	136,337	Feb. 25, 1873	872	281	3	233

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Planter, Corn	H. A. Sharp	139, 269	May 27, 1873	749	237	3	589
Planter, Corn	J. Sheer	135, 942	Feb. 18, 1873	516	168	3	194
Planter, Corn	L. Sipe	144, 708	Nov. 18, 1873	467	158	4	539
Planter, Corn	A. D. Smith	134, 942	Jan. 14, 1873	410	131	3	53
Planter, Corn	A. F. Smith	143, 262	Sept. 30, 1873	826	283	4	358
Planter, Corn	A. N. Smith	143, 036	Sept. 23, 1873	636	217	4	326
Planter, Corn	J. D. Smith	136, 341	Feb. 25, 1873	277	282	3	234
Planter, Corn	A. Springsteen	144, 711	Nov. 18, 1873	469	159	4	539
Planter, Corn	A. H. Stark	139, 205	May 20, 1873	677	212 213	3	576
Planter, Corn	G. W. Starrett	142, 656	Sept. 9, 1873	300	99	4	278
Planter, Corn	J. Stutz	144, 233	Nov. 4, 1873	57	17	4	483
Planter, Corn	D. F. Taft	139, 340	May 27, 1873	804	256	3	594
Planter, Corn	S. and H. Vannuys	135, 178	Jan. 21, 1873	620	202	3	85
Planter, Corn	Z. D. Waters	140, 562	July 1, 1873	189	63, 64	4	23
Planter, Corn and cotton	J. W. Savage and F. M. Doty	139, 195	May 20, 1873	669	209	3	575
Planter, Corn and cotton	Z. B. Sims	139, 620	June 3, 1873	152	51	3	621
Planter, Cotton	R. E. Bowen	141, 753	Aug. 12, 1873	312	102	4	168
Planter, Cotton	J. M. Brooks	135, 766	Feb. 11, 1873	350	112	3	167
Planter, Cotton	W. J. Cox and W. T. Smith	141, 328	July 29, 1873	924	302	4	119
Planter, Cotton	C. H. Nixon	144, 764	Nov. 18, 1873	530	180	4	544
Planter, Cotton	G. Paterson	139, 732	June 10, 1873	276	86	3	647
Planter, Cotton	W. Price	138, 043	Apr. 22, 1873	712	225	3	449
Planter, Cotton	W. E. Rhodes	135, 280	Jan. 28, 1873	744	240	3	107
Planter, Cotton	P. Seymour	144, 037	Oct. 28, 1873	615	203	4	459
Planter, Cotton	O. L. Slater	142, 355	Sept. 2, 1873	29	11	4	244
Planter, Cotton and corn	A. Pennington, jr.	144, 562	Nov. 11, 1873	337	114	4	517
Planter, Cotton-seed	Z. Carter	145, 554	Dec. 16, 1873	475	155	4	648
Planter, Cotton-seed	D. P. Ferguson	144, 607	Nov. 18, 1873	382	128	4	532
Planter, Cotton-seed	A. D. Griswold	138, 497	May 6, 1873	24	9	3	499
Planter, Cotton-seed	J. L. Slocumb	141, 085	July 22, 1873	694	229	4	92
Planter, Cotton-seed	L. B. Sutton	136, 342	Feb. 25, 1873	877	283	3	234
Planter, Dropper for seed	H. H. Koeller	145, 575	Dec. 16, 1873	490	161	4	649
Planter, Hand	R. Arcey	136, 688	Mar. 11, 1873	308	102	3	279
Planter, Hand	D. B. Seely	137, 246	Mar. 25, 1873	816	268	3	340
Planter, Hand	S. S. Stults	135, 294	Jan. 28, 1873	748	241	3	108
Planter, Hand	G. Windle	136, 294	Feb. 25, 1873	835	270	3	230
Planter, Hand corn	J. W. Coleman	140, 186	June 24, 1873	700	220	3	697
Planter, Hand corn	H. Gortner	138, 392	Apr. 29, 1873	1, 042	328	3	483
Planter, Hand corn	F. A. Hawkins	134, 884	Jan. 14, 1873	359	114	3	49
Planter, Hand corn	M. P. Nemmers	144, 919	Nov. 25, 1873	653	222	4	565
Planter, Hand corn	L. H. Richards	135, 489	Feb. 4, 1873	88	23	3	134
Planter, Hand corn	E. Rogers	144, 701	Nov. 18, 1873	462	156	4	539
Planter, Hand corn	M. C. Root	144, 566	Nov. 11, 1873	340	115	4	517
Planter, Hand corn	J. O. Talmage	144, 485	Nov. 11, 1873	272	92	4	512
Planter, Hand corn	J. D. Tracy and J. F. Platt	145, 698	Dec. 16, 1873	595	195	4	658
Planter, Potato	C. Svendsen	140, 965	July 15, 1873	564	189	4	73
Planter, Potato	F. W. Worstell	140, 178	June 24, 1873	693	218	3	696
Planter, Seed	W. Call, jr.	139, 943	June 17, 1873	471	148	3	670
Planter, Seed	R. Friday	136, 231	Feb. 25, 1873	776	251	3	226
Planter, Seed	T. C. Garlington	135, 704	Feb. 11, 1873	300	95	3	163
Planter, Seed	W. J. Saffrey	140, 648	July 8, 1873	276	93	4	42
Planter, Seed	I. T. Suggs	138, 105	Apr. 22, 1873	763	243	3	453
Planting-machine	J. M. Bright and E. Standt	141, 538	Aug. 5, 1873	110	35	4	144
Plasterers' float	L. A. Goodsell	139, 383	May 27, 1873	841	269	3	597
Plastering-machine	G. Stevens and J. H. Watson	145, 459	Dec. 9, 1873	373	124	4	627
Platform:							
See Dumping-platform.							
Ferry-track platform.							
Scale-platform.							
Stove-platform.							
Window-platform.							
Plow	T. G. Andrews and A. Riviere	141, 533	Aug. 5, 1873	106	32	4	143
Plow	A. Anschutz, A. Seidel, and M. Weber	144, 308	Nov. 4, 1873	111	38	4	487
Plow	J. F. Benton	142, 074	Aug. 26, 1873	630	207	4	213
Plow	W. Blackstone	143, 660	Oct. 14, 1873	239	80	4	408
Plow	J. Blanchard	144, 433	Nov. 11, 1873	230	77	4	509
Plow	E. Bourne	144, 653	Nov. 18, 1873	424	142	4	535
Plow	T. E. C. Brinly	140, 004	June 17, 1873	516	164	3	674
Plow	R. A. Brown	145, 088	Dec. 2, 1873	48	15	4	589
Plow	N. Burch	136, 361	Mar. 4, 1873	6	2	3	246
Plow	E. Cartwright	144, 255	Nov. 4, 1873	74	24	4	484
Plow	C. M. Clark	145, 627	Dec. 16, 1873	534	175	4	653
Plow	T. J. and G. M. Clark	137, 060	Mar. 25, 1873	645	214	3	827
Plow	J. M. Cobb	138, 131	Apr. 22, 1873	783	250	3	454
Plow	T. L. Cotten	137, 894	Apr. 15, 1873	562	176	3	427
Plow	A. K. Dahl	144, 960	Nov. 25, 1873	687	232	4	568
Plow	W. Donnelly	141, 705	Aug. 12, 1873	272	88	4	165
Plow	W. A. Estes	143, 279	Sept. 30, 1873	639	229	4	359
Plow	L. C. Frost	143, 620	Oct. 14, 1873	208	70	4	406
Plow	J. L. Graham	145, 862	Dec. 23, 1873	745	243	4	682
Plow	R. B. Ground	137, 915	Apr. 15, 1873	581	183	3	429
Plow	J. S. Hall	144, 760	Nov. 18, 1873	511	173	4	543
Plow	R. G. Hobson	134, 670	Jan. 7, 1873	163	53	3	19
Plow	J. T. Hunter and D. L. H. Mitchell	136, 245	Feb. 25, 1873	788	255	3	227
Plow	W. B. Jackson, J. M. and O. J. Childs	138, 895	May 13, 1873	389	122	3	539
Plow	J. L. Laughlin	144, 462	Nov. 11, 1873	252	85	4	510
Plow	P. Loeb	140, 053	June 17, 1873	563	178	3	678
Plow	J. Love	135, 829	Feb. 11, 1873	411	133	3	171
Plow	A. S. Mann	140, 716	July 8, 1873	332	113	4	47
Plow	J. Marr	141, 881	Aug. 19, 1873	446	145	4	188
Plow	C. Marsh, 2d	142, 800	Sept. 16, 1873	434	146	4	229

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Plow	W. C. McCool	144, 552	Nov. 11, 1873	330	111	4	516
Plow	J. J. Mitchell	146, 088	Dec. 30, 1873	966	312	4	710
Plow	C. O. Nason	141, 375	July 29, 1873	974	316	4	123
Plow	J. R. Nichols	136, 257	Feb. 25, 1873	800	260	3	228
Plow	J. B. Norris	145, 120	Dec. 2, 1873	74	23	4	591
Plow	J. Oliver	144, 785	Nov. 18, 1873	531	181	4	544
Plow	J. C. Potter	140, 302	June 24, 1873	795	253	3	705
Plow	W. Price	137, 716	Apr. 8, 1873	409	123	3	401
Plow	J. W. Reed	135, 289	Jan. 28, 1873	743	240	3	107
Plow	E. Reese	135, 363	Jan. 28, 1873	812	262	3	113
Plow	L. B. Richardson	140, 434	July 1, 1873	76	27	4	14
Plow	A. Rigiére	144, 477	Nov. 11, 1873	263	89	4	511
Plow	J. Roop	138, 197	Apr. 22, 1873	846	268	3	459
Plow	H. Schick	135, 850	Feb. 11, 1873	427	139	3	172
Plow	W. T. Ship, C. J. Peterson, and R. L. McLurd.	144, 707	Nov. 18, 1873	466	158	4	539
Plow	S. W. Soule	143, 263	Sept. 30, 1873	826	283	4	358
Plow	P. H. Starke	141, 960	Aug. 19, 1873	506	167	4	193
Plow	S. L. Stockstill and H. D. Kutz	137, 870	Apr. 15, 1873	542	169	3	425
Plow	G. B. Vaughan	139, 036	May 20, 1873	516	163	3	563
Plow	W. M. Watson	134, 716	Jan. 7, 1873	201	65	3	22
Plow	L. B. White	140, 749	July 8, 1873	362	122	4	49
Plow	E. Wiard	142, 136	Aug. 26, 1873	684	225	4	217
Plow	E. Wiard	144, 524	Nov. 11, 1873	356	120	4	518
Plow	G. D. Wyman	136, 120	Feb. 18, 1873	669	219	3	205
Plow and cultivator, Combined shovel	A. Smith	142, 655	Sept. 9, 1873	300	98	4	278
Plow-boot	C. H. Ricker	138, 196	Apr. 22, 1873	845	267	3	459
Plow-carriage	H. M. Bullitt	143, 434	Oct. 7, 1873	33	12	4	383
Plow-clevis	A. Kaufman	137, 078	Mar. 25, 1873	666	221	3	328
Plow-clevis	W. Lahman	140, 715	July 8, 1873	331	112	4	47
Plow-coltter	E. Wiard	142, 310	Aug. 26, 1873	825	274	4	229
Plow, Corn	J. Preston	138, 818	May 13, 1873	323	100	3	334
Plow, Cotton-scraping	J. M. Cobb	144, 509	Nov. 11, 1873	289	98	4	513
Plow-coupling	J. K. Pitts	135, 360	Jan. 28, 1873	809	261	3	112
Plow-coupling	T. L. Thrasher	141, 964	Aug. 19, 1873	510	168	4	193
Plow-draft attachment	N. Westcott	144, 811	Nov. 18, 1873	553	188	4	546
Plow, Equalizing attachment for	D. H. King and W. M. Hulse	140, 632	July 8, 1873	263	89	4	41
Plow, Gang	R. Coreth	142, 084	Aug. 26, 1873	638	210	4	213
Plow, Gang	M. S. Curtiss	140, 480	July 1, 1873	115	39	4	18
Plow, Gang	G. A. Groves	134, 540	Jan. 7, 1873	35	11	3	10
Plow, Gang	A. M. Humphrey	136, 062	Feb. 18, 1873	618	203	3	202
Plow, Gang	G. W. Manuel	137, 697	Apr. 8, 1873	382	118	3	399
Plow, Gang	J. K. McLennan	135, 654	Feb. 11, 1873	253	80	3	159
Plow, Gang	S. E. Parr	135, 357	Jan. 28, 1873	806	260	3	112
Plow-handle	J. T. Rafferty	138, 434	Apr. 29, 1873	1, 082	341	3	486
Plow-handle, Machinery for making	A. B. Farquhar	140, 355	July 1, 1873	19	6	4	9
Plow-iron, Machine for making	J. M. McGinty and T. Nolan	136, 444	Mar. 4, 1873	78	27	3	252
Plow-point, Reversible	R. M. Pattillo	142, 864	Sept. 16, 1873	484	165	4	304
Plow, Potato	H. T. Baayé	140, 240	June 24, 1873	742	234	3	700
Plow, Railway snow	J. W. Arnold	138, 836	May 13, 1873	339	105	3	535
Plow, Railway snow	O. D. Baird	138, 116	Apr. 22, 1873	772	246	3	453
Plow, Railway snow	T. A. Davies	136, 709	Mar. 11, 1873	325	107	3	280
Plow, Railway snow	W. Davis	136, 975	Mar. 18, 1873	558	185	3	308
Plow, Railway snow	P. A. Smith	136, 272	Feb. 25, 1873	817	264	3	229
Plow, Railway snow	W. H. Van Gieson	136, 346	Feb. 25, 1873	822	264	3	234
Plow, Railway snow	W. Walker	135, 499	Feb. 4, 1873	96	30	3	135
Plow, Railway snow	W. Wheelock	140, 663	July 8, 1873	287	97	4	43
Plow, Railway snow	C. L. Wood	144, 377	Nov. 4, 1873	171	57	4	492
Plow, Reversible	G. W. Howe	141, 222	July 29, 1873	822	270	4	111
Plow, Rotary	C. T. Elliston	142, 094	Aug. 26, 1873	649	213	4	214
Plow, Rotary	A. B. Hoffmeyer and J. Schmidt	145, 177	Dec. 2, 1873	131	43	4	596
Plow, Scraper	H. Leach	142, 113	Aug. 26, 1873	664	218	4	216
Plow, Scraper-attachment for	J. P. Swofford	135, 863	Feb. 11, 1873	436	142	3	173
Plow, Shovel	W. Johnson and M. Ranney	138, 656	May 6, 1873	167	53	3	511
Plow, Shovel	J. J. Mitchell	141, 583	Aug. 5, 1873	148	48	4	147
Plow, Snow	W. J. Roberts	143, 095	Sept. 23, 1873	624	235	4	330
Plow, Snow	B. B. Sweet	143, 731	Oct. 14, 1873	312	103	4	414
Plow, Sower-attachment to	J. Brown	145, 148	Dec. 2, 1873	101	34	4	593
Plow, Steam	I. S. Allen, M. P. Brown, and C. W. Mouthrop	144, 820	Nov. 25, 1873	571	195	4	558
Plow, Steam	P. J. McDonald	139, 966	June 17, 1873	485	153	3	671
Plow, Steam	A. E. McGaughey	134, 913	Jan. 14, 1873	385	122	3	51
Plow, Subsoil	G. P. Birmingham	140, 460	July 1, 1873	98	33	4	16
Plow, Subsoil	J. W. Howard	136, 728	Mar. 11, 1873	340	112	3	281
Plow, Subsoil	J. R. Turner and J. Jacobs	144, 487	Nov. 11, 1873	274	92	4	512
Plow, Subsoil	A. L. P. Vairin	140, 660	July 8, 1873	285	96	4	43
Plow, Subsoil attachment for	E. Cutcliffe	143, 335	Sept. 30, 1873	827	303	4	363
Plow, Subsoil gang	C. Myers	145, 361	Dec. 9, 1873	291	98	4	621
Plow, Sulky	D. W. Hughes	140, 505	July 1, 1873	139	48	4	19
Plow, Sulky	W. Ough	136, 003	Feb. 18, 1873	567	187	3	198
Plow, Truck	J. Flanagan	139, 564	June 3, 1873	104	35	3	617
Plow, Wheel	J. Bingham and O. M. Pond	145, 147	Dec. 2, 1873	101	33	4	593
Plow, Wheel	H. M. Freeman, J. Lowe, and J. F. Stevens	134, 878	Jan. 14, 1873	353	112	3	48
Plow, Wheel	I. B. Green	139, 059	May 20, 1873	540	170	3	565
Plow, Wheel	W. S. Grimshaw	135, 800	Feb. 11, 1873	383	123	3	169
Plow, Wheel	J. D. Harrison	143, 147	Sept. 23, 1873	721	248	4	333
Plow, Wheel	F. Hasbrook	138, 328	Apr. 29, 1873	992	312	3	479
Plow, Wheel	F. Hasbrook	144, 453	Nov. 11, 1873	244	82	4	510
Plow, Wheel	J. H. James, H. Tucker, and T. D. Terry	137, 611	Apr. 8, 1873	306	95	3	393
Plow, Wheel	J. C. Pearl	141, 073	July 22, 1873	673	225	4	91
Plow-wheel	M. Potter	136, 179	Feb. 25, 1873	738	238	3	223

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Plow, Wheel	L. W. Richardson	141,951	Aug. 19, 1873	501	165	4	193
Plow, Wheel	L. Sachse	136,674	Mar. 11, 1873	298	99	3	278
Plow, Wheel	M. Sattley	135,594	Feb. 4, 1873	190	39	3	142
Plow, Wheel	H. M. Skinner	140,551	July 1, 1873	178	60, 61	4	33
Plow, Wheel	C. B. Stevens	139,032	May 20, 1873	512	182	3	562
Plow, Wheel	W. P. Sweeney	137,975	Apr. 15, 1873	631	199	3	433
Plow, Wheel	T. D. Terry, A. Case, and C. Larkin	142,964	Sept. 16, 1873	570	193	4	311
Plow, Wheel	J. Worrell	137,044	Mar. 18, 1873	622	205	3	314
Plows, Composition metal for casting	G. K. Smith	143,539	Oct. 7, 1873	122		4	390
Plows, Riding-attachment for	A. H. Ballagh	145,083	Dec. 2, 1873	43	13	4	589
Plumb and level	S. Sanderson	143,933	Oct. 21, 1873	500	169	4	439
Plumb-bob	G. B. Cowles	138,790	May 13, 1873	300	92	3	532
Pneumatic-dispatch apparatus	C. W. Siemens	141,294	July 29, 1873	892	293	4	117
Pneumatic-signal apparatus	W. Foster, jr	142,224	Aug. 26, 1873	756	249	4	223
Poke, Animal	C. Hinman	134,988	Jan. 21, 1873	461	147	3	72
Poke, Animal	C. Hinman	139,893	June 17, 1873	429	133	3	666
Poke, Animal	J. Hopkins	141,438	Aug. 5, 1873	25	8	4	137
Pocket-attachment, Safety	R. L. Russell	144,702	Nov. 18, 1873	462	157	4	539
Pocket-book	W. H. King	135,990	Feb. 18, 1873	556	184	3	197
Pocket-book	L. Wendt	138,217	Apr. 22, 1873	863	273	3	460
Pocket-book clasp	J. F. Dubber	142,447	Sept. 2, 1873	113	36	4	251
Pocket-book fastening	F. Heiles	144,094	Oct. 28, 1873	664	219	4	463
Pocket-book, Safety-guard for	T. Potter	138,581	May 6, 1873	101	32	3	506
Pocket-book safety-hook	F. C. Likar	138,667	May 6, 1873	178	57	3	512
Pocket-hook, Safety	P. E. Malmström and P. E. Dummer	136,742	Mar. 11, 1873	354	117	3	283
Pocket-knife	H. Staude	138,052	Apr. 22, 1873	721	228	3	449
Pocket-openings, Fastening	J. W. Davis	139,121	May 20, 1873	507	188	3	569
Pocket, Safety	S. Engel	136,983	Mar. 18, 1873	566	188	3	309
Pocket, Safety	H. L. Hopkins	145,178	Dec. 2, 1873	132	43	4	596
Pole-clamp	H. Haering	134,598	Jan. 7, 1873	95	30	3	14
Police-nippers	J. B. Craig and M. Haughey	136,419	Mar. 4, 1873	56	20	3	250
Polishing-compound	E. J. Combs	144,444	Nov. 11, 1873	258		4	509
Polishing-device	J. C. Morrison	139,178	May 20, 1873	654	204	3	574
Polishing-tool	H. Cottrell	144,744	Nov. 18, 1873	497	169	4	542
Polishing wood, Process of	C. Seebach	136,010	Feb. 18, 1873	573		3	198
Portable elevator and dumper	W. H. Herrriott	146,002	Dec. 30, 1873	891	289	4	704
Portable fountain and lawn-sprinkler	R. Brusie	137,175	Mar. 25, 1873	748	248	3	335
Portable furnace	H. J. Lingenfelter	145,954	Dec. 30, 1873	851	277	4	701
Porter's box	I. Bannan	142,888	Sept. 16, 1873	503	172	4	305
Portfolio	C. W. Palmer	140,725	July 8, 1873	339	115	4	47
Portfolio	L. F. Raymond	145,683	Dec. 16, 1873	582	191	4	656
Portfolio-holder	J. B. Aiken	142,884	Sept. 16, 1873	499	171	4	305
Portfolio, Music	J. C. Koch	135,130	Jan. 21, 1873	584	189	3	82
Portfolio, Music	F. C. Schumann	134,613	Jan. 7, 1873	106	35	3	15
Port-stopper fastening	J. Carver	141,113	July 22, 1873	709	237	4	94
Post:							
<i>See</i> Fence-post							
Postage-stamp affixer	E. B. Morgan	135,143	Jan. 21, 1873	594	193	3	83
Postal-card machine	J. M. D. Keating	138,028	Apr. 22, 1873	697	221	3	447
Postal-card screen	L. Courou	142,899	Sept. 16, 1873	513	175	4	306
Post-driver	I. V. Adair	137,120	Mar. 25, 1873	701	232	3	331
Post-hole digger	A. E. Lindsley	139,169	May 10, 1873	646	202	3	573
Post-office box	E. Stockwell and W. H. Taylor	140,092	June 17, 1873	599	189	3	680
Pot:							
<i>See</i> Coffee-pot.							
Flower-pot.							
Molder's pot.							
Mustard-pot.							
Painter's pot.							
Potassa, Manufacture of bitartrate of	L. Adler	145,607	Dec. 16, 1873	516		4	651
Potato and peanut digger	C. E. Pierce	136,860	Mar. 18, 1873	463	154	3	301
Potato bin, Sweet	H. T. Bayo	139,532	June 3, 1873	75	25	3	615
Potato-bug collector	J. Corbell	134,854	Jan. 14, 1873	332	106	3	47
Potato-bug destroyer	A. A. Mixer	143,245	Sept. 30, 1873	810	278	4	357
Potato-bug destroyer	W. H. Myers	143,178	Sept. 23, 1873	744	257	4	335
Potato-cutter and planter	L. J. Mewborn	143,707	Oct. 14, 1873	291	95	4	413
Potato-digger	H. G. Barrows	135,307	Jan. 28, 1873	757	244	3	108
Potato-digger	S. Bigelow and L. C. Bigelow	138,470	May 6, 1873	5	2	3	498
Potato-digger	A. G. Brush	136,028	Feb. 18, 1873	589	194	3	199
Potato-digger	H. M. Dowd and W. W. Dowd, jr.	139,709	June 10, 1873	254	80	3	645
Potato-digger	E. T. Ford	144,083	Oct. 28, 1873	654	215	4	462
Potato-digger	G. W. Haag	138,561	May 6, 1873	85	27	3	504
Potato-digger	J. W. Innis	135,558	Feb. 4, 1873	152	49	3	139
Potato-digger	D. M. and G. E. King	137,931	Apr. 15, 1873	592	187	3	430
Potato-digger	H. B. Norton	136,536	Mar. 4, 1873	165	53, 54	3	258
Potato-digger	J. D. Rensink	138,934	May 13, 1873	420	131	3	542
Potato-digger	L. Schafer, jr.	138,942	May 13, 1873	425	133	3	543
Potato-digger	S. W. Tyler	141,903	Aug. 19, 1873	462	151	4	190
Potato-digger	W. H. Wall	135,183	Jan. 21, 1873	625	204	3	86
Potato-digger	A. Willmann	145,037	Nov. 25, 1873	756	255	4	574
Potato-digger	J. S. Wright and I. Benedict	135,458	Feb. 4, 1873	62	20	3	132
Potato masher and strainer	R. Sebille	140,169	June 24, 1873	686	215	3	695
Potato-screen	G. Cladin	140,886	July 15, 1873	482	163	4	67
Potato-sorting machine	D. M. King	143,357	Sept. 30, 1873	913	310	4	365
Pottery-stock, Machine for preparing	S. R. Thompson	138,824	May 13, 1873	327	101	3	534
Poudre-dryer	L. Duvall	139,555	June 3, 1873	94	32	3	616
Powder:							
<i>See</i> Baking-powder.							
Disinfecting powder.							
Insect-powder.							
Yeast-powder.							
Powder-flask	M. Cilik	142,614	Sept. 9, 1873	267	87	4	275

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Powder-keg	C. Green and W. Wilson, jr.	140, 913	July 15, 1873	510	172	4	69
Power:							
<i>See</i> Animal-power.							
Churn-power.							
Foot-power.							
Horse-power.							
Mechanical power.							
Motive-power.							
Sewing-machine power.							
Spring-power.							
Thrashing-power.							
Wave-power.							
Wind-wheel power.							
Power, Apparatus for transferring	E. B. Clark	145, 721	Dec. 23, 1873	626	905	4	672
Power, Device for transmitting	J. C. Climo	135, 466	Feb. 4, 1873	69	22	3	133
Power, Mechanism for transmitting	D. E. Myers	136, 334	Feb. 25, 1873	869	286	3	233
Power, Mechanism for transmitting	J. Rankin	143, 640	Oct. 14, 1873	222	74, 75	4	407
Preserve-can	J. K. Chace	141, 994	Aug. 19, 1873	534	177	4	196
Preserving and drying lumber	J. Oliver	142, 347	Sept. 2, 1873	21	8	4	244
Preserving and packing compound for eggs, wood, &c.	J. Connell, jr.	139, 116	May 20, 1873	593	.....	3	569
Preserving-can, Fruit, &c.	W. H. Hammond	134, 799	Jan. 14, 1873	283	92	3	43
Preserving corn, Process for	L. McMurray	139, 595	June 3, 1873	130	.....	3	619
Preserving fruit and vegetables for food	W. G. Barbee	144, 592	Nov. 18, 1873	371	.....	4	531
Preserving fruit, Apparatus for	L. C. Cooley	139, 547	June 3, 1873	88	30	3	616
Preserving fruit, vegetables, &c.	A. T. Jones and L. C. Cooley	139, 581	June 3, 1873	117	.....	3	618
Preserving green-corn and other vegetables	G. L. Merrill and O. F. Soule	145, 581	Dec. 16, 1873	495	162	4	649
Preserving wood, Compound for	L. S. Fales	142, 453	Sept. 2, 1873	117	.....	4	252
Press:							
<i>See</i> Baling-press.							
Beater-press.							
Book-holding press.							
Brick-press.							
Butter-press.							
Cheese and fruit press.							
Cider-press.							
Cloth-press.							
Copying and folding press.							
Cotton-press.							
Cylinder-press.							
Embossing-press.							
Fruit-press.							
Furnace-block press.							
Glass-press.							
Hat-press.							
Hay-press.							
Hydraulic-wheel press.							
Jeweler's hand-press.							
Lithographic-press.							
Meat-press.							
Meat or fruit press.							
Oil-press.							
Photograph burnishing-press.							
Printing-press.							
Tobacco-press.							
Wine-press.							
Press	R. Esmond	142, 220	Aug. 26, 1873	752	948	4	223
Press	J. B. Godwin	140, 033	June 17, 1873	542	172	3	676
Press	E. B. Platt	138, 432	Apr. 29, 1873	1, 079	341	3	426
Press	W. E. Warner	137, 641	Apr. 8, 1873	330	102	3	395
Press, Lever for	J. P. Gates	136, 431	Mar. 4, 1873	67	24	3	251
Press, Operating	O. T. Earle and T. J. Rider	142, 093	Aug. 26, 1873	649	213	4	914
Presser-block for pants	L. Cohen and J. C. Waller	137, 346	Apr. 1, 1873	63	20	3	362
Pressure-gage	G. H. Crosby	145, 726	Dec. 23, 1873	630	{ 206 } 207	4	672
Pressure-gage	G. Sewell	142, 128	Aug. 26, 1873	677	223	4	217
Pressure-gage	J. W. Stiles	137, 331	Apr. 1, 1873	52	15	3	361
Pressure-gage and alarm	M. Toulmin	142, 969	Sept. 16, 1873	575	194	4	311
Pressure-gage dial	J. Annin	140, 867	July 15, 1873	465	157	4	65
Printer and stamp, Electro-magnetic date-time	J. C. Hinchman	141, 352	July 29, 1873	953	{ 309 } 311	4	121
Printer's chase	L. G. Chaput	139, 542	June 3, 1873	83	29	3	616
Printer's chase	E. A. Warren	138, 967	May 13, 1873	446	140	3	544
Printer's furniture	H. A. Hompol	145, 900	Dec. 23, 1873	693	227	4	678
Printer's furniture	H. P. Montagne	141, 450	Aug. 5, 1873	37	11	4	138
Printer's galley-rest	J. A. Doyle and J. A. Murphy	143, 328	Sept. 30, 1873	796	274	4	355
Printer's galley-side-stick	R. B. Hindle	140, 366	July 1, 1873	28	9	4	10
Printer's lead-casting machine	J. I. Sturgis	135, 384	Jan. 28, 1873	131	268	3	114
Printer's lead-rack	O. A. Dearing	135, 694	Feb. 13, 1873	479	155	3	191
Printer's leads, Apparatus for casting	W. Filmer	142, 783	Sept. 16, 1873	421	142	4	298
Printer's miter-machine	J. A. Stansbury	137, 575	Apr. 8, 1873	277	85	3	391
Printer's quoin	C. W. Ames	139, 351	May 27, 1873	613	260	3	594
Printer's rule	C. Reuter	142, 512	Sept. 2, 1873	171	55	4	255
Printer's rule, Machine for preparing	J. B. Bancroft	145, 549	Dec. 16, 1873	471	154	4	647
Printer's side-stick and quoin	F. Keehn	145, 574	Dec. 16, 1873	489	161	4	649
Printing and dyeing fabric	T. Crossley	139, 705	June 10, 1873	251	.....	3	645
Printing, Inking-attachment for chromatic	E. A. Howitt	139, 155	May 20, 1873	634	198	3	572
Printing-machine, Automatic time	J. C. Hinchman	139, 153	May 20, 1873	629	{ 196 } 197	3	572
Printing-machine, Automatic time	J. C. Hinchman	139, 154	May 20, 1873	631	197	3	572
Printing on solid or inflexible surfaces, Apparatus for	A. Wilbaux	142, 541	Sept. 2, 1873	196	63	4	257
Printing-plate, Removing ink from engraved	J. S. Ives	144, 544	Nov. 11, 1873	323	.....	4	516
Printing-plate, Typographical	J. I. Ringwalt	140, 542	July 1, 1873	170	57	4	22
Printing-press	F. L. Bailey and J. Watson	135, 618	Feb. 11, 1873	223	69	3	157
Printing-press	C. B. Cottrell	140, 813	July 15, 1873	424	143	4	62

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Printing-press	W. H. Golding	145, 101	Dec. 2, 1873	56	18, 19	4	590
Printing-press	G. A. Hunt	139, 156	May 20, 1873	635	198	3	572
Printing-press	W. A. Kelsey	138, 660	May 6, 1873	170	55	3	511
Printing-press	F. C. Penfield	138, 689	May 6, 1873	197	62	3	513
Printing-press	J. G. Peterson	142, 648	Sept. 9, 1873	293	96	4	277
Printing-press, Apparatus for delivering sheets from	T. J. Mayall	146, 085	Dec. 30, 1873	961	310 311	4	710
Printing-press attachment, Chromatic	E. A. Howitt	134, 602	Jan. 7, 1873	99	32	3	15
Printing-press, Card and ticket	G. E. Peck	143, 780	Oct. 21, 1873	373	123 124	4	429
Printing-press, Chromatic	T. H. Burrig and J. M. Kershaw	140, 242	June 24, 1873	744	235	3	700
Printing-press, Chromatic	G. W. Woodside	134, 579	Jan. 7, 1873	74	23	3	13
Printing-press, Copper-plate	T. S. Bates	145, 610	Dec. 10, 1873	518	170	4	651
Printing-press, Fabric	H. H. Townsend	137, 638	Apr. 8, 1873	323	101	3	395
Printing-press feeder	F. L. Henghes	141, 713	Aug. 12, 1873	278	91	4	166
Printing-press feeder	R. J. Stuart	137, 156	Mar. 25, 1873	728	242	3	333
Printing-press feed-gage	G. N. Morris	145, 890	Dec. 23, 1873	772	252	4	684
Printing-press feed-gage	G. Wilcox	143, 652	Oct. 14, 1873	232	78	4	408
Printing-press, Feeding paper to	C. H. Stoddard and E. D. Norton	140, 962	July 15, 1873	562	188	4	73
Printing-press, Feeding paper to rotary	J. T. Ashley	144, 822	Nov. 25, 1873	573	195 196	4	558
Printing-press, Hand	W. and W. H. Dunkerly, jr.	137, 664	Apr. 8, 1873	352	109	3	397
Printing-press, Hand	N. Ross	134, 705	Jan. 7, 1873	193	63	3	22
Printing-press inking-apparatus	M. England	145, 341	Dec. 9, 1873	276	92	4	620
Printing-press, Inking-apparatus for oscillating	G. W. Prouty	141, 077	July 22, 1873	678	227	4	92
Printing-press, Inking-apparatus for rotary	E. Allen	142, 607	Sept. 9, 1873	261	86	4	275
Printing-press, Plate	G. C. Howard and J. Dainty	139, 392	May 27, 1873	853	273	3	598
Printing-press registering attachment	A. Hilgenreiner	143, 504	Oct. 21, 1873	477	161	4	437
Printing-press, Rotary	S. H. Bingham	139, 360	May 27, 1873	820	262	3	505
Printing-press, Rotary	W. Braidwood and H. J. Hewitt	141, 314	July 29, 1873	910	298	4	118
Printing-press, Rotary	W. Braidwood and H. J. Hewitt	141, 315	July 29, 1873	912	299	4	118
Printing-press, Rotary	C. C. Child	144, 742	Nov. 18, 1873	494	168	4	541
Printing-press, Rotary	C. B. Cottrell	137, 347	Apr. 1, 1873	64	20	3	362
Printing-press, Stop-cylinder	H. Barth	139, 229	May 27, 1873	709	223 224	3	586
Prison-door bolt	T. Lalor	144, 210	Nov. 4, 1873	36	11	4	481
Privies, sinks, &c., Apparatus for cleaning	R. R. Rotowsky	143, 420	Oct. 7, 1873	23	9	4	382
Privy and sink cleaning apparatus	A. M. Hobbs	137, 680	Apr. 8, 1873	366	113	3	398
Privy-indicator	W. C. Duffield	136, 224	Feb. 25, 1873	770	240	3	225
Projectile	S. B. Haycock	137, 442	Apr. 1, 1873	146	47	3	369
Projectile	J. G. Hope	142, 394	Sept. 2, 1873	66	22	4	247
Projectile, Compound explosive	F. A. Markley	138, 907	May 13, 1873	308	126	3	540
Propeller, Chain	E. P. Russell	142, 653	Sept. 9, 1873	298	98	4	278
Propeller, Endless-chain	T. Teed	143, 793	Oct. 21, 1873	384	127	4	430
Propeller, Endless-chain	J. W. Whynates	137, 269	Mar. 25, 1873	835	274	3	341
Propeller for vessel, Chain	T. W. Carter	140, 468	July 1, 1873	106	36	4	17
Propeller for vessel, Vibrating	D. Bainbridge	135, 257	Jan. 28, 1873	719	230	3	105
Propeller for vessel, Vibrating	J. D. Fraser	145, 342	Dec. 9, 1873	277	93	4	620
Propeller, Mechanism for operating screw	J. Wilcoxon	139, 098	May 20, 1873	575	180	3	567
Propeller, Screw	D. Freed	141, 871	Aug. 19, 1873	437	143	4	187
Propeller, Screw	J. Hartman, jr.	137, 365	Apr. 1, 1873	79	26	3	363
Propeller, Screw	N. A. Patterson	135, 149	Jan. 21, 1873	599	195	3	53
Propeller, Screw	N. A. Patterson	142, 269	Aug. 26, 1873	793	261 262	4	226
Propeller, Screw	H. K. Stevens and S. Miller	142, 820	Sept. 16, 1873	448	151	4	300
Propeller, Screw	M. M. Wilson	136, 015	Feb. 18, 1873	579	191	3	199
Propeller, Steering	J. L. Cathcart	135, 404	Feb. 4, 1873	8	3	3	128
Propeller, Steering	F. G. Fowler	143, 896	Oct. 21, 1873	471	158	4	437
Propeller, Steering	W. Harsen	144, 538	Nov. 11, 1873	317	108	4	515
Propeller, Vessel	E. C. Hubbard	135, 555	Feb. 4, 1873	149	48	3	139
Propeller, Vibrating	C. P. Macowitzky	135, 994	Feb. 18, 1873	559	185	3	197
Propeller, Means for operating screw	A. McDonald	145, 009	Nov. 25, 1873	722	244	4	571
Propeller, Means for elevating and depressing	S. G. Hill	141, 558	Aug. 5, 1873	129	40	4	146
Propeller, Mechanism for operating screw	F. H. Tobias	145, 697	Dec. 16, 1873	594	194	4	658
Propelling boats	A. Beekman	143, 270	Sept. 30, 1873	832	286	4	359
Propelling boats	J. Black and G. W. Jones	144, 732	Nov. 18, 1873	486	164	4	541
Propelling boats, Means for	J. S. Anderson	137, 164	Mar. 25, 1873	736	245	3	334
Propelling canal-boat	A. Ames	134, 504	Jan. 7, 1873	1	1	3	7
Propelling canal-boat	H. H. Baker	139, 996	June 17, 1873	509	161	3	673
Propelling canal-boat	A. Johnson	136, 064	Feb. 18, 1873	620	204	3	202
Propelling canal-boat	W. F. Miller	139, 727	June 10, 1873	271	85	3	647
Propelling canal-boat	O. C. Smith	143, 038	Sept. 23, 1873	637	218	4	326
Propelling canal-boat and other vessels	L. Bastet	144, 248	Nov. 4, 1873	70	22	4	483
Propelling device, Vessel	B. T. Babbitt	139, 994	June 17, 1873	508	161	3	673
Propelling mechanism, Vessel	L. Murdoch	143, 091	Sept. 23, 1873	680	234	4	320
Propelling mechanism, Vessel	J. Weich	136, 475	Mar. 4, 1873	106	35	3	254
Propelling vessels	H. C. Camp	134, 730	Jan. 14, 1873	227	73	3	39
Propelling vessels	G. W. Dow	141, 039	July 22, 1873	643	216	4	89
Propelling vessels	J. W. Evans	141, 340	July 29, 1873	942	306	4	120
Propelling vessels	S. Gerhard	137, 359	Apr. 1, 1873	74	24	3	363
Propulsion by gas-explosion	W. A. Leggo	138, 665	May 6, 1873	176	56	3	512
Propulsion of vessels	G. B. D. Boucherville	143, 440	Oct. 7, 1873	38	13	4	384
Propulsion of vessels	C. P. Macowitzky	146, 009	Dec. 30, 1873	896	291	4	704
Propulsion of vessels by direct action of steam	G. W. Jones	145, 210	Dec. 2, 1873	153	52	4	597
Protector:							
<i>See</i> Bottle-protector.							
Broom-protector.							
Carriage-protector.							
Chest-protector.							
Dress-protector.							
Ear-protector.							
Eye and lung protector.							
King-bolt protector.							
Plant-protector.							
Sap-protector.							

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Protector—Continued. See Skirt-protector. Tree-protector. Wall-protector.							
Pruning-hook	J. Christy	143,962	Oct. 28, 1873	548	182	4	453
Pruning-implement	A. P. Betersworth	143,659	Oct. 14, 1873	238	80	4	408
Pruning-implement	A. C. Hulse and J. S. Crum	142,915	Sept. 16, 1873	525	179	4	307
Pruning-instrument	W. H. Collings	143,064	Sept. 23, 1873	661	226	4	328
Pruning-knife	J. S. Crum	139,119	May 20, 1873	596	187	3	569
Pruning-knife	A. C. Hulse	142,236	Aug. 26, 1873	768	252	4	224
Pruning-shears	W. Baker	142,886	Sept. 16, 1873	501	171	4	305
Pruning-shears	W. E. Ball	143,114	Sept. 23, 1873	699	240	4	331
Pruning-shears	T. Borden	136,209	Feb. 25, 1873	760	245	3	225
Pruning-shears	P. Broadbooks	137,821	Apr. 15, 1873	502	156	3	422
Pruning-shears	O. Chase	134,591	Jan. 7, 1873	87	27	3	14
Pruning-shears	M. De Groodt	136,820	Mar. 18, 1873	432	143	3	298
Pruning-shears	H. C. Hills	141,273	July 29, 1873	876	287	4	115
Pruning-shears	M. C. Malone	138,338	Apr. 29, 1873	998	314	3	480
Pruning-shears	W. McCray	138,340	Apr. 29, 1873	1,000	315	3	460
Pruning-shears	A. R. Moulton	134,922	Jan. 14, 1873	393	125	3	51
Pruning-shears	J. G. Rogers	140,388	July 1, 1873	45	15	4	15
Pruning-shears	G. Vanfossen	140,974	July 15, 1873	573	193	4	74
Puddler, Rotary	W. and G. H. Sellers	144,416	Nov. 11, 1873	213	72	4	507
Puddler's ball-roller	R. M. Bassett	139,356	May 27, 1873	817	261	3	595
Puddler's ball-squeezer	F. Danks	141,207	July 29, 1873	811	263	4	110
Puddling and boiling furnace, Door and bit of	J. G. Haberfield	139,244	May 27, 1873	726	229	3	587
Puddling and boiling furnace, Fettling for	J. C. McAninch and G. Atkins	136,083	Feb. 18, 1873	637	203	3	203
Puddling-furnace	J. Heatley	139,788	June 10, 1873	328	102	3	651
Puddling-furnace	C. Jones	140,140	June 24, 1873	659	207	3	693
Puddling-furnace	E. Loyd	135,650	Feb. 11, 1873	250	79	3	159
Puddling-furnace	E. Riley	143,301	Sept. 30, 1873	859	294	4	361
Puddling-furnace door	J. S. Rees	140,730	July 8, 1873	342	116	4	47
Puddling-furnace, Lining rotary	S. Danks	136,421	Mar. 4, 1873	58	229	3	250
Puddling, melting, and heating furnace, Rotary	S. Danks	142,152	Aug. 26, 1873	696	230	4	218
Pug-mill	D. H. Gage	138,628	May 6, 1873	140	46	3	509
Puller: See Stone-puller.							
Pulley	C. C. Moore	135,722	Feb. 11, 1873	313	99	3	164
Pulley	M. K. Whipple	137,270	Mar. 25, 1873	837	275	3	341
Pulley, Band	C. H. Perkins	135,151	Jan. 21, 1873	600	195	3	82
Pulley, Band	E. P. West	134,778	Jan. 14, 1873	265	86	3	41
Pulley-block	E. A. Barrett	135,066	Jan. 21, 1873	533	173	3	78
Pulley-block	A. S. Dickinson	143,441	Oct. 7, 1873	38	14	4	324
Pulley-block	G. A. Ford	142,095	Aug. 26, 1873	650	214	4	214
Pulley, Clothes-line	G. H. Ryer	139,024	May 20, 1873	507	160	3	562
Pulley, Dynamometer	I. P. Rice	137,393	Apr. 1, 1873	103	33	3	365
Pulley, Expanding	J. E. Fales	137,352	Apr. 1, 1873	69	22	3	362
Pulley for gas-machine, &c., Adjustable	E. F. Van Houten	141,967	Aug. 19, 1873	512	169	4	194
Pulley, Friction-clutch	J. D. Crocker	139,456	June 3, 1873	10	3	3	609
Pulley-hanger	J. Kont	139,898	June 17, 1873	436	135	3	607
Pulley, Loose	L. Knight	140,048	June 17, 1873	558	176	3	677
Pulley, Lubricating	J. K. McLanahan	143,830	Oct. 21, 1873	417	139	4	432
Pulley, Lubrication of clutch	A. Canis and F. Higgins	136,699	Mar. 11, 1873	317	105	3	280
Pulley, Suspension	J. A. Everts	144,078	Oct. 28, 1873	651	214	4	461
Pulley to shaft, &c., Friction-attachment for securing	H. Cox	139,704	June 10, 1873	251	79	3	645
Pulley to shaft, Securing	W. B. Van Voorhis	139,282	May 27, 1873	762	241	3	590
Pulley-wheels, Mode of constructing wooden	A. Newell	138,518	May 6, 1873	47	16	3	501
Pulleys, Machine for turning	G. A. Gray, jr.	138,394	Apr. 29, 1873	1,043	328	3	483
Pulp, paste, or slip pigment, Preservation of	P. C. Tiemann	143,106	Sept. 23, 1873	692	222	4	331
Pulp, Process of reducing wood-fiber to	T. B. Armitage	139,646	June 10, 1873	191	63	3	640
Pulp, Wood-grinding machine for making	S. B. Zimmer	141,976	Aug. 19, 1873	518	172	4	194
Pulverizer, Land	T. R. Denby	137,764	Apr. 15, 1873	453	141	3	418
Pulverizing machine, Clay	G. C. Bovey	139,110	May 20, 1873	585	183	3	568
Pulverizing machine, Soil	A. C. Tower	138,301	Apr. 29, 1873	968	304	3	477
Pump	J. S. Barden	134,626	Jan. 7, 1873	116	38	3	16
Pump	W. D. Baxter	137,527	Apr. 8, 1873	234	71	3	387
Pump	J. F. Carl	138,477	May 6, 1873	11	4	3	498
Pump	F. Catudal	134,785	Jan. 14, 1873	272	89	3	42
Pump	H. T. Coleman	140,016	June 17, 1873	527	167	3	674
Pump	G. W. Douglas	144,965	Nov. 25, 1873	691	233	4	568
Pump	J. Edson	143,751	Oct. 21, 1873	348	116	4	427
Pump	A. L. Hatfield	143,759	Oct. 21, 1873	355	118	4	427
Pump	T. C. H. Kraus	142,028	Aug. 19, 1873	567	187	4	198
Pump	S. Lane, jr.	143,769	Oct. 21, 1873	364	121	4	428
Pump	H. Norman and C. F. Dietrich	136,258	Feb. 25, 1873	801	260	3	228
Pump	C. D. Rathbone	140,643	July 8, 1873	273	92	4	42
Pump	E. G. Russell	142,123	Aug. 26, 1873	674	221	4	216
Pump	C. W. Sholes and H. C. Kelly	145,247	Dec. 2, 1873	187	64	4	600
Pump	J. J. Walton	145,918	Dec. 23, 1873	797	261	4	686
Pump	E. C. Wharton	144,171	Oct. 28, 1873	727	243	4	468
Pump	E. C. Wharton	145,921	Dec. 23, 1873	800	262	4	686
Pump	J. Wolford and R. Conner	141,514	Aug. 5, 1873	92	28	4	142
Pump, Acid	F. Nichols	136,934	Mar. 18, 1873	525	173	3	305
Pump, Air	G. E. Barker and S. F. Mack	145,926	Dec. 30, 1873	825	269	4	699
Pump and condenser, Steam	E. Reese	137,796	Apr. 15, 1873	481	150	3	420
Pump and condenser, Steam air	S. Gibbons	142,333	Sept. 2, 1873	10	4	4	243
Pump and engine, Air	T. Beach	137,123	Mar. 25, 1873	703	233	3	331
Pump and fire-engine	S. Weirick and H. Lathrop	139,840	June 10, 1873	373	116	3	654
Pump and funnel, Combined atmospheric exhaust	G. H. Randall	136,264	Feb. 25, 1873	811	262	3	228
Pump, Attachment for direct-acting steam	O. T. Earle	142,092	Aug. 26, 1873	648	213	4	214
Pump, Barge	C. P. Gaver	143,069	Sept. 23, 1873	664	228	4	328
Pump-box	W. A. Spooner	145,133	Dec. 2, 1873	91	29	4	592

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Pump-bracket	S. Selden and O. R. Hanchett	142, 286	Aug. 26, 1873	806	267	4	227
Pump, Compound high and low pressure steam	A. J. L. Loretz	139, 071	May 20, 1873	552	174	3	565
Pump, Compound steam	A. J. L. Loretz	139, 070	May 20, 1873	551	173	3	565
Pump-cylinder, Lining for	W. S. Owen	145, 895	Dec. 23, 1873	777	254	4	684
Pump, Direct-acting steam	O. T. Earle	142, 091	Aug. 26, 1873	647	212	4	214
Pump, Double-acting	P. M. Barker	139, 650	June 10, 1873	194	63	3	641
Pump, Double-acting	K. Nolan	135, 146	Jan. 21, 1873	597	194	3	83
Pump, Double-acting force	J. P. Flanders	140, 819	July 15, 1873	428	145	4	62
Pump, Force	O. Snell	141, 394	July 29, 1873	992	322	4	124
Pump for driven well	J. W. Harrington and J. A. Yingling	143, 345	Sept. 30, 1873	903	307	4	364
Pump for mines, Portable	W. E. Sidney	143, 724	Oct. 14, 1873	306	101	4	413
Pump, Glass piston and its packing for	A. E. Gay	140, 697	July 8, 1873	316	107	4	45
Pump, Hand-lever attachment for steam	O. T. Earle	142, 562	Sept. 9, 1873	925	73	4	272
Pump-handle	I. N. Frazer	135, 269	Jan. 28, 1873	728	233	3	106
Pump, Lift and force	A. H. Powell	134, 927	Jan. 14, 1873	397	126	3	52
Pump, Means of operating ship's	S. R. Deverell	135, 094	Jan. 21, 1873	550	179	3	80
Pump, Mining	G. E. Mills	138, 037	Apr. 22, 1873	707	223	3	448
Pump operated by exhaust steam, Steam vacuum	W. Burdon	135, 203	Jan. 28, 1873	665	214 215	3	101
Pump or blower, Rotary	A. Brear	145, 617	Dec. 16, 1873	525	172	4	652
Pump or engine, Rotary	W. P. Maxson	141, 155	July 22, 1873	750	247	4	97
Pump or syringe, Hand	W. B. Robins	139, 263	May 27, 1873	742	235	3	588
Pump-piston	W. C. Culbertson	142, 004	Aug. 19, 1873	545	180	4	196
Pump-piston	C. B. Gill	135, 905	Feb. 18, 1873	457	158	3	191
Pump-plunger and pump	N. P. Sheldon	140, 795	July 15, 1873	404	137	4	69
Pump, Quicksilver	M. P. Boss	145, 718	Dec. 23, 1873	623	204	4	672
Pump, Reaction	E. Rhotes, jr.	134, 770	Jan. 14, 1873	258	84	3	41
Pump, Rivet-pocket for oil-well	W. H. Birge	134, 970	Jan. 21, 1873	446	142	3	71
Pump, Rotary	L. Chapman	137, 054	Mar. 25, 1873	638	211	3	326
Pump, Rotary	L. Chapman	137, 055	Mar. 25, 1873	640	212	3	327
Pump, Rotary	L. Chapman	137, 057	Mar. 25, 1873	641	213	3	327
Pump, Rotary	L. Chapman	137, 058	Mar. 25, 1873	642	213	3	327
Pump, Rotary	J. E. Gillespie	141, 000	July 22, 1873	609	205	4	86
Pump, Rotary	C. P. Holmes	142, 696	Sept. 9, 1873	334	112	4	281
Pump, Siphon	J. M. Bois	136, 809	Mar. 18, 1873	423	140	3	298
Pump, Steam	W. Aldrich	139, 103	May 20, 1873	579	182	3	568
Pump, Steam	W. Arthur	135, 061	Jan. 21, 1873	529	171	3	78
Pump, Steam	R. Eickenmeyer	138, 622	May 6, 1873	134	44	3	508
Pump, Steam	J. W. Handren	134, 746	Jan. 14, 1873	239	77	3	40
Pump, Steam	J. W. Handren	135, 426	Feb. 4, 1873	30	9	3	130
Pump, Steam	B. S. Lawson	145, 806	Dec. 23, 1873	697	229	4	678
Pump, Steam	G. J. Roberts	138, 695	May 6, 1873	201	63, 64	3	514
Pump, Steam and vacuum	A. J. Simmons	143, 725	Oct. 14, 1873	307	101	4	413
Pump, Steam vacuum	W. Burdon	135, 198	Jan. 28, 1873	660	213	3	101
Pump, Steam vacuum	W. Burdon	135, 199	Jan. 28, 1873	661	213	3	101
Pump, Steam vacuum	W. Burdon	135, 200	Jan. 28, 1873	662	213	3	101
Pump, Steam vacuum	W. Burdon	135, 201	Jan. 28, 1873	663	214	3	101
Pump, Steam vacuum	W. Burdon	135, 202	Jan. 28, 1873	664	214	3	101
Pump, Steam vacuum	W. Burdon	139, 235	May 27, 1873	718	226	3	597
Pump, Steam vacuum	W. Burdon	141, 540	Aug. 5, 1873	113	35, 36	4	144
Pump, Steam vacuum	J. R. Little	136, 441	Mar. 4, 1873	75	26	3	251
Pump, Steam vacuum	W. E. Prall and D. A. Burr	146, 095	Dec. 30, 1873	974	314 315	4	711
Pump, Steam vacuum	J. K. Simpson and S. N. Drake	134, 568	Jan. 7, 1873	63	19	3	12
Pump, Steam vacuum	I. P. Tice	136, 344	Feb. 25, 1873	880	283	3	234
Pump, Strainer for ship's bilge	S. J. Chapman	142, 438	Sept. 2, 1873	102	33	4	250
Pump, Submerged	J. A. Morrell and J. Brewer	141, 807	Aug. 12, 1873	364	120	4	172
Pump, Submerged force	A. T. Hafford	139, 003	May 20, 1873	491	155	3	561
Pumps, Cylinder for lining wooden	R. W. Wheeler	140, 802	July 15, 1873	410	139	4	61
Pumps, Sucker-rod joint for	A. M. Williams	144, 813	Nov. 18, 1873	554	188	4	546
Pumping-engine, Steam	W. C. Hicks	143, 824	Oct. 21, 1873	409	137	4	431
Pumping-engine, Steam	A. J. L. Loretz	134, 629	Jan. 7, 1873	180	58, 59	3	21
Punch and cutter, Leather	H. S. Fickett	134, 794	Jan. 14, 1873	279	91	3	43
Punch and cutting nippers, Hand	J. O. Reilly	139, 079	May 20, 1873	561	176	3	566
Punch, Belt	A. N. Southwick	135, 734	Feb. 11, 1873	322	103	3	165
Punch for metal, Hand	S. F. Leach	145, 578	Dec. 16, 1873	492	162	4	649
Punch, Portable	J. J. Safely	138, 201	Apr. 22, 1873	849	269	3	459
Punch, Ticket	H. W. Hewet	135, 549	Feb. 4, 1873	145	46	3	139
Punching and shearing machine	S. R. Houser	143, 510	Oct. 7, 1873	94	33	4	388
Punching and shearing machine	J. Kiesel	143, 985	Oct. 22, 1873	569	189	4	455
Punching and shearing machine, Combined	W. Lyon	142, 926	Sept. 16, 1873	535	183	4	308
Punching and shearing machine, Combined	C. Swanson	145, 694	Dec. 16, 1873	591	193	4	657
Punching-die, Manufacture of	R. J. Mullin	142, 407	Sept. 2, 1873	77	25	4	248
Punching-machine	R. Baird	136, 954	Mar. 18, 1873	542	179	3	307
Punching-machine	J. M. Laughlin	142, 403	Sept. 2, 1873	74	24	4	248
Punching-machine	S. W. Murray	136, 172	Feb. 25, 1873	732	236	3	222
Punching-machine	W. Woiceski	142, 317	Aug. 26, 1873	831	276	4	229
Punching-machine feeding-device	W. B. Bement	137, 407	Apr. 1, 1873	113	37	3	366
Punching-machine, Metal	J. Clark	141, 629	Aug. 12, 1873	209	66	4	160
Punching sheet-metal, Machine for	M. Stephens	143, 473	Oct. 7, 1873	62	22	4	386
Putty-knife and sprig-box, Combined	J. H. Gaches	136, 499	Mar. 4, 1873	128	41	3	256
Pyrotechnic signal	A. Lamarrs	144, 030	Oct. 28, 1873	610	.....	4	458
Pyroxyline articles, Manufacturing	J. W. Hyatt	138, 254	Apr. 29, 1873	923	291	3	474
Q							
Quartz-mill	T. O. Cutler	143, 336	Sept. 30, 1873	888	304	4	363
Quartz-mill feeder	T. A. Cochran	139, 370	May 27, 1873	827	285	3	596
Quicksilver from amalgam, Apparatus for separating	M. B. Howard	139, 314	May 27, 1873	787	251	3	592
Quicksilver, Process of purifying	J. B. Randol and C. W. Wright	144, 923	Nov. 25, 1873	658	.....	4	566
Quilting frame	B. Blackstone	138, 369	Apr. 29, 1873	1, 024	322	3	482
Quilting frame	W. Hudson	140, 137	June 24, 1873	658	207	3	693
Quilting frame	G. Phillips	142, 411	Sept. 2, 1873	79	26	4	249

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Rack:							
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Dry-goods rack.							
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Journal-packing rack.							
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Radiator, Indirect steam	J. H. Mills	145, 961	Dec. 30, 1873	857	279	4	701
Radiator, Steam	R. Berryman	135, 758	Feb. 11, 1873	343	110	3	166
Radiator, Steam	L. S. Daniels	135, 633	Feb. 11, 1873	235	74	3	158
Radiator, Steam	E. L. Hinckley	135, 645	Feb. 11, 1873	247	78	3	159
Radiator, Steam	A. L. Ide	144, 961	Nov. 25, 1873	704	238	4	570
Radiator, Steam	J. P. Wilson	138, 722	May 6, 1873	230	71	3	516
Rag-cutters, Scythe-holder for	E. D. Aldrich	145, 475	Dec. 16, 1873	397	131	4	641
Rag or paper engine, Bed-plate for	G. A. Corser	135, 631	Feb. 11, 1873	234	74	3	158
Rails, Machine for dressing wood	H. G. Angle	142, 608	Sept. 9, 1873	262	86	4	275
Railway-bed	J. W. Kern	136, 067	Feb. 18, 1873	624	205	3	202
Railway-brake, Hydraulic	G. P. Reushaw	136, 617	Mar. 11, 1873	248	84	3	274
Railway cattle-guard	T. D. Kline	141, 566	Aug. 5, 1873	136	43	4	146
Railway cattle-guard	I. C. Tunison and A. Reeve	142, 596	Sept. 9, 1873	252	82	4	274
Railway chair	R. M. York	138, 308	Apr. 29, 1873	974	306	3	478
Railway chair	D. D. Eldridge	136, 426	Mar. 4, 1873	61	22	3	250
Railway chair	S. Ferris	145, 936	Dec. 16, 1873	835	272	4	699
Railway chair	D. M. Graham	144, 332	Nov. 4, 1873	132	44	4	489
Railway chair	S. Huber	141, 275	July 29, 1873	877	287	4	115
Railway chair	W. Huffman	142, 235	Aug. 26, 1873	767	252	4	224
Railway chair	E. D. Mann	135, 230	Jan. 28, 1873	694	223	3	103
Railway chair	W. A. Rowland	138, 698	May 6, 1873	204	64	3	514
Railway chair	L. B. Tyng	142, 359	Sept. 2, 1873	34	12	4	245
Railway coupling-link, Machine for forming	P. H. Healy	139, 005	May 20, 1873	493	155	3	561
Railway crossing	J. Brahn	145, 781	Dec. 23, 1873	679	222	4	676
Railway crossing	G. Elliot	136, 227	Feb. 25, 1873	773	250	3	226
Railway crossing	R. J. Hughes	139, 716	June 10, 1873	259	81	3	645
Railway crossing	J. Wood	139, 643	June 3, 1873	174	57	3	623
Railway crossing gate	W. F. Morgan	138, 677	May 6, 1873	187	60	3	512
Railway crossings, Gate for	J. B. Powell	138, 527	May 6, 1873	54	18	3	502
Railway crossing signal, Automatic	R. Walker	137, 808	Apr. 15, 1873	490	153	3	421
Railway dust-preventer	J. Wellby	136, 013	Feb. 18, 1873	577	190	3	199
Railway, Elevated arch	E. J. Hulbert and A. N. N. Aubin	137, 552	Apr. 8, 1873	256	78, 79	3	389
Railway, Endless rolling-gear for	J. Frye	136, 052	Feb. 18, 1873	609	200	3	201
Railway-frog	W. B. Atkinson	138, 835	May 13, 1873	338	104	3	535
Railway-frog	G. W. Billings	137, 882	Apr. 15, 1873	550	172	3	426
Railway-frog	J. Brahn	139, 291	May 27, 1873	770	244	3	591
Railway-frog	T. J. and G. M. Clark	140, 574	July 8, 1873	214	71	4	37
Railway-frog	J. H. Lakey	137, 085	Mar. 18, 1873	671	223	3	329
Railway-frog	H. J. Skinner and S. J. Gifford	139, 271	May 27, 1873	752	232	3	589
Railway-frog	J. Wood	140, 332	June 24, 1873	825	262	3	707
Railway-frog	J. Wood	145, 041	Nov. 25, 1873	760	257	4	574
Railway-frog	J. Woodville	140, 230	June 24, 1873	734	232	3	700
Railway-gage	L. Kayser	143, 227	Sept. 30, 1873	844	291	4	360
Railway-gate	J. Beamisdarfer, sr.	135, 620	Feb. 11, 1873	224	70	3	157
Railway-gate	C. S. Currie	137, 534	Apr. 8, 1873	241	74	3	388
Railway-gate	A. Houts	142, 466	Sept. 2, 1873	130	42	4	252
Railway, Platform carrier for endless	J. Frye	136, 054	Feb. 18, 1873	611	200	3	201
Railway-rail	W. W. Altar	141, 979	Aug. 19, 1873	521	172	4	194
Railway-rail	H. G. Angle	137, 337	Apr. 1, 1873	56	17	3	361
Railway-rail	A. B. Dean and T. C. Coleman	136, 043	Feb. 18, 1873	601	198	3	200
Railway-rail	W. S. Hunter	134, 749	Jan. 14, 1873	241	78	3	40
Railway-rail	A. Johnson	144, 029	Oct. 29, 1873	609	202	4	458
Railway-rail	J. R. Johnston	142, 701	Sept. 9, 1873	338	113	4	281
Railway-rail	M. F. McIntyre	137, 463	Apr. 1, 1873	164	52	3	370
Railway-rail	G. C. Morgan	136, 852	Mar. 18, 1873	458	152	3	300
Railway-rail	B. Myers	143, 708	Oct. 14, 1873	291	95	4	412
Railway-rail	W. Peckham	141, 515	Aug. 5, 1873	93	29	4	142
Railway-rail	M. R. Perkins	144, 221	Nov. 4, 1873	45	13	4	482
Railway-rail	R. Steel	142, 179	Aug. 26, 1873	718	237	4	220
Railway-rail	J. H. Wales and H. S. Cushman	142, 182	Aug. 26, 1873	721	234	4	220
Railway-rail fastening	A. M. Rouse	145, 015	Nov. 25, 1873	735	248	4	572
Railway-rail joint	T. V. Allis	137, 587	Apr. 8, 1873	286	88	3	391
Railway-rail joint	R. Anthony and F. A. Seabert	137, 819	Apr. 15, 1873	500	156	3	422
Railway-rail joint	J. Bishop	140, 760	July 15, 1873	374	128	4	58
Railway-rail joint	W. R. Clark	136, 307	Feb. 25, 1873	845	273	3	231
Railway-rail joint	J. M. Clem	135, 082	Jan. 21, 1873	543	176	3	79
Railway-rail joint	W. Crandell	139, 660	June 10, 1873	202	66	3	641
Railway-rail joint	H. Decker	142, 996	Sept. 23, 1873	692	204	4	324
Railway-rail joint	W. G. Dunn	145, 339	Dec. 9, 1873	275	92	4	620
Railway-rail joint	J. L. Hudson	142, 020	Aug. 19, 1873	560	185	4	198
Railway-rail joint	W. D. Lindsley	142, 030	Aug. 19, 1873	569	188	4	198
Railway-rail joint	M. F. McIntyre	136, 530	Mar. 4, 1873	160	52	3	258
Railway-rail joint	S. Nunamaker	134, 924	Jan. 14, 1873	394	125	3	52
Railway-rail joint	T. Rodes	143, 533	Oct. 7, 1873	117	40	4	390
Railway-rail joint	G. W. Skaats	137, 253	Mar. 25, 1873	821	270	3	340
Railway-rail joint	W. H. Skidmore	142, 954	Sept. 16, 1873	561	190	4	310
Railway-rail joint	G. A. Sturges	139, 276	May 27, 1873	758	239, 240	3	590
Railway-rail joint	W. Thompson	145, 372	Dec. 9, 1873	298	100	4	692
Railway-rail, Joint-connection for hollow	R. S. Sanborn	142, 654	Sept. 9, 1873	299	98	4	278

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Railway-rail joints, Elastic seat for	L. Scofield, jr.	143,304	Sept. 30, 1873	861	295	4	361
Railway-rail joint-fastening	B. W. Buchheit	142,610	Sept. 9, 1873	263	85	4	275
Railway-rail joint-fastening	G. A. Sturgess	143,790	Oct. 21, 1873	382	127	4	429
Railway-rail joint-fastening	S. Vanstone	136,683	Mar. 11, 1873	305	101	3	279
Railway-rail joint-stiffener	H. Harding	145,649	Dec. 16, 1873	552	182	4	654
Railway-rail, Manner of punching bolt-hole in steel	T. Critchlow	136,037	Feb. 18, 1873	596	196	3	200
Railway-rail splice	H. P. Adams	136,402	Mar. 4, 1873	44	16	3	249
Railway-rail, Street	M. L. Ghirardini	141,217	July 29, 1873	823	269	4	111
Railway-rails, Device for straightening	T. J. Told	135,676	Feb. 11, 1873	274	86	3	161
Railway-rails, Process of utilizing old	G. Fritz	145,166	Dec. 2, 1873	118	39	4	595
Railway safety-guard	C. Latimer	137,694	Apr. 8, 1873	378	117	3	399
Railway-signal	J. H. Johnson and J. E. Layton	140,200	June 24, 1873	711	224	3	698
Railway-signal	E. R. Marshall	144,854	Nov. 25, 1873	604	205	4	561
Railway-signal	J. F. Ross	142,944	Sept. 16, 1873	552	187	4	309
Railway-signal	W. Wickersham	143,483	Oct. 7, 1873	70	24	4	386
Railway-signal apparatus, Electric	F. L. Pope	140,790	July 15, 1873	399	136	4	60
Railway-signal apparatus, Electric	H. W. Spang	141,395	July 29, 1873	993	322	4	121
Railway-signal, Automatic	H. S. Evans	143,815	Oct. 21, 1873	404	134	4	431
Railway-signal, Electric	J. D. and T. Digney, H. Lartigue and H. Forest	139,376	May 27, 1873	832	266	3	596
Railway-signal, Electric	S. C. Hendrickson	143,694	Oct. 14, 1873	275	91	4	411
Railway-signal, Electric	D. Rousseau	141,387	July 29, 1873	985	320	4	123
Railway-signal, Electric	H. W. Spang	140,737	July 8, 1873	349	118	4	48
Railway-signal, Musical	R. A. Filkins	141,266	July 29, 1873	871	285	4	115
Railway-signal, Pneumatic	W. E. Prall	145,309	Dec. 9, 1873	248	83	4	618
Railway-signals, Circuit-breaker for electric	D. Rousseau	144,568	Nov. 11, 1873	343	115	4	517
Railway-signals, Circuit-closer for	D. Rousseau	140,953	July 15, 1873	551	185	4	72
Railway-signals, Circuit-closer for	G. H. Snow	143,935	Oct. 21, 1873	501	169	4	439
Railway-signals, Circuit for electric	F. L. Pope	140,536	July 1, 1873	166	56	4	22
Railway-signals, Electric circuit and device for	F. L. Pope	143,529	Oct. 7, 1873	111	38	4	389
Railway-signals, Track-circuit for electric	S. C. Hendrickson	143,903	Oct. 21, 1873	476	160	4	437
Railway-signaling apparatus, Circuit-closer for	H. W. Spang	142,131	Aug. 26, 1873	620	223	4	217
Railway-signaling apparatus, Electric	R. K. Boyle	141,755	Aug. 12, 1873	313	103	4	169
Railway-signaling apparatus, Electric	F. L. Pope	145,308	Dec. 9, 1873	246	82	4	617
Railway, Street	J. R. Beckett	142,668	Sept. 9, 1873	313	104	4	279
Railway, Street	T. R. Lovett	134,906	Jan. 14, 1873	378	120	3	50
Railway-switch	J. R. Adams	138,834	May 13, 1873	338	104	3	535
Railway-switch	J. B. Alexander	144,379	Nov. 11, 1873	183	63	4	505
Railway-switch	D. J. Arnold	136,895	Mar. 18, 1873	493	163	3	303
Railway-switch	G. F. Beatty	144,014	Oct. 28, 1873	599	198	4	457
Railway-switch	G. W. Billings	137,050	Mar. 25, 1873	636	210	3	326
Railway-switch	H. Black	136,126	Feb. 25, 1873	691	223	3	219
Railway-switch	D. E. Brockett	142,673	Sept. 9, 1873	316	105	4	279
Railway-switch	W. H. Clark and P. Chaney, jr.	142,837	Sept. 16, 1873	463	157	4	302
Railway-switch	A. W. Cram	135,527	Feb. 4, 1873	121	38	3	137
Railway-switch	H. S. Dewey	137,535	Apr. 8, 1873	241	74	3	388
Railway-switch	M. and J. W. Fels	140,909	July 15, 1873	507	171	4	69
Railway-switch	A. C. Garratt	140,770	July 15, 1873	381	131	4	59
Railway-switch	B. Hall	140,915	July 15, 1873	512	172	4	69
Railway-switch	F. P. Hanchet	140,917	July 15, 1873	514	173	4	69
Railway-switch	S. H. Jenkins	144,102	Oct. 28, 1873	670	221	4	463
Railway-switch	G. Keech	144,207	Nov. 4, 1873	34	10	4	481
Railway-switch	J. F. Linthicum	139,589	June 3, 1873	126	42	3	619
Railway-switch	E. Mercier	145,518	Dec. 16, 1873	442	144	4	645
Railway-switch	T. Newman	145,678	Dec. 16, 1873	578	189	4	656
Railway-switch	H. H. Potter	144,224	Nov. 4, 1873	47	14	4	489
Railway-switch	T. J. Reynolds	145,013	Nov. 25, 1873	733	247	4	572
Railway-switch	J. G. Rockwell	143,302	Sept. 30, 1873	860	294	4	361
Railway-switch	C. C. Shelby	139,627	June 10, 1873	362	112	3	654
Railway-switch	C. S. and L. R. Shute	136,776	Mar. 11, 1873	380	126	3	285
Railway-switch	W. A. Slingerland	144,930	Nov. 25, 1873	682	225	4	566
Railway-switch	C. D. Tisdale	139,279	May 27, 1873	759	240	3	590
Railway-switch	W. H. Van Gieson	139,635	June 3, 1873	184	55	3	622
Railway-switch	E. P. Wheeler	144,007	Oct. 28, 1873	593	198	4	457
Railway-switch	C. H. White	139,220	May 20, 1873	688	217	3	577
Railway-switch, Means for operating	J. Wood	144,880	Nov. 25, 1873	625	212	4	562
Railway-switch, Self-closing	T. K. Hubbell and G. H. Gregory	144,848	Nov. 25, 1873	599	204	4	560
Railway-switch signal	J. Cullen	139,046	May 20, 1873	522	165	3	563
Railway-switch stand	C. W. Spayd	145,456	Dec. 9, 1873	370	123	4	627
Railway-switch, Street	R. A. Rush	142,725	Sept. 9, 1873	356	121	4	282
Railway-tank feeder	J. E. Pattison	140,433	July 1, 1873	75	27	4	14
Railway-tank feeder	R. J. Gibbons	140,132	June 24, 1873	654	205	3	693
Railway-tank, Self-feeding	A. Grochan	135,473	Feb. 4, 1873	74	25	3	133
Railway-tank, Watering-column for	B. D. Moody	140,294	June 24, 1873	769	250	3	704
Railway-tie	J. N. Poage	145,236	Dec. 2, 1873	177	61	4	599
Railway-tie	P. S. Devlan	143,407	Oct. 7, 1873	9	3	4	381
Railway-tie	H. L. De Zeng	145,991	Dec. 30, 1873	882	286	4	703
Railway-tie	W. Peck and H. C. Richman	139,518	June 3, 1873	64	22	3	614
Railway-tie	G. R. Richardson	140,952	July 15, 1873	550	184	4	72
Railway-tie	W. H. Sterling	139,031	May 20, 1873	511	161	3	562
Railway-tie, Iron	T. R. Timby	145,258	Dec. 2, 1873	197	68	4	601
Railway time-signal	C. W. Galick	140,411	July 1, 1873	60	21	4	13
Railway time-signal	G. B. Cummings	143,405	Oct. 7, 1873	6	2	3	381
Railway time-signal	J. Fend and J. W. Stevenson	145,057	Dec. 2, 1873	16	6	4	587
Railway track	H. H. Ford	143,135	Sept. 23, 1873	713	245	4	333
Railway track	L. H. Peteler	135,839	Feb. 11, 1873	418	136	3	172
Railway track	A. D. Rock	135,667	Feb. 11, 1873	266	84	3	160
Railway track	D. S. Tuthill	135,300	Jan. 28, 1873	752	243	3	108
Railway-track lifter	A. H. Arnot	135,747	Feb. 11, 1873	332	106	3	166
Railway-track tamper	P. Magee	136,845	Mar. 18, 1873	452	150	3	300
Railway-track wrench	P. L. Gibbs	137,910	Apr. 15, 1873	578	181	3	428
Railway-tracks, Repairing	B. A. Warfield	145,465	Dec. 9, 1873	378	125	4	628

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Railway-train indicator	S. W. Hemenway	136, 342	Feb. 25, 1873	786	954	3	227
Railway-train, Smoke and spark conduit for	T. De Codezo	143, 812	Oct. 21, 1873	401	133	4	431
Railway-trains, Electric apparatus for signaling between.	R. K. Boyle	143, 663	Oct. 14, 1873	242	81	4	409
Railway, Ventilating underground and sub-surface.	O. Vandenberg	136, 563	Mar. 4, 1873	190	62, 63	3	260
Railway water-crane	H. S. Cumberley and D. Mann	142, 150	Aug. 26, 1873	695	229	4	218
Railway water-tank	J. L. Shaw	137, 328	Apr. 1, 1873	97	32	3	365
Railway water-tank, Watering-column for	J. N. Poage	139, 188	May 20, 1873	661	207, 208	3	574
Railway, Wheel for endless	J. Frye	136, 053	Feb. 18, 1873	610	200	3	201
Rake:							
<i>See</i> Harvester-rake.							
Hay-rake.							
Horse-rake.							
Revolving-rake.							
Rake	J. O. Jones	143, 578	Oct. 14, 1873	171	58	4	403
Rake	L. A. Powers	144, 791	Nov. 18, 1873	536	182	4	545
Rake and tedder, Combined	R. J. Colvin	138, 132	Apr. 22, 1873	784	250	3	454
Rake and tedder, Combined	C. L. Dow	143, 166	Sept. 23, 1873	734	253	4	334
Rake and tedder, Combined	S. Perry	136, 539	Mar. 4, 1873	170	54	3	259
Rake-shoe, Revolving	A. J. Taylor	136, 189	Feb. 25, 1873	746	240	3	223
Range	L. Meyer	145, 674	Dec. 16, 1873	574	188	4	656
Range, Cooking	W. Hopkin, jr.	143, 762	Oct. 21, 1873	356	119	4	427
Range, Cooking	J. H. Mitchell	139, 728	June 10, 1873	272	85	3	647
Range, Cooking	J. L. Pfau, jr.	139, 187	May 20, 1873	661	207	3	574
Range, Cooking	N. M. Simonds	140, 550	July 1, 1873	177	60	4	23
Range for cooking and heating	S. Teets	138, 543	May 6, 1873	66	22	3	503
Range, Heating	J. Lawlor	140, 205	June 24, 1873	715	225	3	698
Range, Heating and cooking	H. L. Palmer	135, 356	Jan. 28, 1873	804	260	3	112
Range, Hot-water heating-apparatus for	H. L. Palmer	134, 765	Jan. 14, 1873	253	83	3	41
Rat-trap	T. Hebb	136, 995	Mar. 18, 1873	577	192	3	310
Ratchet-drill	B. Gallagher	137, 432	Apr. 1, 1873	137	45	3	368
Ratchet-drill	T. J. Sloan	142, 356	Sept. 2, 1873	30	11	4	244
Ratchet-drill	J. Swank	135, 451	Feb. 4, 1873	55	18	3	132
Ratchet-pinion	J. F. Kingwill	135, 991	Feb. 18, 1873	557	184	3	197
Ratchet-rod, Adjustable	E. H. Smith	143, 538	Oct. 7, 1873	121	41	4	390
Ratchet-wrench	I. C. Colbert	145, 399	Dec. 9, 1873	324	109	4	624
Rattan ware	S. H. Penley	144, 563	Nov. 11, 1873	338	114	4	517
Razor	E. A. Freeman	135, 793	Feb. 11, 1873	377	121	3	169
Razor-strap	J. B. Lucas	139, 011	May 20, 1873	497	156	3	561
Razor-strap	J. B. Lucas	145, 742	Dec. 23, 1873	645	211	4	674
Reading-gage	R. S. Hildreth	140, 135	June 24, 1873	657	206	3	693
Reamer, Adjustable	A. Shedlock	139, 087	May 20, 1873	566	178	3	567
Reaper, &c., Coupling-joint for	G. W. Sylvester	143, 195	Sept. 23, 1873	761	262	4	337
Reaper and mower knife, Heel for	R. Allstatter	134, 831	Jan. 14, 1873	315	100	3	45
Reaper's coupling-joint	G. W. Sylvester	138, 709	May 6, 1873	215	67	3	515
Reciprocating-engine	S. J. Jones	143, 827	Oct. 21, 1873	412	137	4	432
Reciprocating-engine	A. Staley	142, 747	Sept. 8, 1873	379	127	4	284
Reciprocating steam-engine	A. E. Baker	137, 167	Mar. 25, 1873	739	245, 246	3	334
Reciprocating steam-engine	R. G. Nicoll and G. H. Hollmann	139, 258	May 27, 1873	737	233	3	588
Reciprocating steam-engine	W. Simpson and A. Gardner	135, 670	Feb. 11, 1873	268	84	3	161
Reciprocating steam-engine	J. W. Wilbraham	137, 273	Mar. 25, 1873	839	275	3	341
Reciprocating steam-engine and saw-mill combined.	I. Brown	139, 233	May 27, 1873	716	225, 226	3	586
Reclining-chair	G. Buchanan	141, 318	July 29, 1873	916	300	4	119
Reclining-chair	E. Collins	141, 121	July 22, 1873	714	238	4	95
Reclining-chair	G. D. Goss	137, 069	Mar. 25, 1873	656	217, 218	3	328
Reclining-chair	G. C. Paine	141, 662	Aug. 12, 1873	237	75	4	162
Reclining-chair	E. C. Ranks	143, 299	Sept. 30, 1873	857	294	4	360
Reclining-chair, Adjustable	J. J. Hartman	145, 651	Dec. 16, 1873	553	182	4	654
Reclining-chair, Adjustable	G. A. Schaestey	145, 595	Dec. 16, 1873	506	166	4	650
Reclining-chair, Self.	G. Niderkorn	142, 039	Aug. 19, 1873	581	191	4	199
Reel:							
<i>See</i> Angling-reel.							
Clothes-reel.							
Clothes-line reel.							
Fishing-reel.							
Harvester-reel.							
Hose-reel.							
Oven-reel.							
Reel	R. Simon	141, 084	July 22, 1873	683	229	4	92
Refining petroleum	S. Van Syckel	140, 801	July 15, 1873	409	139	4	61
Refining petroleum, Process of	A. Farrar	138, 237	Apr. 29, 1873	902	3	4	472
Reflector	J. O. Belknap	138, 843	May 13, 1873	347	107	3	536
Reflector	C. F. Jacobsen	138, 255	Apr. 29, 1873	923	291	3	474
Reflector	F. L. Senour	139, 923	June 17, 1873	456	142	3	668
Reflector	H. B. Walbridge	140, 325	June 24, 1873	820	200	3	707
Refrigerating-apparatus	J. L. Tripler	140, 321	June 24, 1873	816	258, 259	3	707
Refrigerating-apparatus for vessels, railway-cars, &c.	W. Bray	136, 484	Mar. 4, 1873	114	38	3	255
Refrigerator	R. Armiger	145, 081	Dec. 2, 1873	41	13	4	589
Refrigerator	J. J. Bailey	138, 364	Apr. 29, 1873	1, 019	321	3	481
Refrigerator	W. M. Baker	138, 553	May 6, 1873	78	25	3	504
Refrigerator	W. M. Baker	143, 607	Oct. 14, 1873	194	65	4	405
Refrigerator	A. Bardell	142, 191	Aug. 26, 1873	728	240	4	221
Refrigerator	C. Camp	143, 059	Sept. 23, 1873	657	225	4	328
Refrigerator	S. E. Condon	134, 844	Jan. 7, 1873	137	44	3	17
Refrigerator	B. R. Du Val	138, 488	May 6, 1873	18	6	3	499
Refrigerator	E. S. Earley	135, 209	Jan. 28, 1873	671	216	3	102
Refrigerator	A. J. and J. Fink	145, 855	Dec. 23, 1873	739	242	4	681
Refrigerator	S. M. Fort	141, 781	Aug. 12, 1873	341	112	4	171
Refrigerator	F. W. Hunt	142, 469	Sept. 2, 1873	133	43	4	253
Refrigerator	T. D. Kingan	142, 796	Sept. 16, 1873	430	145	4	299

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Refrigerator.....	J. Lorenz and H. F. W. Bender.....	145, 066	Dec. 2, 1873	24	2	4	587
Refrigerator.....	D. Mulcahy.....	138, 095	Apr. 22, 1873	757	240	3	452
Refrigerator.....	C. O. Peck.....	137, 477	Apr. 1, 1873	178	56	3	372
Refrigerator.....	J. Rohrer.....	143, 591	Oct. 14, 1873	179	61	4	404
Refrigerator.....	E. S. Root.....	145, 127	Dec. 2, 1873	83	27	4	592
Refrigerator.....	J. G. Seltzer and A. J. Fink.....	134, 937	Jan. 14, 1873	406	130	3	53
Refrigerator.....	M. Shaw.....	139, 428	May 27, 1873	888	286	3	600
Refrigerator.....	A. B. Spencer.....	135, 251	Jan. 23, 1873	715	229	3	105
Refrigerator.....	R. Taylor.....	137, 112	Mar. 25, 1873	693	230	3	330
Refrigerator.....	R. Thomson.....	145, 317	Dec. 9, 1873	257	85	4	618
Refrigerator and beer-cooler combined.....	G. Nuss.....	140, 638	July 8, 1873	267	91	4	41
Refrigerator and cooler.....	C. D. Hicks.....	143, 625	Oct. 14, 1873	210	71	4	406
Refrigerator and mode of cooling.....	J. F. Schneider.....	139, 197	May 20, 1873	671	210	3	575
Refrigerator and sideboard combined.....	G. L. Packard.....	139, 186	May 20, 1873	660	207	3	574
Refrigerator and soda-water apparatus combined.....	T. W. Johnson.....	140, 629	July 8, 1873	260	88	4	41
Refrigerator and water-cooler combined.....	J. S. Bateman.....	137, 650	Apr. 8, 1873	337	104	3	396
Refrigerator and water-cooler combined.....	H. W. B. Hervey.....	141, 141	July 22, 1873	735	243	4	96
Refrigerator-building.....	W. S. Bate.....	143, 317	Sept. 30, 1873	872	298	4	362
Refrigerator-building.....	W. M. Mixer.....	138, 427	Apr. 29, 1873	1, 077	339	3	486
Refrigerator buildings, &c., Floor for.....	R. A. Smith and A. Schmid.....	142, 745	Sept. 9, 1873	377	126	4	284
Refrigerator-door.....	P. A. Vogt.....	136, 629	Mar. 11, 1873	262	88	3	275
Refrigerator for preserving butter, &c.....	G. B. Rohrer.....	135, 159	Jan. 21, 1873	605	197	3	84
Refrigerator for restaurant, &c.....	W. F. Byrne.....	140, 243	June 24, 1873	745	235	3	700
Refrigerator for slaughter-houses.....	H. A. Roberts.....	145, 968	Dec. 30, 1873	864	280	4	702
Refrigerator for transporting ice-cream, &c.....	J. Moos.....	142, 806	Sept. 16, 1873	437	148	4	300
Refrigerator for transporting oysters, &c.....	J. C. Jones.....	142, 703	Sept. 9, 1873	339	114	4	281
Refuse-burner.....	W. Glue.....	145, 861	Dec. 23, 1873	744	243	4	682
Regenerator-furnace.....	H. Frank.....	135, 640	Feb. 11, 1873	241	76	3	159
Register:							
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Game-register.							
Grain-register.							
Hot-air register.							
Machinery-register.							
Measuring-register.							
Package-register.							
Passenger-register.							
Telegraph-register.							
Telegraph receiving-register.							
Valve-register.							
Register and indicator.....	E. P. Wheeler.....	143, 651	Oct. 14, 1873	231	78	4	408
Register and stove-pipe thimble, Combined.....	C. Hilton.....	137, 203	Mar. 25, 1873	777	256	3	337
Register-point perforating-device.....	W. Overend.....	143, 374	Sept. 30, 1873	929	314	4	366
Regulator:							
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Damper-regulator.							
Draft-regulator.							
Electrical regulator.							
Feed-water regulator.							
Gas-regulator.							
Grinding-mill feed-regulator.							
Heat-regulator.							
Speed-regulator.							
Telegraph-regulator.							
Watch-regulator.							
Water-regulator.							
Windmill-regulator.							
Rein, Check.....	G. J. Townley.....	143, 860	Oct. 21, 1873	444	148	4	434
Rein, Elastic check.....	J. Nealy, jr. and T. P. Kemp.....	136, 256	Feb. 25, 1873	800	260	3	228
Rein-guide for vehicles.....	A. D. Smith.....	142, 127	Aug. 26, 1873	676	222	4	217
Rein-holder.....	J. W. Clark.....	143, 668	Oct. 14, 1873	245	83	4	409
Rein-holder.....	E. Fahrney.....	143, 409	Oct. 7, 1873	11	4	4	381
Rein-holder.....	L. Fawcett.....	145, 559	Dec. 16, 1873	478	156	4	648
Rein-holder.....	C. M. Graunis and L. M. Fitch.....	143, 140	Sept. 23, 1873	716	246	4	333
Rein retainer, Check.....	C. H. Ferrin.....	141, 814	Aug. 12, 1873	370	121	4	173
Rein support and protector, Driving.....	W. N. C. Wilson.....	139, 842	June 10, 1873	374	116	3	655
Relisher and wedge cutter.....	W. J. Hoskins and A. D. Rowe.....	139, 715	June 10, 1873	258	81	3	645
Rendering apparatus, Fat, offal, &c.....	A. Broadnax.....	136, 129	Feb. 25, 1873	694	214	3	219
Rendering fat and deodorizing the gases, Apparatus for.....	H. S. Firman.....	136, 827	Mar. 18, 1873	438	145	3	299
Rendering fats, Steam-generator and apparatus for.....	V. D. Anderson.....	141, 746	Aug. 12, 1873	305	100	4	168
Rendering lard, Machine for cutting up fat meat for.....	J. Weber and W. C. Siefert.....	134, 717	Jan. 7, 1873	201	65	3	32
Rendering lard, treating offal, &c., Apparatus for.....	J. N. B. Bond.....	136, 208	Feb. 25, 1873	759	245	3	224
Rendering tallow, &c., Apparatus for.....	P. W. Dilton.....	136, 420	Mar. 4, 1873	57	20	3	250
Resin-box and cooler.....	A. K. Lee.....	138, 809	May 13, 1873	314	97	3	533
Resins, Bleaching.....	A. K. Lee.....	139, 402	May 27, 1873	866	277	3	598
Respirator.....	B. W. James.....	145, 874	Dec. 23, 1873	756	247	4	683
Respirator, Nasal.....	B. W. James.....	142, 477	Sept. 2, 1873	139	45	4	253
Retort furnace for separating zinc from gold, silver, &c.....	E. Balbach, jr.....	139, 449	June 3, 1873	2	1	3	609
Reverberatory furnace.....	G. Atkins.....	136, 017	Feb. 18, 1873	580	191	3	199
Reverberatory furnace.....	W. Hayland.....	138, 564	May 6, 1873	88	28	3	504
Reverberatory furnace.....	H. McDonald.....	139, 683	June 10, 1873	223	72	3	643
Reverberatory furnace.....	J. Morrison.....	141, 371	July 29, 1873	971	315	4	122
Revolving rake.....	A. B. Sharp.....	137, 247	Mar. 25, 1873	816	268	3	340
Revolving seat.....	G. F. Dawson.....	140, 895	July 15, 1873	491	166	4	67
Ribbon-block.....	T. Ehrenberg.....	144, 520	Nov. 11, 1873	300	101	4	514
Ribbon-block.....	W. Obrist.....	139, 326	May 27, 1873	795	253	3	593
Ribbon-case.....	J. K. Landis.....	140, 510	July 1, 1873	144	49	4	90
Rice-cleaner.....	J. L. Arms.....	141, 194	July 29, 1873	797	261	4	109
Rice-cleaner.....	D. L. Geer.....	142, 158	Aug. 26, 1873	703	232	4	219
Rice-cleaning machine.....	J. N. White.....	136, 117	Feb. 18, 1873	667	218	3	205
Rice-huller.....	M. E. Stacy.....	136, 942	Mar. 18, 1873	532	176	3	306

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Rice-separating machine	H. B. Stevens	144, 803	Nov. 18, 1873	546	186	4	545
Rick-cover, Portable	J. W. Fitzgerald	140, 127	June 24, 1873	648	204	3	692
Rifle, Scythe	W. H. Daniels	137, 763	Apr. 15, 1873	452	141	3	418
Rigging-stopper	T. G. Bell	145, 833	Dec. 23, 1873	718	236	4	680
Rigging, Thimble for ship's	T. G. Bell	139, 230	May 27, 1873	714	225	3	586
Ring:							
<i>See</i> Finger-ring.							
Halter-ring.							
India-rubber ring.							
Key-ring.							
Scarf-ring.							
Spinning-ring.							
Suspension-ring.							
Ripper and rag-looper	H. M. Johnson	136, 065	Feb. 18, 1873	622	204	3	202
River, Device for sand-bars in	A. Garnham	139, 569	June 3, 1873	108	36	3	618
River, Mode of utilizing currents of	E. Valade	134, 618	Jan. 7, 1873	109	36	3	16
Rivet-heading machine	J. A. Wells	143, 549	Oct. 7, 1873	137	45	4	391
Rivet-setting machine	M. D. Brooks	142, 434	Sept. 2, 1873	97	32	4	250
Rivets, Manufacture of hollow	M. Bray	140, 881	July 15, 1873	477	161	4	66
Riveting-machine	W. Seller	136, 100	Feb. 12, 1873	651	213	3	204
Road, Construction of	E. Chadwick	141, 995	Aug. 19, 1873	535	177	4	196
Road-roller	A. Lindelof	135, 825	Feb. 11, 1873	408	132	3	171
Road-steamer, Wheel for	J. S. Fisher	137, 065	Mar. 25, 1873	651	216	3	327
Road-trimmer	B. Goodrich	144, 532	Nov. 11, 1873	311	105	4	515
Rock and ore crusher	C. Foster	138, 240	Apr. 29, 1873	904	285	3	472
Rock-drill	D. Kennedy	143, 355	Sept. 30, 1873	910	309	4	365
Rock-drill	G. E. Nutting and J. C. Githens	140, 637	July 8, 1873	268	91	4	41
Rock-drill	W. Roberts, jr.	145, 364	Dec. 9, 1873	293	98	4	621
Rock-drill	H. C. Sergeant	140, 596	July 8, 1873	232	78, 79	4	39
Rock-drill	W. Weaver	142, 824	Sept. 16, 1873	452	153	4	301
Rock-drill	S. H. Yerden	142, 319	Aug. 26, 1873	833	276	4	289
Rock-drill carriage	A. P. Thomas and W. J. Evans	140, 173	June 24, 1873	689	216	3	696
Rock-drill carriage	G. E. Towne and W. W. Bailey	138, 959	May 13, 1873	439	138	3	544
Rock-drill for shaft-boring apparatus, Expanding	H. Sontag	134, 943	Jan. 14, 1873	410	131	3	53
Rock-drill rod, Safety-clamp for	M. C. Bullock	136, 812	Mar. 18, 1873	426	141	3	298
Rock-drills and other tools, Die for forming	D. Minthorn	145, 519	Dec. 16, 1873	443	145	4	645
Rock-drills, Feeding-mechanism for	J. Doty	140, 767	July 15, 1873	380	131	4	59
Rock-drills, Guide and core-barrel for revolving	G. Frisbee	140, 357	July 1, 1873	20	7	4	9
Rock-drills, Guide for rotary	A. Ball	134, 506	Jan. 7, 1873	3	1	3	8
Rock-drills, Hydraulic feed for revolving	R. Allison	145, 775	Dec. 23, 1873	674	220	4	676
Rock-drilling machine	F. Johnson	137, 372	Apr. 1, 1873	84	27	3	364
Rock-drilling machine	C. Lohnes	137, 010	Mar. 18, 1873	591	196	3	311
Rock-drilling machine	F. Walts	134, 951	Jan. 14, 1873	418	133	3	53
Rock-drilling machine	D. Wood	138, 777	May 13, 1873	287	89	3	531
Rocking-chair	G. E. Lord	134, 688	Jan. 7, 1873	179	58	3	81
Rocking-chair	W. Mohr	136, 086	Feb. 18, 1873	640	209	3	203
Rocking-chair, Folding	A. Russell	136, 099	Feb. 18, 1873	651	213	3	204
Rocking-chair, Spring	F. Chichester	142, 145	Aug. 26, 1873	692	227	4	218
Rocking-chair, Spring	A. H. Ordway	138, 757	May 13, 1873	270	84	3	529
Rocking-horse and swing combined	B. P. Crandall, jr., and W. Twiddy	136, 707	Mar. 11, 1873	323	107	3	280
Rod:							
<i>See</i> Connecting-rod.							
Eccentric-rod.							
Fishing-rod.							
Lightning-rod.							
Piston-rod.							
Pitman-rod.							
Ratchet-rod.							
Screw-rod.							
Skipping-rod.							
Rods, Device for reducing and screw-threading	R. F. Fowler	141, 342	July 29, 1873	944	307	4	120
Roll, Casting chilled	G. G. Lobdell	139, 798	June 10, 1873	356	104	3	651
Roll for rolling railway-rails	J. W. Cooper	136, 816	Mar. 18, 1873	430	142	3	298
Roller:							
<i>See</i> Clothes-wringer roller.							
Curtain-roller.							
Land-roller.							
Leather-creasing roller.							
Puddler's ball-roller.							
Road-roller.							
Sand-paper roller.							
Roller and irrigator, Combined	D. S. Howard	140, 043	June 17, 1873	554	175	3	677
Roller and planter combined	O. Knudson	141, 144	July 22, 1873	738	244	4	96
Rolling-mill	J. E. Atwood	138, 114	Apr. 22, 1873	770	245	3	453
Rolling-mill	H. R. Hinkley	139, 246	May 27, 1873	728	230	3	587
Rolling-mill	J. Moore, W. George, and A. L. Holley	145, 225	Dec. 2, 1873	168	57, 58	4	509
Rolling-mill	C. H. Perkins	144, 631	Nov. 18, 1873	402	135	4	534
Rolling-mill	W. and G. H. Sellers	145, 129	Dec. 2, 1873	85	28	4	592
Rolling-mill	W. H. Stevens and G. B. F. Cooper	142, 052	Aug. 19, 1873	595	196	4	200
Rolling-mill	A. Wood, jr.	142, 316	Aug. 26, 1873	830	275	4	229
Rolling-mill guide	C. H. Perkins	144, 632	Nov. 18, 1873	403	135	4	534
Rolling-mill guide	C. H. Perkins	144, 633	Nov. 18, 1873	404	136	4	534
Rolling-mill, Sheet-metal	E. H. Davies	141, 701	Aug. 12, 1873	288	87	4	165
Roof, Composition dressing for	H. O. Brown	139, 864	June 17, 1873	401	.....	3	664
Roof-covering	R. U. Piper	134, 702	Jan. 7, 1873	191	62	3	22
Roof, Fire and water proof	J. Long	143, 581	Oct. 14, 1873	172	58	4	403
Roof, Fire-proof	J. B. Cornell	139, 945	June 17, 1873	472	148	3	670
Roof, Fire-proof	G. H. Johnson and W. J. Fryer, jr.	143, 352	Sept. 30, 1873	907	309	4	364
Roof, Fire-proof	N. Poulson	139, 607	June 3, 1873	141	46	3	620
Roof, Fire-proof	E. S. Tobey	137, 038	Mar. 18, 1873	615	203, 204	3	313
Roof, Fire-proof mansard	W. J. Fryer, jr., and G. H. Johnson	141, 215	July 29, 1873	822	269	4	111

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Roof, Fire-proof mansard	J. W. Kennedy	142, 793	Sept. 16, 1873	428	{ 144 145	4	299
Roof, Metallic	I. S. Mettler	142, 641	Sept. 9, 1873	287	94	4	277
Roof-truss	P. L. Weimer	146, 114	Dec. 30, 1873	993	320	4	712
Roof-truss, Iron	A. Gottlieb	140, 772	July 15, 1873	383	132	4	59
Roofs, Attaching slates to	D. Ryan	145, 529	Dec. 16, 1873	454	149	4	646
Roofs, &c., Fire-proof compound for coating	E. U. Piper	135, 152	Jan. 21, 1873	601		3	83
Roofs, &c., Fire-proof paper for	R. U. Piper	135, 153	Jan. 21, 1873	601		3	83
Roofing	J. H. Hood	136, 516	Mar. 4, 1873	145	47	3	257
Roofing-cement, Fire-proof	J. B. Slichter	142, 130	Aug. 26, 1873	679		4	217
Roofing, Cement for slate	H. Wheeler	145, 705	Dec. 16, 1873	603	197	4	658
Roofing, Cemented slate	A. G. Hennion	141, 437	Aug. 5, 1873	24		4	137
Roofing, Composite	S. C. Hogue	136, 722	Mar. 11, 1873	337		3	281
Roofing, Composite	R. S. Jennings	143, 697	Oct. 14, 1873	277	92	4	411
Roofing, Composite	R. Lehdorf	136, 840	Mar. 18, 1873	447		3	300
Roofing, Composition	W. H. Haight and T. S. Gladding	140, 366	July 1, 1873	26		4	10
Roofing, Composition	C. Mueller	140, 945	July 15, 1873	544		4	72
Roofing, Felt	E. Churchill	144, 016	Oct. 28, 1873	600		4	457
Roofing, Fire-proof	C. Parker	138, 813	May 13, 1873	319	98	3	534
Roofing, Fire-proof and water-proof	E. R. Percy	137, 566	Apr. 8, 1873	267		3	390
Roofing, Illuminating	T. Hyatt	142, 472	Sept. 2, 1873	136	44	4	253
Roofing, Illuminating	T. Hyatt	142, 473	Sept. 2, 1873	136	44	4	253
Roofing, Metallic	C. Lewando	140, 928	July 15, 1873	528	176	4	70
Roofing, Metallic	P. Wall	140, 100	June 17, 1873	606	191	3	681
Roofing-plate, Ventilating illuminating	T. Hyatt	145, 186	Dec. 2, 1873	137	45	4	596
Roofing, Sheet-metal	E. C. Hegeler and F. W. Matthieson	141, 929	Aug. 19, 1873	483	160	4	191
Roofing, Sheet-metal	G. F. Leonard	140, 582	July 8, 1873	219	73, 74	4	37
Roofing, Sheet-metal	R. A. Smith	143, 471	Oct. 7, 1873	61	21	4	386
Roofing, Slate, Mode of attaching	S. Farquhar	138, 999	May 30, 1873	486	154	3	560
Roofing, Tile	D. Swain	142, 056	Aug. 19, 1873	599	197	4	200
Roofing, Water-proof plastic cement for	G. Howland	138, 159	Apr. 22, 1873	807		3	456
Rope and cordage, Coating and preserving	W. A. Torrey	135, 865	Feb. 11, 1873	437		3	173
Rope-clamp	W. H. Downing	141, 706	Aug. 12, 1873	273	89	4	165
Rope-clamp, Metallic	A. Méhu	141, 579	Aug. 5, 1873	145	47	4	147
Rope-skipper, Automatic	J. Hoffman	140, 503	July 1, 1873	138	47	4	19
Rotary cutter	C. H. McIlroy and M. L. Oram	140, 938	July 15, 1873	539	179	4	71
Rotary cutter, Reversible	E. V. O'Neill	139, 417	May 27, 1873	879	282	3	600
Rotary engine	S. Baker and S. C. McIntire	144, 882	Nov. 25, 1873	626	212	4	563
Rotary engine	J. E. Crisp	142, 559	Sept. 9, 1873	220	72	4	272
Rotary engine	J. C. Culver	135, 207	Jan. 28, 1873	669	216	3	102
Rotary engine	G. W. Cummings	141, 261	July 29, 1873	864	282	4	114
Rotary engine	W. P. Eayrs	136, 981	Mar. 18, 1873	563	{ 187 188	3	309
Rotary engine	W. P. Eayrs	141, 128	July 22, 1873	721	240	4	95
Rotary engine	M. Elaeesser	138, 744	May 13, 1873	259	80	3	528
Rotary engine	F. J. Hollenweger	142, 629	Sept. 9, 1873	277	91	4	276
Rotary engine	C. C. Klein	145, 505	Dec. 16, 1873	425	{ 139 140	4	644
Rotary engine	W. R. Manley	146, 010	Dec. 30, 1873	899	{ 291 292	4	704
Rotary engine	W. P. Maxson	145, 671	Dec. 16, 1873	572	128	4	656
Rotary engine	E. Myers	144, 559	Nov. 11, 1873	335	113	4	517
Rotary engine	S. P. Ochiltree	139, 807	June 10, 1873	346	107	3	652
Rotary engine	J. C. Spencer	143, 936	Oct. 21, 1873	503	169	4	439
Rotary engine	L. H. Woods	144, 941	Nov. 25, 1873	671	227	4	567
Rotary engine	P. Worrall	144, 722	Nov. 18, 1873	477	162	4	540
Rotary engine or pump	L. Chapman	137, 056	Mar. 25, 1873	640	{ 212 213	3	327
Rotary meter	I. Cook	141, 325	July 29, 1873	921	301	4	119
Rotary shears for metal	M. Stevens	144, 155	Oct. 28, 1873	712	237	4	467
Rotary steam-engine	J. V. Beekman	142, 982	Sept. 23, 1873	591	201	4	323
Rotary steam-engine	J. B. Bennett	135, 311	Jan. 28, 1873	760	245	3	109
Rotary steam-engine	W. Cram	138, 864	May 13, 1873	364	113	3	537
Rotary steam-engine	J. F. Early	135, 789	Feb. 11, 1873	374	120	3	169
Rotary steam-engine	S. B. Frank	143, 504	Oct. 7, 1873	89	31	4	388
Rotary steam-engine	S. Gibson	141, 710	Aug. 12, 1873	275	90	4	165
Rotary steam-engine	C. Grotz	140, 914	July 15, 1873	511	172	4	69
Rotary steam-engine	D. D. Hardy	141, 436	Aug. 5, 1873	21	8	4	137
Rotary steam-engine	C. Inman	136, 164	Feb. 25, 1873	726	234	3	222
Rotary steam-engine	E. W. and S. Jenkins	141, 226	July 29, 1873	831	271	4	111
Rotary steam-engine	J. Leaver and J. Wock	140, 378	July 1, 1873	37	12	4	11
Rotary steam-engine	J. Lucas	138, 334	Apr. 29, 1873	995	313	3	479
Rotary steam-engine	W. F. Moody	145, 304	Dec. 9, 1873	243	81	4	617
Rotary steam-engine	L. Parker	137, 795	Apr. 15, 1873	479	150	3	420
Rotary steam-engine	L. M. Shaw and A. S. Baker	143, 723	Oct. 14, 1873	305	100	4	413
Rotary steam-engine	W. C. Stiles	137, 109	Mar. 25, 1873	690	229	3	330
Rotary steam-engine	W. C. Stiles	138, 352	Apr. 29, 1873	1, 010	318	3	481
Rotary steam-engine	H. Taylor	137, 261	Mar. 25, 1873	828	272	3	341
Rotary steam-engine, Reversible	O. Adams	141, 909	Aug. 19, 1873	469	153	4	190
Row-lock	T. Fearson	138, 388	Apr. 29, 1873	1, 038	327	3	483
Row-lock	J. M. K. Southwick	134, 821	Jan. 14, 1873	307	98	3	45
Row-lock	G. C. Wilen	138, 972	May 13, 1873	449	141	3	545
Rubber and plumbago compound for bearings and other purposes	T. J. Mayall	140, 208	June 24, 1873	716		3	698
Rubber for making brush-backs, &c., Manufacture and vulcanization of	E. A. Hill	142, 911	Sept. 16, 1873	522	{ 177 178	4	307
Rubber mat for pitchers, &c.	C. A. Price	145, 815	Dec. 23, 1873	705	232	4	679
Rubber sheets into strips, Machine for cutting	T. J. Mayall	140, 933	July 15, 1873	531	177	4	71
Ruche-holder	J. V. Rockwell	139, 423	May 27, 1873	885	285	3	600
Ruches, Setting and sewing	M. and S. Roggenburger	135, 445	Feb. 4, 1873	50	16, 17	3	131
Rudder for vessels	J. W. Van Sant	138, 962	May 13, 1873	442	139	3	544
Rudder, Vessel	J. B. Baptista	142, 367	Sept. 2, 1873	41	14	4	245
Rudder, Vessel	O. P. Tharp	135, 385	Jan. 28, 1873	832	268	3	114
Rule, Extension	E. D. Waterbury	144, 003	Oct. 28, 1873	588	195	4	456

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Rule for printers, Perforating.	C. W. Ames	145,380	Dec. 9, 1872	305	103	4	622
Rule, square, and bevel combined.	C. M. Heffron	138,152	Apr. 22, 1873	800	255	3	456
Ruler.	F. A. Combes	145,555	Dec. 16, 1873	475	155	4	648
Ruler.	J. G. Ernst	140,125	June 24, 1873	647	203	3	692
Ruler and blotter combined.	R. M. Austin	140,989	July 22, 1873	600	203	4	85
Ruler and blotter, Combined.	T. Merrill	145,068	Dec. 2, 1873	26	9	4	587
Ruler and pencil-sharpener, Combined.	W. H. Flanigan	136,230	Feb. 25, 1873	776	250	3	226
Ruler, Parallel.	G. Blunck	141,029	July 22, 1873	634	214	4	88
Ruler, Parallel.	W. B. Mason	134,814	Jan. 14, 1873	298	96	3	44
Ruling-gage, Draftsman's.	A. F. Nagle	139,601	June 3, 1873	136	45	3	620
Ruling-machine, Paper.	E. D. Averell	135,751	Feb. 11, 1873	337	108	3	166
Ruling-machine, Paper.	H. T. Cliff and J. E. Martin	144,064	Oct. 28, 1873	640	210	4	461
Ruling-machine, Striker for paper.	J. D. Connolly	143,672	Oct. 14, 1873	248	83	4	409
Ruling-machine, Paper.	A. Hathaway	134,883	Jan. 14, 1873	358	114	3	49
S.							
Saccharine liquid, Apparatus for treating.	C. W. Durant	135,788	Feb. 11, 1873	373	119	3	168
Saccharine matter from cane, Apparatus for extracting.	M. S. Bringier	141,316	July 29, 1873	913	299	4	118
Saccharine matter from sugar-cane, Apparatus and process for extracting.	M. S. Bringier	140,461	July 1, 1873	99	34	4	16
Sacks, Apparatus for raising, emptying, and filling.	S. Wilkerson, jr.	146,117	Dec. 30, 1873	995	321	4	712
Saddle.	T. H. McGrath	145,001	Nov. 25, 1873	723	244	4	571
Saddle, Riding.	R. C. Hamil	139,668	June 10, 1873	210	68	3	642
Saddle-tree.	P. Becker	135,755	Feb. 11, 1873	341	109	3	166
Saddle-tree.	O. V. Flora	145,639	Dec. 16, 1873	545	179	4	653
Saddle-tree.	A. Teas	144,164	Oct. 28, 1873	721	241	4	467
Saddle-tree, Gig.	J. Bauer	136,205	Feb. 25, 1873	757	244	3	224
Sad and embossing iron, Combined.	F. Myers	136,613	Mar. 11, 1873	244	83	3	274
Sad and fluting iron.	J. Hewitt	135,116	Jan. 21, 1873	568	185	3	81
Sad and fluting iron.	J. Hewitt	137,445	Apr. 1, 1873	148	48	3	369
Sad and fluting iron.	L. Mooney	145,676	Dec. 16, 1873	575	189	4	656
Sad and fluting iron.	D. W. Young, J. Hewitt, and L. Mooney	136,121	Feb. 18, 1873	670	219	3	205
Sad, fluting, and band iron.	A. S. Mann	139,590	June 3, 1873	127	42	3	619
Sad-iron.	W. P. Dodson	140,483	July 1, 1873	118	40	4	18
Sad-iron.	J. T. Fowkes	135,791	Feb. 11, 1873	375	120	3	169
Sad-iron.	S. S. Fitch	136,829	Mar. 18, 1873	440	146	3	299
Sad-iron.	W. A. Freeman, jr.	135,328	Jan. 28, 1873	779	252	3	110
Sad-iron.	J. Hewitt	137,201	Mar. 25, 1873	776	256	3	337
Sad-iron.	W. L. Hubbell	137,205	Mar. 25, 1873	779	257	3	337
Sad-iron.	W. L. Hubbell	141,054	July 22, 1873	653	220	4	90
Sad-iron.	B. J. nes	143,451	Oct. 7, 1873	46	16	4	364
Sad-iron.	G. W. C. Lovell	136,596	Mar. 4, 1873	156	50	3	258
Sad-iron.	F. Myers	136,612	Mar. 11, 1873	244	82	3	274
Sad-iron.	J. J. Vaughn and C. J. Blaney	137,982	Apr. 15, 1873	636	200	3	433
Sad-iron and crimping-shoe.	J. Hewitt	134,887	Jan. 14, 1873	362	115	3	49
Sad-iron crimper.	J. Hewitt	135,550	Feb. 4, 1873	146	46	3	139
Sad-iron heating-case.	G. W. C. Lovell	136,077	Feb. 18, 1873	632	207	3	203
Sad-iron holder and lid-lifter.	C. B. Pettengill	139,733	June 10, 1873	277	86	3	647
Sad-iron shield.	J. Gleason	142,334	Sept. 2, 1873	11	4	4	243
Sad-irons, &c., Mode of, and apparatus for, varnishing.	W. J. Reagan	142,728	Sept. 9, 1873	361	122	4	283
Safe and vault.	J. Crump	146,047	Dec. 30, 1873	931	301	4	707
Safe and vault.	J. Crump	146,048	Dec. 30, 1873	933	301	4	707
Safe, Automatic fire-escape for.	J. Parke	142,174	Aug. 26, 1873	714	236	4	220
Safe, Bleaching.	C. W. Shively	134,941	Jan. 14, 1873	409	131	3	53
Safe, Burglar-proof.	W. Corliss	137,061	Mar. 25, 1873	640	214	3	327
Safe-door, &c., Bolt for.	W. Hall	141,874	Aug. 19, 1873	439	143	4	188
Safe-door, Bolt-work for.	H. B. Tripp	142,300	Aug. 26, 1873	818	270	4	228
Safe-door, Device for operating.	H. B. Tripp	145,032	Nov. 25, 1873	751	254	4	573
Safe-door, Securing lock-spindle in.	R. Young	136,353	Feb. 25, 1873	888	286	3	235
Safe, Fire and burglar proof.	B. Howard	139,792	June 10, 1873	331	103	3	651
Safe, Fire-proof.	N. Constable	139,296	May 27, 1873	773	245	3	591
Safe, Fire-proof.	T. Hyatt	142,476	Sept. 2, 1873	138	45	4	253
Safe, Fire-proof.	J. E. Mulford	139,414	May 27, 1873	876	281	3	599
Safe, Fire-proof.	D. O. Paige	141,376	July 29, 1873	975	317	4	123
Safe, Fire-proof.	F. A. R. Sontag and W. H. Lotz	145,761	Dec. 23, 1873	663	216	4	675
Safe, Fire-proof.	J. W. Warner	134,574	Jan. 7, 1873	69	21	3	12
Safe, Marine.	G. F. Abraham	138,832	May 13, 1873	336	104	3	535
Sail and marine drag, Combined.	T. M. Fleetwood	137,190	Mar. 25, 1873	764	252	3	336
Sail-bank.	J. G. Young, jr.	135,055	Jan. 21, 1873	525	170	3	77
Sail, Lizard for.	C. H. Gallagher	136,988	Mar. 18, 1873	570	190	3	309
Sail, Rotary.	J. E. Garcia	135,641	Feb. 11, 1873	242	76	3	159
Sails, Reefing fore and aft.	L. Norden	141,811	Aug. 12, 1873	368	121	4	173
Sail-stay, Ship's.	C. Freeman	143,508	Oct. 14, 1873	160	54	4	402
Salt and pepper dredge combined.	T. B. Atterbury	143,591	Oct. 28, 1873	539	179	4	452
Salt in cruet, Device for agitating.	F. B. Richardson	136,386	Mar. 4, 1873	31	11	3	248
Salt, &c., Steam-superheater for evaporating.	L. R. Cornell	142,440	Sept. 2, 1873	103	34	4	251
Salve.	G. Hall	139,954	June 17, 1873	478	157	3	670
Salve.	D. J. McEvoy	144,405	Nov. 11, 1873	205	69	4	506
Salver.	A. H. Bagges	145,145	Dec. 2, 1873	99	33	4	593
Sample-case, Grocer's.	N. B. McCreary	134,912	Jan. 14, 1873	384	122	3	51
Sample-case, Revolving.	J. F. Randolph	144,924	Nov. 25, 1873	658	223	4	566
Sample-fastener.	C. Mason	136,682	Mar. 11, 1873	287	96	3	217
Sand-paperying machine.	D. A. and S. T. Armstrong	141,413	Aug. 5, 1873	2	1	4	135
Sand-paperying machine.	H. L. Haggood	142,626	Sept. 9, 1873	275	90	4	276
Sand-paper roller.	H. W. Brett	145,392	Dec. 9, 1873	317	106	4	623
Saponifying-apparatus.	G. W. Hatfield	140,701	July 8, 1873	320	108	4	46
Sap-protector.	H. C. Cole and E. D. Sabin	140,185	June 24, 1873	700	220	3	696
Sap-spout.	H. B. Sevey	144,871	Nov. 25, 1873	619	210	4	562
Sash and door clamp.	R. L. Greenlee	143,236	Sept. 30, 1873	802	276	4	356
Sash and door clamp.	T. S. Uril	139,281	May 27, 1873	762	241	3	590

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Sash and door fastener	J. B. Frost	140,026	June 17, 1873	537	170	3	673
Sash and frame, Window	D. McKay	140,783	July 15, 1873	392	135	4	60
Sash, &c., Automatic fastening for	J. Holley	143,982	Oct. 28, 1873	567	188	4	455
Sash-balance	J. J. Cowell	136,366	Mar. 4, 1873	12	4	3	246
Sash-balance	R. Faries	145,289	Dec. 9, 1873	230	78	4	616
Sash-balance	C. Harbaugh	145,173	Dec. 2, 1873	126	41	4	595
Sash-balance	B. F. Hartman	135,221	Jan. 28, 1873	682	220	3	103
Sash-balance	G. H. Joas	141,356	July 29, 1873	958	312	4	122
Sash-balance	J. M. Simpson	136,461	Mar. 4, 1873	90	31	3	253
Sash-balance	L. S. Wright	142,604	Sept. 9, 1873	259	85	4	275
Sash-cord fastener	H. Harris and F. Hewitt	141,050	July 22, 1873	651	219	4	89
Sash-cord guide	C. B. Clark	140,887	July 15, 1873	483	163	4	67
Sash-cord guide	W. M. Griscom	145,863	Dec. 23, 1873	746	244	4	682
Sash-cord guide	W. Shaw	138,944	May 13, 1873	427	134	3	543
Sash-fastener	L. L. Bates	142,667	Sept. 9, 1873	312	104	4	279
Sash-fastener	R. E. Beckwith	135,963	Feb. 18, 1873	532	175	3	195
Sash-fastener	J. Bishop	135,396	Feb. 4, 1873	1	1	3	128
Sash-fastener	G. W. Bishop	137,883	Apr. 15, 1873	551	172	3	426
Sash-fastener	G. W. Bishop	142,431	Sept. 2, 1873	95	31	4	250
Sash-fastener	E. Buratow	144,655	Nov. 18, 1873	426	143	4	535
Sash-fastener	T. P. Coin	140,994	July 22, 1873	603	204	4	86
Sash-fastener	A. Cole and E. Davis	141,120	July 22, 1873	713	238	4	95
Sash-fastener	D. M. Donehoo	140,256	June 24, 1873	756	239	3	701
Sash-fastener	M. Gee	141,640	Aug. 12, 1873	217	69	4	160
Sash-fastener	O. H. Gilbert	144,451	Nov. 11, 1873	243	82	4	510
Sash-fastener	L. D. Gillette	144,528	Nov. 11, 1873	308	103	4	515
Sash-fastener	M. Judd	139,895	June 17, 1873	433	134	3	667
Sash-fastener	T. P. I. Magoun	134,813	Jan. 14, 1873	297	96	3	44
Sash-fastener	O. W. Noble	143,026	Sept. 23, 1873	626	213	4	325
Sash-fastener	A. C. Rodgers	141,385	July 29, 1873	984	319	4	123
Sash-fastener	J. D. Shewell	145,972	Dec. 30, 1873	868	281	4	702
Sash-fastener and tightener	T. Frost	136,232	Feb. 25, 1873	777	251	3	226
Sash-fastener and weather-strip combined	E. J. Sprague	141,178	July 22, 1873	775	253	4	99
Sash-holder	C. C. Algeo	137,280	Apr. 1, 1873	1	1	3	357
Sash-holder	S. L. Anderson, P. Walden, and E. P. More	143,655	Oct. 14, 1873	234	79	4	408
Sash-holder	W. B. Bradford	134,727	Jan. 14, 1873	225	72	3	38
Sash-holder	S. Chard	145,988	Dec. 30, 1873	881	285	4	703
Sash-holder	F. M. Davis	142,994	Sept. 23, 1873	601	204	4	323
Sash-holder	J. L. Devoil and J. M. Oakey	140,898	July 15, 1873	494	167	4	68
Sash-holder	J. F. Graham	138,494	May 6, 1873	22	8	3	499
Sash-holder	R. B. Hugunin	137,682	Apr. 8, 1873	367	114	3	398
Sash-holder	E. Knapp	138,258	Apr. 29, 1873	926	292	3	474
Sash-holder	C. Partello	135,358	Jan. 28, 1873	807	260	3	112
Sash-holder	D. Pike	134,925	Jan. 14, 1873	395	126	3	52
Sash-holder	G. W. Richardson	141,078	July 22, 1873	679	227	4	92
Sash-holder	W. Senk	139,825	June 10, 1873	361	112	3	653
Sash-holder	G. A. Sturges	141,184	July 22, 1873	781	255	4	99
Sash-holder	H. Thomas	136,681	Mar. 11, 1873	304	100	3	279
Sash-holder	L. A. Tuttle	138,057	Apr. 22, 1873	726	230	3	450
Sash-holder	J. Ware	142,305	Aug. 26, 1873	821	272	4	229
Sash-holder	E. W. Warren	134,715	Jan. 7, 1873	200	65	3	22
Sash-holder	J. R. Watson	135,184	Jan. 21, 1873	626	204	3	86
Sash-holder	T. Weaver	141,904	Aug. 19, 1873	464	151	4	190
Sash-holder, Carriage-window	S. E. Totten, jr	136,793	Mar. 11, 1873	396	131	3	226
Sash, Hot bed	J. Taylor	136,789	Mar. 11, 1873	392	130	3	226
Sash-lifter	H. Kingsbury	141,647	Aug. 12, 1873	224	70	4	161
Sash-lock	C. T. Gibson	135,217	Jan. 28, 1873	679	219	3	102
Sash, Machine for making window	J. Travers	142,420	Sept. 2, 1873	86	28	4	249
Sash, Metallic window	F. M. Campbell	141,204	July 29, 1873	809	265	4	110
Sash, Metal window	J. D. Moran	140,588	July 8, 1873	226	76	4	38
Sash-molding	R. L. Auderton	144,307	Nov. 4, 1873	111	37	4	487
Sash-rope fastening	L. Russell	135,368	Jan. 28, 1873	817	264	3	113
Sash, Ventilating window	C. Pullinger	142,941	Sept. 16, 1873	550	186	4	309
Sash ventilator, Window	J. C. Bates	136,618	Mar. 11, 1873	269	90	3	276
Sash ventilator, Window	J. C. Bates	141,254	July 29, 1873	859	281	4	114
Sash-weight	P. Ashen	137,753	Apr. 15, 1873	442	137	3	417
Sash, Window	W. L. McDowell	138,755	May 13, 1873	269	83	3	529
Sash, Window	D. W. Noyes	138,921	May 13, 1873	408	128	3	541
Satchel, School	H. Wallis	135,254	Jan. 28, 1873	717	229	3	105
Sauce for food	A. P. Agresta and A. Meucci	142,071	Aug. 26, 1873	629	213	4	213
Sausage-cutter	J. Knopp	146,007	Dec. 30, 1873	897	291	4	704
Sausage-stuffer	P. W. Brownback	142,897	Sept. 16, 1873	512	174	4	306
Sausage-stuffer	F. Mickels	138,674	May 6, 1873	185	59	3	512
Sausage-stuffing, &c., Apparatus for	J. A. Moore	141,451	Aug. 5, 1873	38	12	4	138
Saw	S. Cook	141,036	July 22, 1873	641	216	4	89
Saw	J. Crookes	141,122	July 22, 1873	716	238	4	95
Saw	V. Luppert and P. St. Pierre	141,939	Aug. 19, 1873	491	162	4	192
Saw	E. Marx	144,344	Nov. 4, 1873	142	48	4	490
Saw	S. Scholfield	139,426	May 27, 1873	887	285	3	600
Saw-attachment	J. Giblin	140,495	July 1, 1873	130	44	4	19
Saw-backs, Machine for forming	C. Maier	142,220	Aug. 26, 1873	778	256	4	225
Saw, Band	C. A. Young	139,644	June 3, 1873	174	58	3	623
Saw bench, Circular	B. F. Dunklee	136,979	Mar. 18, 1873	562	187	3	309
Saw-blanks, Case for	C. I. Walker	139,094	May 20, 1873	579	179	3	567
Saw-buckle	C. W. Hubbard	141,225	July 29, 1873	830	271	4	111
Saw, Buckle for hanging reciprocating	H. W. Brown	139,363	May 27, 1873	822	263	3	595
Sawdust for use in the arts, Preparing	F. H. Snyder	138,821	May 13, 1873	325	108	3	534
Saw-feeding and setting machine	N. G. Ross	142,585	Sept. 9, 1873	243	80	4	273
Saw-feeding device	A. P. Durant	137,424	Apr. 1, 1873	128	42	3	367
Saw-feeding machine	W. B. Bizzell	140,399	July 1, 1873	52	18	4	12
Saw-feeding machine	G. Blythe	137,172	Mar. 25, 1873	746	247	3	334
Saw-feeding machine	J. J. Engleman	144,522	Nov. 11, 1873	301	101	4	514
Saw-feeding machine	C. F. Henie	139,149	May 20, 1873	625	195	3	571

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Saw-filing machine	W. W. Parsons	146, 017	Dec. 30, 1873	906	293	4	705
Saw frame, Buck	W. Clemson	135, 408	Feb. 4, 1873	15	4	3	129
Saw-gage	G. W. Kirby	144, 209	Nov. 4, 1873	35	10	4	421
Saw-gage, Circular	C. J. Ulmer	138, 453	Apr. 29, 1873	1, 100	347	3	488
Saw-gage, Gang	N. C. Moody	142, 643	Sept. 9, 1873	288	95	4	277
Saw-gang, Band	H. Sillman	135, 164	Jan. 21, 1873	610	198	3	84
Saw-grinding machine	D. M. Mefford	137, 706	Apr. 8, 1873	389	121	3	400
Saw-guard, Circular	O. A. Dean	141, 702	Aug. 12, 1873	269	87	4	165
Saw-guide	P. Prybil	134, 704	Jan. 7, 1873	192	62	3	92
Saw-guide, Adjustable	F. H. Palmer	140, 157	June 24, 1873	675	912	3	694
Saw-guide, Circular	S. Taylor	140, 096	June 17, 1873	602	190	3	681
Saw-gummer	H. Baughman	135, 962	Feb. 18, 1873	531	175	3	195
Saw-gummer	W. G. Blackledge	140, 673	July 8, 1873	295	99	4	43
Saw-gummer	L. Gibbs	145, 643	Dec. 16, 1873	548	180	4	654
Saw-gummer	W. Tucker	136, 110	Feb. 18, 1873	662	216	3	205
Saw-gumming machine	H. Baughman	145, 327	Dec. 9, 1873	265	89	4	619
Saw-gumming machine	C. N. Brown	135, 769	Feb. 11, 1873	352	113	3	167
Saw-gumming machine	S. P. Olney	142, 173	Aug. 26, 1873	713	236	4	219
Saw-gumming machine	K. Weinberger	138, 354	Apr. 29, 1873	1, 011	318	3	461
Saw, Hand	T. S. Dison	143, 128	Sept. 23, 1873	708	243	4	332
Saw-handle	E. C. Atkins	139, 756	June 10, 1873	300	93	3	649
Saw-handle	M. L. Ballard	137, 402	Apr. 1, 1873	109	35	3	366
Saw-handle	W. Clemson	135, 628	Feb. 11, 1873	232	73	3	158
Saw-handle	W. Clemson	145, 628	Dec. 16, 1873	535	175	4	653
Saw-handle, Cross-cut	W. E. Travis	137, 978	Apr. 15, 1873	634	199	3	433
Saw-hauling	J. E. Merritt	142, 036	Aug. 19, 1873	578	190	4	199
Sawing and splitting machine, Wood	A. G. Hagerstrom	135, 332	Jan. 28, 1873	783	254	3	110
Sawing-machine	P. M. Andriot	141, 479	Aug. 5, 1873	62	19	4	140
Sawing-machine	J. T. Baggs	138, 552	May 6, 1873	77	25	3	504
Sawing-machine	E. Benjamin	137, 284	Apr. 1, 1873	5	2	3	357
Sawing-machine	O. W. Brock	137, 758	Apr. 15, 1873	449	139	3	418
Sawing-machine	T. H. Carroll	141, 761	Aug. 12, 1873	320	104	4	169
Sawing-machine	H. A. Current	136, 216	Feb. 25, 1873	765	247	3	225
Sawing-machine	W. Detrick and J. D. Culver	139, 554	June 3, 1873	93	32	3	616
Sawing-machine	J. Eachus	142, 154	Aug. 26, 1873	699	231	4	212
Sawing-machine	E. Inman	142, 699	Sept. 9, 1873	336	113	4	281
Sawing-machine	G. Marshall	139, 965	June 17, 1873	484	153	3	671
Sawing-machine	W. Neidelfer	135, 575	Feb. 4, 1873	168	54	3	141
Sawing-machine	A. T. Nichols	137, 022	Mar. 18, 1873	601	199	3	312
Sawing-machine	A. T. Nichols	141, 163	July 22, 1873	758	249	4	98
Sawing-machine	F. C. G. Parr	135, 007	Jan. 21, 1873	481	154	3	74
Sawing-machine	D. R. Pratt	146, 021	Dec. 30, 1873	909	294	4	705
Sawing-machine	G. T. Riddle	143, 033	Sept. 23, 1873	634	216	4	326
Sawing-machine	W. H. Shugart	141, 959	Aug. 19, 1873	506	167	4	193
Sawing-machine	C. H. Smith	137, 626	Apr. 8, 1873	316	98, 99	3	394
Sawing-machine	E. H. Stearns	144, 154	Oct. 28, 1873	710	237	4	466
Sawing-machine	H. M. Stow	140, 657	July 8, 1873	283	96	4	43
Sawing-machine	J. M. Stowell	142, 294	Aug. 26, 1873	813	269	4	228
Sawing-machine	J. M. Westmoreland	137, 042	Mar. 18, 1873	620	205	3	313
Sawing-machine	S. Wheeler	137, 561	Apr. 8, 1873	282	87	3	391
Sawing-machine	A. Xander	141, 975	Aug. 19, 1873	512	171	4	194
Sawing-machine, Band	O. Bonney, Jr.	138, 121	Apr. 22, 1873	775	247	3	454
Sawing-machine, Band	J. A. Roche and G. V. Orton	144, 797	Nov. 18, 1873	542	184	4	545
Sawing-machine, Band	H. Sillman	138, 443	Apr. 29, 1873	1, 091	344	3	487
Sawing-machine, Band	B. D. Whitney	137, 583	Apr. 8, 1873	283	87	3	391
Sawing-machine, Scroll	T. W. Dowling	145, 993	Dec. 30, 1873	884	286	4	703
Sawing-machine, Scroll	M. Foley	143, 895	Oct. 21, 1873	470	158	4	437
Sawing-machine, Scroll	G. S. Grigg	136, 433	Mar. 4, 1873	68	24	3	251
Sawing-machine, Scroll	M. Hansen	141, 048	July 22, 1873	649	219	4	89
Sawing-machine, Scroll	H. Lawrence	138, 808	May 13, 1873	313	97	3	533
Sawing-machine, Scroll	E. A. Walker	142, 361	Sept. 2, 1873	35	13	4	245
Sawing-machine table	H. O. Reed	142, 813	Sept. 16, 1873	443	150	4	300
Sawing-machine, Wood	B. F. Click	143, 330	Sept. 30, 1873	883	302	4	363
Sawing-machine, Wood	S. Fnuck	135, 216	Jan. 28, 1873	678	219	3	102
Sawing-machine, Wood	I. G. Ringstad	142, 121	Aug. 26, 1873	672	221	4	216
Sawing-machine, Wood	J. Skinner	144, 482	Nov. 11, 1873	270	91	4	512
Saw, Jig	B. Merritt	134, 760	Jan. 14, 1873	249	81, 82	3	40
Saw, Jig	M. E. Weller	143, 650	Oct. 14, 1873	230	77	4	408
Saw-jointer	S. D. Knight	144, 111	Oct. 28, 1873	677	224	4	464
Saw, Method of adjusting circular	S. W. Clemmens	139, 544	June 3, 1873	84	29	3	616
Saw-mill	B. Berndt	141, 028	July 22, 1873	634	213	4	88
Saw-mill	W. Gowen	134, 795	Jan. 14, 1873	280	91	3	43
Saw-mill	D. C. Prescott	136, 541	Mar. 4, 1873	173	55	3	259
Saw-mill carriage	B. F. and J. B. Smith	138, 206	Apr. 22, 1873	852	270	3	460
Saw-mill, Circular	M. Blackburn	140, 002	June 17, 1873	515	163	3	673
Saw-mill, Circular	W. A. Campbell	134, 976	Jan. 21, 1873	451	144	3	72
Saw-mill, Circular	E. H. Stearns	141, 672	Aug. 12, 1873	245	78	4	163
Saw-mill crank	A. Rodgers	142, 816	Sept. 16, 1873	445	150	4	300
Saw-mill dog	H. D. Donn	134, 653	Jan. 7, 1873	144	46	3	18
Saw-mill dog	E. H. Stearns	145, 026	Nov. 25, 1873	746	252	4	573
Saw-mill dog	J. Torrent	145, 031	Nov. 25, 1873	750	253	4	573
Saw-mill dog for circular	J. Taber	140, 442	July 1, 1873	83	29	4	15
Saw-mill head-block	G. B. Getty	140, 032	June 17, 1873	541	171	3	676
Saw-mill head-block	D. Lane	136, 656	Mar. 11, 1873	281	94	3	277
Saw-mill head-block	D. Lane	136, 657	Mar. 11, 1873	282	95	3	277
Saw-mill head-block	G. A. Prescott and J. Barsaloux	144, 866	Nov. 25, 1873	615	209	4	562
Saw-mill head-block	A. Rodgers	139, 264	May 27, 1873	743	235	3	588
Saw-mill head-block	G. Zschech	145, 712	Dec. 16, 1873	608	198	4	659
Saw-mill pitman-lubricator	J. McKenzie	140, 152	June 24, 1873	671	210	3	694
Saw-mill slab and sliding holder	J. Barsaloux and G. A. Prescott	135, 508	Feb. 4, 1873	103	33	3	136
Saw, Scroll	J. Atkinson	144, 181	Nov. 4, 1873	5	2	4	479

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Saw, Scroll	H. L. Beach	145,084	Dec. 2, 1873	43	13	4	589
Saw, Scroll	H. Bickford	136,207	Feb. 25, 1873	758	245	3	224
Saw, Scroll	W. H. Doane	134,650	Jan. 7, 1873	142	45	3	18
Saw, Scroll	W. H. Doane and W. H. Dobson	135,099	Jan. 21, 1873	554	181	3	80
Saw, Scroll	F. H. Hardenbergh	134,882	Jan. 14, 1873	357	114	3	49
Saw, Scroll	J. W. Rowlingson	141,080	July 22, 1873	680	228	4	92
Saw, Scroll	H. B. Smith	138,103	Apr. 22, 1873	762	242	3	453
Saw, Scroll	E. A. Walker	139,284	May 27, 1873	764	242	3	590
Saw, Scroll	J. B. Wright	146,118	Dec. 30, 1873	998	322	4	712
Saw-set	J. Begbie	137,756	Apr. 15, 1873	444	138	3	417
Saw-set	A. and W. Boynton	137,410	Apr. 1, 1873	116	38	3	366
Saw-set	W. J. Boynton	144,947	Nov. 25, 1873	677	229	4	567
Saw-set	J. N. Brigs	145,087	Dec. 2, 1873	47	14	4	589
Saw-set	B. S. Castle	143,272	Sept. 30, 1873	833	286	4	359
Saw-set	R. F. Cook	145,734	Dec. 23, 1873	629	206	4	672
Saw-set	C. E. Grandy	137,607	Apr. 8, 1873	303	94	3	393
Saw-set	T. E. Grimes	143,447	Oct. 7, 1873	43	15	4	384
Saw-set	H. C. Hart	144,092	Oct. 28, 1873	662	218	4	463
Saw-set	J. W. Leslie	136,440	Mar. 4, 1873	75	26	3	251
Saw-set	A. B. Smith and S. Osborne	136,777	Mar. 11, 1873	382	126	3	285
Saw-set	G. Swenson	140,441	July 1, 1873	81	29	4	15
Saw-set	J. G. Tattershall	138,297	Apr. 29, 1873	966	303	3	477
Saw-set	M. E. True	143,598	Oct. 14, 1873	185	63	4	404
Saw-set	W. Tunstill	135,867	Feb. 11, 1873	439	143	3	173
Saw-setting device	J. B. Schmid	137,150	Mar. 25, 1873	723	240	3	353
Saw-setting machine	J. G. Baker	135,752	Feb. 11, 1873	339	108	3	166
Saw-setting machine	W. H. Dobson	139,124	May 20, 1873	601	189	3	569
Saw-sharpening device	J. B. Drake	143,067	Sept. 23, 1873	663	227	4	328
Saw-sharpening device	C. Willard	137,644	Apr. 8, 1873	332	103	3	395
Saw-sharpening and setting machine	E. Duffy	139,304	May 27, 1873	781	244	3	591
Saw-sharpening machine	T. M. Chapman	144,383	Nov. 11, 1873	187	64	4	505
Saw-sharpening machine	T. L. Davidson and H. Winningham	138,137	Apr. 22, 1873	788	252	3	455
Saw-sharpening machine	F. E. Frey	139,139	May 20, 1873	615	192	3	571
Saw-sharpening machine	E. W. Phelps	143,712	Oct. 14, 1873	294	96	4	412
Saw-straightening machine	J. S. Anderson	135,059	Jan. 21, 1873	523	171	3	78
Saw-swage	J. E. Emerson	142,779	Sept. 16, 1873	418	141	4	298
Saw-swage	W. Ferguson	137,767	Apr. 15, 1873	455	142	3	418
Saw-swage	A. J. McCollum and G. D. Emery	141,572	Aug. 5, 1873	140	45	4	147
Saw-swaging device	C. F. Henis	134,666	Jan. 7, 1873	159	52	3	19
Saw-swaging machine	C. F. Henis	134,667	Jan. 7, 1873	160	53	3	19
Saw-swaging machine	G. A. Prescott	135,361	Jan. 28, 1873	810	261	3	112
Saw-table, Circular	H. C. Rosin	142,733	Sept. 9, 1873	365	123	4	283
Saw-teeth	J. E. Emerson	138,236	Apr. 29, 1873	901	284	3	472
Saw-teeth	J. E. Emerson	142,781	Sept. 16, 1873	490	141	4	298
Saw-teeth	W. P. Miller	142,258	Aug. 26, 1873	784	259	4	296
Saw-teeth blank	J. E. Emerson	142,780	Sept. 16, 1873	419	141	4	298
Saw-teeth, Device for dressing	W. Rowe	142,176	Aug. 26, 1873	716	237	4	290
Saw-teeth, Machine for cutting	J. H. W. Onion and W. H. H. Larduskey	135,934	Feb. 18, 1873	510	166	3	193
Saw-teeth, Machine for dressing	J. Lucia	141,366	July 29, 1873	966	314	4	122
Saw-teeth, Removable	J. Crookes	141,427	Aug. 5, 1873	16	4	4	136
Saw-teeth setting device	G. W. Bugbee	141,990	Aug. 19, 1873	531	176	4	195
Saw-tooth gauge	C. E. Grandy	142,390	Sept. 2, 1873	63	21	4	247
Saw, Wheel or pulley for band	J. A. Roche and G. V. Orton	140,794	July 15, 1873	404	137	4	60
Scaffold	J. F. Darley	134,737	Jan. 14, 1873	232	74	3	39
Scaffold	M. D. Drake	140,688	July 8, 1873	308	104	4	45
Scaffold	A. Gates	135,902	Feb. 18, 1873	485	157	3	191
Scaffold	D. Y. Miller	139,726	June 10, 1873	270	85	3	647
Scaffold, Adjustable	J. Dillon	144,263	Nov. 4, 1873	79	26	4	484
Scaffold, Adjustable	J. S. Tilley	140,858	July 15, 1873	458	155	4	65
Scaffold-pole clamp	H. Haering and H. Alles	143,448	Oct. 7, 1873	44	15	4	384
Scaffold-support	R. A. Edmonston	141,498	Aug. 5, 1873	80	25	4	141
Scale, Bagholder weighing	A. H. Bell	143,658	Oct. 14, 1873	232	80	4	408
Scale, Druggists'	A. Cyran and C. Reinhardt	139,372	May 27, 1873	822	265	3	596
Scale-pan	J. P. Chatillon	143,499	Oct. 7, 1873	86	29	4	387
Scale-platform, Railway	C. C. Warren	139,216	May 20, 1873	685	216	3	576
Scales, Platform	J. Bryson	141,627	Aug. 12, 1873	207	65	4	160
Scales, Platform	J. F. Keeler	139,897	June 17, 1873	435	135	3	667
Scales, Steelyard	T. C. Hargrave	135,908	Feb. 18, 1873	469	158	3	192
Scales, Weighing	W. Z. Conner	142,991	Sept. 23, 1873	508	203	4	323
Scales, Weighing	S. Harris	141,556	Aug. 5, 1873	126	40	4	145
Scarf-clasp	A. R. Weisz	144,170	Oct. 28, 1873	726	243	4	468
Scarf-ring	J. Haack and S. Diolot	137,362	Apr. 1, 1873	77	25	3	363
Scarf-ring	A. P. Mayhew and I. D. Leonard	143,366	Sept. 30, 1873	922	312	4	365
Scissors	H. S. Breedon	144,251	Nov. 4, 1873	71	23	4	484
Scissors	J. A. Correa	135,692	Feb. 11, 1873	200	91	3	162
Scissors	A. Whittemore	138,061	Apr. 22, 1873	729	231	3	450
Scissors and tape-line combined	M. J. Stubblings	140,227	June 24, 1873	731	230	3	699
Scissors-points, Cap for	C. W. Williams	144,177	Oct. 28, 1873	734	245	4	468
Scissors-sharpening device	T. Halvorsen	137,135	Mar. 25, 1873	712	236	3	332
School-chair	E. J. Piper	134,190	Apr. 22, 1873	841	266	3	459
Scoop, Cart-loading	A. Vreeland	145,320	Dec. 9, 1873	259	88	4	618
Scoop for raising sunken coal	R. Stiles	138,541	May 6, 1873	64	22	3	503
Scourer	See Knife-scourer.						
Scow, Dumping	J. E. Bartlett	136,578	Mar. 11, 1873	219	73	3	272
Scow, Dumping	A. T. Morris	138,179	Apr. 22, 1873	827	263	3	458
Scraper	S. Horney	144,202	Nov. 4, 1873	27	8	4	490
Scraper	W. E. and F. A. Jacobs	143,016	Sept. 23, 1873	619	210	4	325
Scraper	W. D. Mayfield and J. M. Payne	140,935	July 15, 1873	536	178	4	71
Scraper	A. H. Reid	139,816	June 10, 1873	353	109	3	653
Scraper, Artist's	H. J. Haight	135,333	Jan. 22, 1873	786	254	3	111
Scraper, Boiler-flue	M. M. Ammidoun	138,465	May 6, 1873	1	1	3	497

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Scraper, Boiler-tube	J. B. Christoffel	137, 826	Apr. 15, 1873	504	158	3	499
Scraper, Box	C. G. W. and J. D. Ellis	141, 549	Aug. 5, 1873	191	38	4	145
Scraper, Dredging	D. Brabston	142, 968	Sept. 23, 1873	595	202	4	323
Scraper, Gas-retort	L. Blair	135, 397	Feb. 4, 1873	2	1	3	128
Scraper, Kettle and pan	E. J. Whitman	142, 609	Sept. 9, 1873	258	84	4	274
Scraper, Road	D. S. Hamilton	139, 689	June 10, 1873	211	69	3	642
Scraper, Road	J. Morton	141, 808	Aug. 12, 1873	366	190	4	172
Scraper, Road	R. F. Read	144, 925	Nov. 25, 1873	659	223	4	566
Scraper, Road	J. Steffensen	137, 496	Apr. 1, 1873	204	62	3	373
Scraper, Road	M. E. Warner and S. W. Kingsley	144, 935	Nov. 25, 1873	666	226	4	566
Scraper, Road	W. P. Warren	140, 175	June 24, 1873	691	217	3	696
Scraper, Road	J. W. Weston	144, 717	Nov. 18, 1873	473	160	4	540
Scraper, Road	L. P. Wright	139, 099	May 20, 1873	576	181	3	568
Scraper, Wood	H. D. Spickler	137, 329	Apr. 1, 1873	50	15	3	361
Scraping and loading machine	D. Marrs	135, 042	Jan. 21, 1873	513	166	3	76
Scraping-instrument	V. Davis	135, 699	Feb. 11, 1873	295	93	3	163
Screen:							
See Ash-screen.							
Car-window screen.							
Coal-screen.							
Folding screen.							
Potato-screen.							
Window-screen.							
Screw	J. Frearson	145, 411	Dec. 9, 1873	334	112	4	624
Screw and clamp combined, Jack	T. R. and A. C. Jackson and C. S. Watson	139, 157	May 20, 1873	637	198	3	572
Screw and nut	S. J. Peet	138, 277	Apr. 27, 1873	943	298	3	475
Screw, Binding	F. Schurz	137, 801	Apr. 15, 1873	486	152	3	421
Screw-blank picking and shaving machine	E. Nugent and J. Fanning	144, 692	Nov. 18, 1873	456	154	4	538
Screw-blanks, Machine for threading	E. Nugent and J. Fanning	145, 121	Dec. 2, 1873	75	24	4	591
Screw-blanks, Machine for threading	E. Croft	142, 560	Sept. 9, 1873	223	72, 73	4	272
Screw bolt and nut	T. English	135, 898	Feb. 18, 1873	482	156	3	191
Screw, Boot-heel	W. Ackerman	141, 908	Aug. 19, 1873	468	153	4	190
Screw-capping die	G. W. Briggs	134, 845	Jan. 14, 1873	326	104	3	46
Screw, Casting center on cast-iron	T. M. Tucker	135, 388	Jan. 28, 1873	834	269	3	114
Screw-cutting device	J. B. Low	135, 830	Feb. 11, 1873	412	133	3	171
Screw-cutting die	S. D. Bates and S. W. Murray	137, 283	Apr. 1, 1873	4	2	3	357
Screw-cutting die	W. E. Ward	134, 777	Jan. 14, 1873	264	86	3	41
Screw-cutting machine	C. S. Crane and W. H. Lavinia	136, 818	Mar. 18, 1873	431	143	3	298
Screw-cutting machine	G. Emig	134, 871	Jan. 14, 1873	348	111	3	48
Screw-cutting machine	M. B. Flynn	143, 685	Oct. 14, 1873	266	88	4	410
Screw-cutting machine	G. B. Jaycox and A. Webster	140, 780	July 15, 1873	390	134	4	59
Screw-cutting machine	D. McGuire	140, 212	June 24, 1873	721	227	3	698
Screw-cutting machine	J. Peace and W. P. Cox	141, 234	July 29, 1873	839	273	4	112
Screw-cutting machine	A. and A. Phillips	140, 161	June 24, 1873	679	213	3	695
Screw-cutting machine	H. O. Reed	141, 460	Aug. 5, 1873	46	14	4	139
Screw-cutting machine	J. W. Row	136, 269	Feb. 25, 1873	815	263	3	229
Screw-cutting machine	C. C. Walworth	141, 299	July 29, 1873	898	294	4	117
Screw-cutting machine	J. J. Grant	136, 153	Feb. 25, 1873	718	232	3	221
Screw-driver	J. H. Davis	141, 857	Aug. 19, 1873	414	135	4	186
Screw-driver	F. B. Hunt	135, 340	Jan. 28, 1873	792	256	3	111
Screw-driver	S. E. Kneeland	145, 506	Dec. 16, 1873	430	140	4	644
Screw-driver	C. Law	139, 069	May 20, 1873	551	173	3	565
Screw-forming machine	W. A. McCool	138, 422	Apr. 29, 1873	1,074	339	3	485
Screw-heads, Machine for slotting	E. S. Pierce and J. A. Ayres	134, 818	Jan. 14, 1873	302	97	3	44
Screw-making machine, Machine	J. Braun	138, 067	Apr. 22, 1873	734	232	3	450
Screw-plate	T. L. Von Dorn	145, 701	Dec. 16, 1873	598	195	4	658
Screw-rod	S. J. Peet	138, 278	Apr. 29, 1873	944	298	3	475
Screw-tap	J. Flower	140, 128	June 24, 1873	649	204	3	693
Screw-threading die	J. J. Grant	140, 133	June 24, 1873	655	205	3	693
Screw-threading machine	E. Horton	144, 100	Oct. 28, 1873	668	220	4	463
Screw-threads on bolt and screw blanks, Machine for swaging	R. Boeklen	139, 861	June 17, 1873	399	125	3	664
Screw-threads on sheet-metal, Machine for forming	C. F. Neuber and F. W. Perry	145, 893	Dec. 23, 1873	774	533	4	684
Screw, Wood	O. D. Barrett	143, 217	Sept. 30, 1873	784	271	4	354
Screw, Wood	J. A. Bidwell and W. Chisholm	134, 783	Jan. 14, 1873	270	88	3	42
Screw, Wood	W. Bourne	138, 784	May 13, 1873	294	90	3	531
Screw, Wood	S. P. Burdick	137, 414	Apr. 1, 1873	120	39	3	367
Screw, Wood	A. S. Ladd and C. N. Corning	142, 112	Aug. 26, 1873	664	218	4	216
Screw, Wood	I. S. Russell	146, 023	Dec. 30, 1873	911	295	4	705
Screw, Wood	J. K. Stockton	138, 592	May 6, 1873	110	35	3	506
Screw-wrench	D. Frank	137, 908	Apr. 15, 1873	577	181	3	428
Screws, Divided-nut device for feed	F. A. Huntington	143, 626	Oct. 14, 1873	211	71	4	406
Screws for knobs, Machine for making double-pointed	C. H. Thurston	145, 136	Dec. 2, 1873	93	30, 31	4	593
Screws, Machine for making metal	N. C. Hubbell	143, 412	Oct. 7, 1873	13	4, 5, 6	4	382
Screws, Machine for making metal	C. M. Spencer	143, 306	Sept. 30, 1873	863	296	4	361
Screws of rolls, Device for adjusting the elevating and depressing	R. H. Thomas	138, 452	Apr. 29, 1873	1,099	347	3	498
Scrubber	I. J. Emory, jr.	138, 322	Apr. 29, 1873	988	310	3	479
Scrubbing-machine	S. H. Bush	138, 129	Apr. 22, 1873	781	250	3	454
Scrubbing-machine	W. J. Gard	145, 796	Dec. 22, 1873	690	226	4	677
Scythe	E. L. Wheeler	134, 779	Jan. 14, 1873	265	87	3	42
Scythe-rolling machine	H. Waters	137, 741	Apr. 8, 1873	425	131	3	403
Scythe-rolling machine	H. Waters	138, 216	Apr. 22, 1873	860	272	3	460
Scythe-stone holder	J. L. Morrison and T. H. Fletcher	137, 560	Apr. 8, 1873	262	81	3	39
Seal-bolt	J. E. Thomson	144, 370	Nov. 4, 1873	164	55	4	492
Sealed can	W. H. I. Howe	136, 920	Mar. 18, 1873	515	169	3	305
Sealing-wax mold	I. L. Baker	193, 866	Oct. 21, 1873	447	149	4	435
Sealing-wax package	W. J. Lumb	143, 771	Oct. 21, 1873	365	121	4	428
Seal-lock	G. R. Dunn	140, 486	July 1, 1873	120	41	4	18
Seal-lock	F. C. Hamilton	139, 786	June 10, 1873	326	101	3	651
Seal-lock	J. Kinzer	138, 566	May 6, 1873	90	29	3	505
Seal-lock	G. L. Kiteon and J. Benner	135, 818	Feb. 11, 1873	403	130	3	171

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Seal-lock, &c	D. K. Miller	143, 831	Oct. 21, 1873	418	139	4	432
Seal-lock	T. Slaight	141, 519	Aug. 5, 1873	96	29	4	143
Seal-lock	J. E. Thomson	143, 201	Sept. 23, 1873	764	264	4	337
Seal-lock	J. E. Thomson	143, 544	Oct. 7, 1873	126	42	4	391
Seal-lock for box	H. C. Marston	138, 670	May 6, 1873	181	58	3	512
Seaming-machine	A. S. Munger	144, 691	Nov. 18, 1873	453	153	4	538
Seaming-machine, Sheet-metal	C. Brombacher	139, 863	June 17, 1873	400	125	3	664
Seaming-machine, Sheet-metal	G. D. Brooks	140, 678	July 8, 1873	300	101	4	44
Seamless can, Machine for forming	M. Von Culin	143, 735	Oct. 14, 1873	315	105	4	414
Seams, Mode of forming turned	S. W. Shorrey	137, 966	Apr. 15, 1873	623	197	3	432
Seat:							
<i>See</i> Car-seat.							
Carriage-seat.							
Carriage and wagon seat.							
Chair-seat.							
Harvester-seat.							
Jump-seat.							
Lawn-seat.							
Revolving-seat.							
Spring-seat.							
Vehicle-seat.							
Wagon-seat.							
Seat	J. Peard	138, 183	Apr. 22, 1873	832	264	3	458
Secretary, wardrobe, and bedstead, Combined	A. Weeks	145, 703	Dec. 16, 1873	600	196	4	658
Security-hook	J. K. Macdonald	135, 228	Jan. 28, 1873	691	222	3	103
Seed-drill	E. G. Matthews	139, 074	May 20, 1873	556	175	3	566
Seed-drill	D. N. Minor	145, 889	Dec. 23, 1873	771	252	4	684
Seed-drill	R. H. D. Morrison	145, 443	Dec. 9, 1873	360	120	4	626
Seed-drill and planter	W. F. West	142, 599	Sept. 9, 1873	255	83, 84	4	274
Seed-dropper	J. M. Forden	139, 565	June 3, 1873	105	35	3	617
Seed-dropper	J. M. Forden	144, 327	Nov. 4, 1873	128	43	4	489
Seed-dropper	E. L. Gross	139, 143	May 20, 1873	620	193	3	571
Seed-dropper	F. W. Young	135, 743	Feb. 11, 1873	329	105	3	165
Seed-dropper	F. W. Young	142, 320	Aug. 26, 1873	833	277	4	229
Seed-dropper	F. W. Mase	145, 668	Dec. 16, 1873	568	187	4	655
Seed-separator	F. C. Miller	142, 170	Aug. 26, 1873	710	235	4	219
Seed-separator and drill, Combined	P. D. Shepherd	137, 965	Apr. 15, 1873	622	196	3	432
Seeder, Broadcast	J. D. Huffman	138, 403	Apr. 29, 1873	1, 050	331	3	494
Seeder, Broadcast	H. Ogborn and A. W. Kendrick	136, 174	Feb. 25, 1873	734	236	3	223
Seeder, Broadcast	J. R. Scarborough	145, 018	Nov. 25, 1873	737	249	4	572
Seeder, Hand	J. E. Garside	134, 986	Jan. 21, 1873	459	147	3	72
Seeding-machine	D. Caine	137, 051	Mar. 25, 1873	637	210	3	326
Seeding-machine	S. B. Miller	137, 708	Apr. 8, 1873	391	121	3	400
Seeding-machine	S. G. Randall	137, 026	Mar. 18, 1873	604	200	3	312
Seeding-machine	M. Schnapp	145, 019	Nov. 25, 1873	737	249	4	572
Seeding-machine	H. C. Stephens	141, 472	Aug. 5, 1873	57	17	4	139
Seeding-machine	H. F. Stinde	140, 961	July 15, 1873	559	187	4	73
Seeding-machine	G. F. Stroud	141, 143	July 22, 1873	736	244	4	96
Seeding-machine	J. W. Strowbridge	136, 107	Feb. 18, 1873	659	215	3	205
Seeding-machine	E. Witzigman	144, 679	Nov. 25, 1873	624	212	4	562
Self-acting switch	L. W. Harris	139, 956	June 17, 1873	479	150	3	670
Self-operating switch	A. Bouchard	141, 537	Aug. 5, 1873	110	35	4	144
Self-waiting table	W. W. Patteson	138, 687	May 6, 1873	195	62	3	513
Self-waiting table	J. F. Schultz	139, 267	May 27, 1873	746	236	3	589
Self-waiting table	M. Stone	135, 382	Jan. 28, 1873	829	267	3	114
Separator:							
<i>See</i> Clover-separator.							
Coal-separator.							
Coal and ore separator.							
Grain-separator.							
Metal-separator.							
Middlings separator.							
Ore-separator.							
Seed-separator.							
Thrashing-machine separator.							
Settee	J. and E. R. Holzer	139, 389	May 27, 1873	850	271	3	597
Settee, Extension	C. Beatty	138, 842	May 13, 1873	346	167	3	536
Sewage, Treatment of	F. Hillé	138, 250	Apr. 29, 1873	917	289	3	473
Sewer-basin for street-corner	J. H. Boschen	142, 671	Sept. 9, 1873	315	105	4	279
Sewer-bottom cement	M. Day	144, 961	Nov. 25, 1873	688	232	4	568
Sewer-cleaner	J. H. Jennings	142, 238	Aug. 26, 1873	769	253	4	224
Sewer, Cleaning	B. Latham	145, 111	Dec. 2, 1873	64	21	4	590
Sewer-cleaning apparatus	W. H. Chase	137, 290	Apr. 1, 1873	10	3	3	358
Sewer gas-trap	G. C. Anthon	141, 412	Aug. 5, 1873	1	1	4	135
Sewer-inlet, Grating for	H. W. Clapp	134, 978	Jan. 21, 1873	453	145	3	72
Sewer-inlet trap	J. Hitchcock	137, 447	Apr. 1, 1873	149	49	3	369
Sewer-inlet trap	G. R. Moore	143, 774	Oct. 21, 1873	368	122	4	428
Sewing and other machinery, Brake for preventing retrograde movement in.	Peek	141, 166	July 22, 1873	760	250	4	98
Sewing books, Machine for	C. H. Palmer	135, 662	Feb. 11, 1873	258	82	3	160
Sewing-case	F. Benkendorf	142, 762	Sept. 16, 1873	403	136	4	297
Sewing-machine	E. W. Beebe	139, 040	May 20, 1873	519	164	3	563
Sewing-machine	A. Bingham	135, 194	Jan. 28, 1873	654	211	3	100
Sewing-machine	H. A. Blanchard	141, 987	Aug. 19, 1873	328	175	4	195
Sewing-machine	R. Chaudler	139, 368	May 27, 1873	826	264	3	596
Sewing-machine	D. H. Coles	138, 381	Apr. 29, 1873	1, 033	325	3	483
Sewing-machine	C. S. Cushman	141, 332	July 29, 1873	922	303	4	120
Sewing-machine	C. S. Cushman	142, 442	Sept. 2, 1873	108	35	4	251
Sewing-machine	J. A. Davis	138, 996	May 20, 1873	484	153	3	560
Sewing-machine	A. S. Dinamore	136, 976	Mar. 18, 1873	559	186	3	308
Sewing-machine	J. V. D. Eldredge	136, 823	Mar. 18, 1873	435	144	3	229
Sewing-machine	J. Fanning and E. Nugent	145, 287	Dec. 9, 1873	228	77	4	616
Sewing-machine	O. Farrar	136, 314	Feb. 25, 1873	850	274	3	232

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Sewing-machine	J. L. Follett	135,536	Feb. 4, 1873	131	41	3	138
Sewing-machine	E. A. Goodes	136,718	Mar. 11, 1873	332	110 111	3	281
Sewing-machine	E. A. Goodes	142,013	Aug. 19, 1873	552	182 283	4	197
Sewing-machine	C. Gullmann	136,057	Feb. 18, 1873	613	201 202	3	201
Sewing-machine	T. Henderson and W. G. Wright	139,245	May 27, 1873	727	229 230	3	587
Sewing-machine	W. Hiron and J. D. Moore	141,791	Aug. 12, 1873	352	116	4	171
Sewing-machine	J. A. House	145,570	Dec. 16, 1873	496	159 160	4	649
Sewing-machine	G. W. Hunter	143,766	Oct. 21, 1873	361	120	4	428
Sewing-machine	J. T. Jones	136,324	Feb. 25, 1873	860	277	3	232
Sewing-machine	T. K. Keith	139,962	June 17, 1873	483	152	3	671
Sewing-machine	M. H. Kernaul	138,163	Apr. 22, 1873	810	258	3	456
Sewing-machine	F. Koch and E. Brass	138,898	May 13, 1873	391	123	3	540
Sewing-machine	F. Koch and E. Brass	145,215	Dec. 2, 1873	158	54, 55	4	598
Sewing-machine	L. W. Lathrop	139,067	May 20, 1873	547	172 173	3	565
Sewing-machine	C. Lewis and J. Soothill	138,902	May 13, 1873	394	124	3	540
Sewing-machine	J. B. Lincoln and C. F. Clough	140,584	July 8, 1873	221	74	4	38
Sewing-machine	W. S. Lincoln and W. A. Rayer	137,007	Mar. 18, 1873	587	195	3	311
Sewing-machine	I. Manning	145,515	Dec. 16, 1873	440	144	4	644
Sewing-machine	J. N. McLean and J. Benner	135,000	Jan. 21, 1873	473	152	3	73
Sewing-machine	T. L. Melone	140,787	July 15, 1873	396	136	4	60
Sewing-machine	J. C. Moore	135,930	Feb. 18, 1873	507	165	3	193
Sewing-machine	J. P. Noyes	143,027	Sept. 23, 1873	627	213 214	4	326
Sewing-machine	J. O'Neil	137,618	Apr. 8, 1873	310	96	3	394
Sewing-machine	C. H. Palmer	145,814	Dec. 23, 1873	704	231 232	4	679
Sewing-machine	W. C. Pickersgill	136,616	Mar. 11, 1873	947	83	3	274
Sewing-machine	D. Porter	144,864	Nov. 25, 1873	614	209	4	568
Sewing-machine	W. A. Rayer and W. S. Lincoln	142,042	Aug. 19, 1873	584	192	4	199
Sewing-machine	G. Riefhus	137,028	Mar. 18, 1873	607	201	3	312
Sewing-machine	E. F. Richardson	145,687	Dec. 16, 1873	584	192	4	657
Sewing-machine	D. H. Rogan	137,321	Apr. 1, 1873	38	12	3	360
Sewing-machine	E. D. Smith	140,438	July 1, 1873	80	28	4	15
Sewing-machine	J. A. Smith	140,634	July 8, 1873	281	95	4	42
Sewing-machine	D. M. Smyth	141,088	July 22, 1873	687	230 231 232	4	92
Sewing-machine	O. St. Amant	145,025	Nov. 25, 1873	743	251 252	4	573
Sewing-machine	J. T. Tobey	139,745	June 10, 1873	289	90	3	648
Sewing-machine	G. C. Walters	137,640	Apr. 8, 1873	529	102	3	395
Sewing-machine	S. W. Wardwell	141,245	July 29, 1873	850	277 278	4	113
Sewing-machine	T. A. Weber	145,823	Dec. 23, 1873	710	234	4	679
Sewing-machine	G. Jr. and J. F. Webster	139,444	May 27, 1873	599	220	3	601
Sewing-machine	W. M. Whiting	141,303	July 29, 1873	901	296	4	117
Sewing-machine	J. H. Whitney	134,961	Jan. 14, 1873	424	136	3	54
Sewing-machine attachment	E. H. Alexander	140,233	June 24, 1873	737	232	3	700
Sewing-machine attachment	J. M. Grist	136,651	Mar. 11, 1873	278	93	3	277
Sewing-machine attachment	T. J. Peaslee	136,859	Mar. 18, 1873	462	153	3	301
Sewing-machine attachment	F. N. Violet	134,826	Jan. 14, 1873	312	99	3	45
Sewing-machine attachments, Clamp for	J. G. Powell	142,812	Sept. 16, 1873	442	149	4	300
Sewing-machine attachment for making button-holes	J. F. Haikins	146,000	Dec. 30, 1873	889	228 229	4	704
Sewing-machine balance-wheel	D. G. Williams	140,992	July 15, 1873	581	196	4	75
Sewing-machine binder	M. J. Stoll	135,381	Jan. 28, 1873				
Sewing-machine bobbin holder	W. F. and J. Barnea, and P. Meaick	141,981	Aug. 19, 1873	829	267	3	114
Sewing-machine bobbin winder	A. B. Bary	137,048	Mar. 25, 1873	522	173	4	195
Sewing-machine bobbin winder	T. Pedden	141,663	Aug. 12, 1873	635	210	3	326
Sewing machine, Boot and shoe	W. Duchemin	135,032	Jan. 21, 1873	239	75	4	162
Sewing machine, Boot and shoe	W. Duchemin	135,787	Feb. 11, 1873	503	162	3	76
Sewing machine, Boot and shoe	G. V. Sheffield	135,047	Jan. 21, 1873	366	118 119	3	168
Sewing-machine box-plaiting attachment	O. M. Chamberlain	137,343	Apr. 1, 1873	517	167	3	77
Sewing-machine braider	E. H. Alexander	136,354	Mar. 4, 1873	61	19	3	362
Sewing-machine braider	E. H. Alexander	136,355	Mar. 4, 1873	1	1	3	245
Sewing-machine braider	J. P. Chaffee	140,012	June 17, 1873	2	1	3	245
Sewing-machine brake	R. Gladney	138,881	May 13, 1873	523	166	3	674
Sewing-machine brake	C. E. Kimball	138,897	May 13, 1873	379	118	3	538
Sewing-machine, Button-hole	S. Clemmshaw	139,770	June 10, 1873	391	122	3	539
Sewing-machine, Button-hole	G. Kallmeyer	137,689	Apr. 8, 1873	313	97	3	650
Sewing-machine, Button-hole stitching attachment for	C. A. Hansen and G. Harley	144,672	Nov. 18, 1873	373	116	3	399
Sewing-machine button-holding attachment	E. Morean	134,558	Jan. 7, 1873	436	147	4	537
Sewing-machine cabinet	G. Range	138,435	Apr. 29, 1873	52	16, 17	3	11
Sewing-machine chair	F. Chichester	135,465	Feb. 4, 1873	1,082	342	3	426
Sewing-machine chair, Adjustable	F. Chichester	138,073	Apr. 22, 1873	68	21	3	133
Sewing-machine, Clamp for button-hole	W. Chicken	136,702	Mar. 11, 1873	739	234	3	451
Sewing-machine cloth-holder	L. A. Dupré	140,406	July 1, 1873	319	105	3	280
Sewing-machine corder	J. G. Powell	143,569	Oct. 14, 1873	57	20	4	13
Sewing-machine cover	C. B. Grover	136,506	Mar. 4, 1873	177	60	4	403
Sewing-machine cover	C. W. Reed	136,762	Mar. 11, 1873	134	43	3	256
Sewing-machine cover, Binding for	E. F. French	138,324	Apr. 29, 1873	370	122 123	3	284
Sewing-machine cover hook	J. C. Egly	135,100	Jan. 21, 1873	989	311	3	479
Sewing-machine cutter	L. H. Allon	139,350	May 27, 1873	555	181	3	80
Sewing-machine cutting-attachment	A. T. Perrine	140,159	June 24, 1873	812	259	3	584
Sewing-machine cutting-attachment	W. H. Sample	144,480	Nov. 11, 1873	677	213	3	695
Sewing-machine cutting-attachment	J. E. Wiggin	139,425	June 3, 1873	268	91	4	512
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Sewing-machine driving-motor	R. A. Atwell	142, 551	Sept. 9, 1873	214	69, 70	4	271
Sewing-machine embroidering-attachment	I. M. Rose	136, 098	Feb. 18, 1873	649	213	3	204
Sewing-machine embroidery-attachment	A. W. Johnson	142, 478	Sept. 2, 1873	140	46	4	253
Sewing-machine extension-table	J. Bendor	136, 959	Mar. 18, 1873	545	180	3	307
Sewing-machine fan-attachment	J. Bendor	140, 877	July 15, 1873	472	160	4	66
Sewing-machine fan-attachment	R. Jackson	143, 015	Sept. 23, 1873	618	210	4	325
Sewing-machine fan-attachment	E. Kempe	139, 584	June 3, 1873	120	40	3	619
Sewing-machine fan-attachment	C. B. Verones	135, 868	Feb. 11, 1873	439	143	3	173
Sewing-machine feeding-mechanism	C. Parham	135, 579	Feb. 4, 1873	176	55	3	141
Sewing-machine feeding-mechanism	W. and E. Westmoreland	140, 603	July 8, 1873	241	81	4	39
Sewing-machine, Folding-cover for	S. J. Pusey	141, 169	July 22, 1873	764	250	4	98
Sewing-machine folding-guide	J. E. Earle	139, 378	May 27, 1873	835	268	3	596
Sewing-machine folding-guide	S. W. Wood	138, 306	Apr. 29, 1873	972	305 306	3	477
Sewing-machine for banding hats	J. Stewart, jr.	141, 397	July 29, 1873	995	323	4	124
Sewing-machine for quilting	J. Happe and W. Newman	137, 199	Mar. 25, 1873	773	255	3	336
Sewing-machine for turned shoes	T. L. Miller	140, 586	July 8, 1873	224	75	4	38
Sewing-machine gathering and ruffling attachment	A. Johnston	146, 005	Dec. 30, 1873	894	290	4	704
Sewing-machine gathering and ruffling attachment	J. Wibe	143, 049	Sept. 23, 1873	648	222	4	327
Sewing-machine gathering attachment	T. S. Huntington	137, 002	Mar. 18, 1873	5-3	194	3	310
Sewing-machine gathering or ruffling attachment	A. Johnston	135, 122	Jan. 21, 1873	579	187	3	81
Sewing-machine gathering or ruffling attachment	A. Johnston	135, 123	Jan. 21, 1873	575	187	3	81
Sewing-machine guide	W. A. Springer	142, 819	Sept. 16, 1873	447	151	4	300
Sewing-machine hemmer	W. L. Apthorp	144, 649	Nov. 18, 1873	422	141	4	535
Sewing-machine hemmer	E. Booth	138, 371	Apr. 29, 1873	1, 025	323	3	422
Sewing-machine hemmer	S. H. and J. M. Bryant, and H. L. McGaw	144, 736	Nov. 18, 1873	490	160	4	541
Sewing-machine hemmer	F. Caswell	141, 993	Aug. 19, 1873	534	176	4	196
Sewing-machine hemmer	J. V. D. Eldredge	142, 689	Sept. 9, 1873	325	109	4	280
Sewing-machine hemmer	H. A. Ellis	136, 495	Mar. 4, 1873	124	40	3	255
Sewing-machine hemmer	H. C. Goodrich and R. Barnum	138, 638	May 6, 1873	150	48	3	510
Sewing-machine hemmer	J. M. Griest	144, 333	Nov. 4, 1873	133	45	4	469
Sewing-machine hemmer	J. F. Johnson	143, 160	Sept. 23, 1873	730	252	4	334
Sewing-machine hemmer	A. McMillan	141, 578	Aug. 5, 1873	143	46	4	147
Sewing-machine hemmer	L. Schultz	142, 519	Sept. 2, 1873	176	58	4	256
Sewing-machine hemmer	L. Sexauer	144, 706	Nov. 18, 1873	465	158	4	539
Sewing-machine lamp-bracket	L. M. N. Wolf	138, 831	May 13, 1873	336	103	3	535
Sewing-machine lock	E. L. Gaylor	135, 270	Jan. 28, 1873	728	233	3	106
Sewing-machine motor	B. C. Chambers	141, 996	Aug. 19, 1873	536	177	4	196
Sewing-machine motor	W. R. Duntou	134, 526	Jan. 7, 1873	21	7	3	9
Sewing-machine motor	G. W. Manson	141, 367	July 29, 1873	966	314	4	122
Sewing-machine motor	W. Young	140, 607	July 8, 1873	244	82	4	39
Sewing-machine needle-blanks, Machine for turning	J. Brooks	135, 767	Feb. 11, 1873	350	112 113	3	167
Sewing-machine needle setter and threader	C. F. Albert	139, 990	June 17, 1873	504	160	3	673
Sewing-machine needle setter and threader	G. P. Farmer	140, 262	June 24, 1873	761	240	3	702
Sewing-machine needle-threader	C. T. Beardsley	142, 430	Sept. 2, 1873	94	31	4	250
Sewing-machine needle-threader	T. Schofield	143, 098	Sept. 23, 1873	686	236	4	330
Sewing-machine needle-threader	M. A. and J. T. Williams	140, 983	July 15, 1873	582	196	4	75
Sewing-machine needles, Cushion and sharpener for	J. D. Neabitt	135, 931	Feb. 18, 1873	509	165	3	193
Sewing-machine needles, Machine for grooving	H. Freimuth and A. Büttner	136, 430	Mar. 4, 1873	64	23	3	250
Sewing-machine oil-cup support	L. N. Leslie	136, 327	Feb. 25, 1873	862	277	3	233
Sewing-machine plaiter	O. M. Chamberlain	139, 657	June 10, 1873	199	65	3	641
Sewing-machine plaiting-attachment	O. M. Chamberlain	137, 342	Apr. 1, 1873	60	18, 19	3	361
Sewing-machine plaiting-attachment	W. Walker	141, 407	July 29, 1873	1, 006	327	4	125
Sewing-machine plaiting-attachment	W. Walker	141, 610	Aug. 5, 1873	175	56	4	149
Sewing-machine power	A. W. Cochran	142, 839	Sept. 16, 1873	466	157	4	302
Sewing-machine presser-foot	G. W. Allerton and Z. M. Powers	139, 700	June 10, 1873	248	78	3	645
Sewing-machine presser-foot	H. C. Goodrich	138, 637	May 6, 1873	150	48	3	510
Sewing-machine quilting-attachment	W. H. Hefley	138, 399	Apr. 29, 1873	1, 047	330	3	484
Sewing-machine quilting-attachment	W. H. Null	143, 092	Sept. 23, 1873	680	234	4	330
Sewing-machine quilting-guide	F. G. Buschmuer	145, 841	Dec. 23, 1873	726	238	4	680
Sewing-machine ruffler	G. E. Dolton	139, 883	June 17, 1873	419	131	3	666
Sewing-machine ruffler	J. S. Hugg and J. T. Stewart	136, 162	Feb. 25, 1873	724	234	3	222
Sewing-machine ruffler	W. H. Lewitt	140, 285	June 24, 1873	782	243	3	704
Sewing-machine ruffler	T. G. Perkins	135, 339	Jan. 28, 1873	808	261	3	112
Sewing-machine ruffler	C. Schullian	143, 259	Sept. 30, 1873	823	282	4	358
Sewing-machine ruffler	M. J. Stull	140, 557	July 1, 1873	184	62	4	23
Sewing-machine ruffler	C. M. Woolworth	142, 543	Sept. 2, 1873	198	64	4	258
Sewing-machine ruffler and gatherer	A. Johnston	139, 064	May 20, 1873	544	171	3	565
Sewing-machine ruffler and gatherer	F. Sievers	139, 089	May 20, 1873	568	178	3	567
Sewing-machine ruffling-attachment	H. C. Goodrich	134, 744	Jan. 14, 1873	237	76	3	40
Sewing-machine ruffling-attachment	T. S. Huntington	137, 003	Mar. 18, 1873	583	194	3	310
Sewing-machine ruffling-attachment	E. Stewart	136, 676	Mar. 11, 1873	300	100	3	278
Sewing-machine ruffling or plaiting attachment	A. Johnston	137, 686	Apr. 8, 1873	370	115	3	398
Sewing-machine ruffling or plaiting attachment	A. Rush	143, 424	Oct. 7, 1873	26	10	4	383
Sewing-machine shoe	J. G. Ross and T. L. Miller	138, 764	May 13, 1873	276	85, 86	3	530
Sewing-machine shuttle	W. Cooney	138, 134	Apr. 22, 1873	786	251	3	455
Sewing-machine shuttle	G. A. Edwards and G. Schieder	136, 311	Feb. 25, 1873	847	273	3	231
Sewing-machine shuttle	C. W. Ellis	137, 665	Apr. 8, 1873	353	109	3	397
Sewing-machine shuttle	W. Hockensmith	140, 041	June 17, 1873	552	174	3	677
Sewing-machine shuttle	G. W. Hunter	145, 348	Dec. 9, 1873	282	94	4	620
Sewing-machine shuttle	J. Knox	144, 395	Nov. 11, 1873	197	67	4	506
Sewing-machine shuttle	G. Rehfus	139, 421	May 27, 1873	882	283	3	600
Sewing-machine shuttle	W. H. Schofield	143, 303	Sept. 30, 1873	861	295	4	361
Sewing-machine shuttle	J. B. Secor	141, 894	Aug. 19, 1873	456	149	4	189
Sewing-machine shuttle	W. H. Thayer	143, 104	Sept. 23, 1873	690	237	4	331
Sewing-machine shuttle-bobbin	G. Juengst	135, 125	Jan. 21, 1873	578	188	3	82
Sewing-machine shuttle-bobbin	W. H. Thayer	136, 282	Feb. 25, 1873	826	297	3	230
Sewing-machine shuttles, Die for forming	D. W. Hale	134, 541	Jan. 7, 1873	36	11	3	10
Sewing-machine stand	H. Loth	140, 929	July 15, 1873	528	176	4	70
Sewing-machine stand	R. M. Wanzer	137, 983	Apr. 15, 1873	637	201	3	433

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				Spec.	Dr. G.	Vol.	Page.
Sewing-machine stop	D. S. Alling	135,461	Feb. 4, 1873	65	20	3	132
Sewing-machine table	J. Bennor	140,874	July 15, 1873	470	159	4	66
Sewing-machine table	J. Bennor	140,875	July 15, 1873	471	159	4	66
Sewing-machine table	J. Bennor	140,876	July 15, 1873	472	160	4	66
Sewing-machine table	J. Bennor	141,985	Aug. 19, 1873	526	174	4	195
Sewing-machine table	J. Bennor	143,742	Oct. 21, 1873	342	114	4	426
Sewing-machine table	J. Bennor	145,612	Dec. 16, 1873	521	171	4	652
Sewing-machine table	W. H. Boyer	143,611	Oct. 14, 1873	198	66	4	405
Sewing-machine table	J. W. Cheney	136,701	Mar. 11, 1873	318	105	3	280
Sewing-machine table	W. M. Cuthbert	136,903	Mar. 18, 1873	499	165	3	303
Sewing-machine table	E. A. Jeffery	142,024	Aug. 19, 1873	563	186	4	198
Sewing-machine table	H. Loth	134,904	Jan. 14, 1873	377	120	3	50
Sewing-machine table	H. Loth	134,905	Jan. 14, 1873	378	120	3	50
Sewing-machine table	H. Loth	135,827	Feb. 11, 1873	410	132	3	171
Sewing-machine table	J. B. McLure	134,759	Jan. 14, 1873	248	81	3	40
Sewing-machine table	T. W. Morrison	139,805	June 10, 1873	344	106	3	652
Sewing-machine table	S. J. Pusey	136,543	Mar. 4, 1873	174	56	3	259
Sewing-machine table	J. J. Wheat	136,798	Mar. 11, 1873	399	132	3	286
Sewing-machine table	F. R. Wolfinger	141,250	July 29, 1873	857	279	4	113
Sewing-machine table and chair combined	L. N. B. Gray	140,362	July 1, 1873	23	8	4	10
Sewing-machine table-attachments	M. A. Browne	136,410	Mar. 4, 1873	50	18	3	249
Sewing-machine table-cover	E. A. Jeffery	135,121	Jan. 21, 1873	572	187	3	81
Sewing-machine table-cover	H. Jensen	141,561	Aug. 5, 1873	132	42	4	146
Sewing-machine table, &c., Lock for	J. B. Logan	142,708	Sept. 9, 1873	344	115	4	282
Sewing-machine table-top	W. Wilson	135,392	Jan. 28, 1873	837	270	3	115
Sewing-machine tension-indicator	D. B. Tiffany	136,626	Mar. 11, 1873	260	87	3	275
Sewing-machine thread-cutter	F. Collins	134,518	Jan. 7, 1873	15	5	3	8
Sewing-machine thread-cutter	N. Evinger	144,326	Nov. 4, 1873	128	43	4	489
Sewing-machine thread-cutter	C. J. Henry and C. J. Wood	134,669	Jan. 7, 1873	162	53	3	19
Sewing-machine thread-cutter	C. J. Henry and C. J. Wood	138,153	Apr. 22, 1873	801	255	3	456
Sewing-machine thread-cutter	A. M. Leslie	138,412	Apr. 29, 1873	1,060	333	3	485
Sewing-machine thread-cutter	F. V. Oburg	137,947	Apr. 15, 1873	605	191	3	431
Sewing-machine thread-cutting mechanism	A. Webber	143,046	Sept. 23, 1873	646	221	4	327
Sewing-machine thread-waxing attachment	C. E. Lewis	134,606	Jan. 7, 1873	102	33	3	15
Sewing-machine tray	G. A. Kirchner	136,525	Mar. 4, 1873	155	50	3	258
Sewing-machine trimming-attachment	W. A. Spruiger	142,290	Aug. 26, 1873	810	268	4	228
Sewing-machine treadle	S. B. Bushfield	140,677	July 8, 1873	300	101	4	44
Sewing-machine treadle	C. F. Clough and J. B. Lincoln	137,179	Mar. 25, 1873	751	249	3	335
Sewing-machine treadle	M. H. Knapp	142,704	Sept. 9, 1873	340	114	4	281
Sewing-machine treadle	C. J. F. Kraft	136,377	Mar. 4, 1873	24	8	3	247
Sewing-machine treadle	A. B. Shaw	134,820	Jan. 14, 1873	306	98	3	45
Sewing-machine treadle	F. Smiley	141,240	July 29, 1873	845	275	4	112
Sewing-machine treadle	W. H. Stewart	144,366	Nov. 4, 1873	161	53, 54	4	491
Sewing-machine treadle	W. D. Wood	140,865	July 15, 1873	464	157	4	65
Sewing-machine treadle, Adjustable	J. McEvoy	141,722	Aug. 19, 1873	285	93	4	166
Sewing-machine treadles, Clutch mechanism for	J. Tisdale	135,297	Jan. 23, 1873	750	242	3	108
Sewing-machine treadles, Foot-warming attachment for	A. R. Bush	136,582	Mar. 11, 1873	223	74	3	272
Sewing-machine tuck-creaser	S. P. Babcock	143,741	Oct. 21, 1873	341	114	4	426
Sewing-machine tuck-creaser	R. S. Barnum	135,065	Jan. 21, 1873	532	172	3	78
Sewing-machine tuck-creaser	W. J. Faulkner	143,975	Oct. 28, 1873	561	186	4	454
Sewing-machine tuck-creaser	A. Johnston	135,919	Feb. 18, 1873	498	162	3	192
Sewing-machine tuck-creaser	W. D. Kane	139,249	May 27, 1873	730	221	3	588
Sewing-machine tuck-creaser	E. Powell	146,094	Dec. 30, 1873	973	314	4	711
Sewing-machine tuck-creaser	J. T. Stewart	137,108	Mar. 25, 1873	689	229	3	330
Sewing-machine tuck-marker	H. C. Goodrich	138,635	May 6, 1873	148	48	3	510
Sewing-machine tuck-marker	H. C. Goodrich	138,636	May 6, 1873	149	48	3	510
Sewing-machine tucker	D. and E. B. Barnum	137,047	Mar. 25, 1873	633	209	3	326
Sewing-machine tucker	J. H. Bean	141,623	Aug. 12, 1873	203	64	4	159
Sewing-machine tucker	J. H. Bean	145,422	Dec. 16, 1873	403	132	4	642
Sewing-machine tucker	F. W. Brown	141,626	Aug. 12, 1873	206	65	4	160
Sewing-machine tucker	J. S. Oakley	137,232	Mar. 25, 1873	801	264	3	338
Sewing-machine tucking-attachment	E. Bouillon	138,730	May 13, 1873	246	77	3	527
Sewing-machine water-wheel attachment	C. H. Palmer	136,452	Mar. 4, 1873	84	29	3	252
Sewing-machine, Wax-thread	E. E. Bean	134,508	Jan. 7, 1873	6	2	3	8
Sewing-machine, Wax-thread	E. E. and F. Bean	134,509	Jan. 7, 1873	7	3	3	8
Sewing-machine, Wax-thread	E. E. and F. Bean	137,528	Apr. 8, 1873	235	72	3	387
Sewing-machine, Wax-thread	W. H. Johnson	135,431	Feb. 4, 1873	36	10, 11	3	130
Sewing-machine, Wax-thread	A. Tittman	136,792	Mar. 11, 1873	395	131	3	286
Sewing-machine, Frame for holding work on	E. M. Turner	146,110	Dec. 30, 1873	989	319	4	712
Sewing-machine, Mechanism for operating	D. Whitlock	134,780	Jan. 14, 1873	266	87	3	42
Sewing-machine, Mode of operating	E. Wright	142,544	Sept. 2, 1873	198	64	4	258
Sewing-machine, Movable cloth-plate for	R. L. Leech	142,404	Sept. 2, 1873	75	24	4	248
Sewing-machine, Rotating-hook for	A. and J. Aird	136,635	Mar. 11, 1873	266	89	3	276
Sewing shoes, Guide for	H. Bond	143,955	Oct. 28, 1873	543	180	4	433
Sewing shoes, Guide for	L. E. De Waru	143,969	Oct. 28, 1873	554	184	4	453
Sewing-stand	L. J. Fling and A. Land	145,858	Dec. 23, 1873	742	242, 243	4	681
Shade-holder	L. J. Atwood	141,252	July 29, 1873	858	280	4	113
Shade-holder	M. W. House	137,306	Apr. 1, 1873	23	7	3	359
Shade-holder	T. Moran	141,806	Aug. 12, 1873	364	119	4	172
Shaft-bearing	G. M. Ball	135,506	Feb. 4, 1873	102	32	3	135
Shaft-bearing	C. Bird and W. H. Sullenberger	141,986	Aug. 19, 1873	527	174	4	195
Shaft-bending machine	A. J. Fraser	141,552	Aug. 5, 1873	123	39	4	145
Shaft-coupling	R. S. Cathcart	143,879	Oct. 21, 1873	458	153, 154	4	436
Shaft-coupling	J. Gibbins	145,100	Dec. 2, 1873	57	18	4	590
Shaft-coupling	W. J. Silver	142,288	Aug. 26, 1873	802	267	4	227
Shaft-coupling	J. M. Stone	141,296	July 29, 1873	895	294	4	117
Shaft-coupling	E. Swain	140,600	July 8, 1873	236	80	4	39
Shaft-eye, Tool for milling carriage	W. S. Ward	136,112	Feb. 18, 1873	664	217	3	205
Shaft-furnace for roasting ore	T. McGlew	140,837	July 15, 1873	440	150	4	63
Shaft-hanger	W. Bellis	138,119	Apr. 22, 1873	774	247	3	454
Shaft-hanger	B. E. Orton and W. Cavert	144,353	Nov. 4, 1873	151	50	4	490
Shaft-iron, Carriage	W. W. Knowles	138,753	May 13, 1873	267	83	3	529
Shaft, Tumbling	D. Snell	143,191	Sept. 23, 1873	758	261	4	336

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Shaft, Vehicle	S. P. Connor and P. D. Pfisterer.	139, 117	May 20, 1873	594	187	3	569
Shaft, Vehicle	J. J. Dewey.	145, 055	Dec. 2, 1873	13	5	4	587
Shaft, Vehicle	B. Schroeder.	138, 449	Apr. 29, 1873	1, 090	344	3	487
Shafts and well-tubes, Apparatus for lowering and sinking.	J. Chaudron.	136, 031	Feb. 18, 1873	581	194	3	900
Shafts, Automatically-operating.	F. B. Miles.	142, 494	Sept. 2, 1873	158	51	4	254
Shafting, Bearing for.	P. J. Hardy.	145, 565	Dec. 16, 1873	462	158	4	648
Shafting-hanger.	W. W. Carey.	137, 593	Apr. 8, 1873	280	90	3	392
Shafting-hanger.	J. Greenwood.	142, 100	Aug. 20, 1873	653	215	4	915
Shafting, Manufacture of.	C. F. Kneisley and W. Wenethoff.	139, 165	May 20, 1873	644	201	3	572
Shafting, Process for casting bearings on.	J. Miller.	136, 176	Apr. 22, 1873	594	262	3	488
Shank-stiffener.	W. N. Sprague.	143, 369	Sept. 30, 1873	939	318	4	367
Sharpening-machine.	J. H. Curran.	146, 050	Dec. 30, 1873	935	301	4	707
Sharpening-machine.	S. F. Emerson.	141, 042	July 22, 1873	645	217	4	89
Sharpening-machine.	J. P. Kealy and J. Rigney.	140, 832	July 15, 1873	437	149	4	711
Sharpening-machine.	H. B. Rorke.	146, 098	Dec. 30, 1873	977	316	4	63
Shaving-mug.	A. J. Furr and W. C. Knans.	144, 667	Nov. 18, 1872	432	146	4	536
Shawl-strap.	T. R. Dunham.	135, 530	Feb. 4, 1873	124	39, 40	3	137
Shawl-strap.	J. B. Higgins.	134, 748	Jan. 14, 1873	240	78	3	49
Shawl-strap.	F. H. Willis.	141, 024	July 22, 1873	631	212	4	58
Shearing-machine.	J. K. Priest.	144, 136	Oct. 28, 1873	697	231	4	465
Shears:							
<i>See</i> Counting-shears.							
Paper-shears.							
Pruning-shears.							
Rotary-shears.							
Sheep-shears.							
Shears	A. Lapham.	143, 454	Oct. 7, 1873	48	17	4	385
Shears and button-hole cutters combined.	A. Swingle.	138, 542	May 6, 1873	65	22	3	503
Sheathing-joint.	N. G. Northrup.	138, 520	May 6, 1873	49	16	3	501
Sheave.	P. Kavanagh.	141, 564	Aug. 1, 1873	135	43	4	146
Shed, Portable stock.	D. H. Yeiser.	142, 069	Aug. 19, 1873	699	200	4	201
Shedding-mechanism.	W. Gminder.	135, 798	Feb. 11, 1873	381	123	3	169
Sheep-holder.	S. Tucker.	135, 175	Jan. 21, 1873	618	201	2	85
Sheep-shears.	A. S. McWilliams.	140, 292	June 24, 1873	787	250	3	704
Sheet-metal bending-machine.	C. F. Brand.	143, 558	Oct. 14, 1873	153	51	4	401
Sheet-metal bending-machine.	W. F. Cozens and W. H. Wiggin.	141, 329	July 29, 1873	925	302	4	119
Sheet-metal bending-machine.	W. F. Kistler.	142, 921	Sept. 16, 1873	530	181	4	308
Sheet-metal bending-machine.	J. Pearce.	135, 150	Jan. 21, 1873	600	195	3	83
Sheet-metal boxes, Machine for cutting out and stamping up.	W. J. Gordon.	145, 412	Dec. 9, 1873	335	112	4	625
Sheet-metal cutting and cupping die.	C. F. Wilson and S. H. Miller.	138, 721	May 6, 1873	229	71	3	516
Sheet-metal elbows, Construction of.	L. Bancroft.	137, 525	Apr. 8, 1873	231	71	3	367
Sheet-metal joints, Riveting.	P. Ball.	142, 979	Sept. 23, 1873	587	200	4	322
Sheet-metal, Machine for cold-rolling.	J. Evans.	135, 102	Jan. 21, 1873	556	181	3	80
Sheet-metal, Machine for cutting out planchets of.	J. Lowe.	138, 264	Apr. 29, 1873	290	293	3	474
Sheet-metal pans, Machine for wiring.	W. Foglesong.	136, 986	Mar. 18, 1873	568	189	3	309
Sheet-metal, Spinning articles of.	F. J. Seymour.	134, 939	Jan. 14, 1873	408	130	3	53
Sheet-metal tubing.	S. R. Wilmot.	137, 991	Apr. 15, 1873	643	203	3	434
Sheet-metal tubing.	S. R. Wilmot.	137, 992	Apr. 15, 1873	644	203	3	434
Sheet-metal vessels, Casting bottom on.	R. J. Howdon.	137, 204	Mar. 25, 1873	778	257	3	337
Sheet-metal ware, Handle for.	J. Fallows.	145, 266	Dec. 9, 1873	228	77	4	616
Sheet-metal ware, Handle for.	J. W. Lamb.	137, 848	Apr. 15, 1873	525	164	3	424
Sheet-metal ware, Machine for beading.	C. E. Marchand.	139, 681	June 10, 1873	222	71	3	643
Shell, Revolving.	J. Danner.	143, 888	Oct. 21, 1873	466	156	4	436
Shell, Explosive.	J. T. Senn.	137, 491	Apr. 1, 1873	196	60	3	373
Shell, Process for cutting and shaping pearl.	E. Carrington.	134, 851	Jan. 14, 1873	330	105	3	47
Shelving bracket.	J. V. Meigs.	139, 408	May 27, 1873	872	279	3	599
Shield, Armpit.	J. Sibley.	142, 875	Sept. 16, 1873	493	168	4	304
Shingle-band notching-machine.	C. E. McGregory.	142, 033	Aug. 19, 1873	573	189	4	199
Shingle-machine.	A. Anderson.	142, 138	Aug. 26, 1873	686	226	4	217
Shingle-machine.	S. M. King.	139, 162	May 20, 1873	641	200	3	573
Shingle-machine.	H. Peavy.	135, 441	Feb. 4, 1873	45	14	3	131
Shingle-ripping machine.	C. Shelmandine.	144, 292	Nov. 4, 1873	100	33, 34	4	488
Shingle-shaving machine.	T. H. Carter.	143, 877	Oct. 21, 1873	457	153	4	435
Shingles, Machine for bundling.	R. Law.	134, 753	Jan. 14, 1873	243	79	3	40
Shingling-bracket.	L. W. Merriam.	137, 212	Apr. 1, 1873	30	9	3	359
Shingling-bracket.	L. W. Merriam.	136, 425	Apr. 29, 1873	1, 075	339	3	486
Ship and tank, Joint for iron.	D. E. Merrick.	142, 406	Sept. 2, 1873	76	25	4	248
Ship building, Iron.	S. Holmes and W. M. Bowron.	139, 789	June 10, 1873	320	102	3	651
Ship, Construction of.	A. W. Thompson.	136, 393	Mar. 4, 1873	36	13	3	248
Ship-frame, Adjustable templet for.	A. Perrin.	140, 071	June 17, 1873	579	183	3	679
Ship-hook blank, Die for making.	C. F. Billings.	138, 471	May 6, 1873	6	2	3	498
Ship-ventilating and steam-boiler heating apparatus.	J. Thomas.	140, 741	July 8, 1873	354	120	4	46
Ship's hull.	E. C. Beléguic.	145, 832	Dec. 23, 1873	718	236	4	680
Ship's rigging, Fair-leader for.	J. J. Walton.	145, 919	Dec. 23, 1873	798	261	4	686
Shipping-can shield.	H. M. Smith.	137, 627	Apr. 8, 1873	317	99	3	394
Shipping mechanism for machinery.	F. N. Bixby.	136, 483	Mar. 4, 1873	113	37	3	254
Shirt.	O. Gowing.	135, 424	Feb. 4, 1873	29	8	3	130
Shirt.	S. S. Gray.	145, 414	Dec. 9, 1873	337	113	4	625
Shirt.	A. D. Marr.	134, 909	Jan. 14, 1873	381	121	3	51
Shirt.	G. C. Thomas.	139, 933	June 17, 1873	462	145	3	669
Shirt.	W. B. Watson.	143, 108	Sept. 23, 1873	694	238	4	331
Shirt.	J. Wieser.	139, 937	June 17, 1873	466	146	3	669
Shirt-bosom.	C. W. Jenks.	135, 478	Feb. 4, 1873	79	25	3	134
Shirt-bosom.	J. Pagan.	140, 431	July 1, 1873	73	26	4	14
Shirt-bosom and lungs-protector, Combined.	W. R. Trask.	143, 205	Sept. 23, 1873	771	265	4	337
Shirt-bosom stretcher.	E. Bassett.	140, 000	June 17, 1873	514	163	3	673
Shirt-bosom support.	G. F. Johnson.	140, 373	July 1, 1873	32	11	4	11
Shirt-bosom support.	I. L. Landis.	139, 797	June 10, 1873	336	104	3	651
Shirt-bosom support.	I. M. Post.	140, 537	July 1, 1873	167	56	4	22
Shirt-bosom support and shoulder-brace.	S. F. Long.	140, 379	July 1, 1873	77	12	4	11
Shirt-front.	T. M. Deham.	142, 212	Aug. 26, 1873	746	246	4	222

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Shoe and leather-polisher.....	J. Day.....	134, 525	Jan. 7, 1873	20	7	3	9
Shoe-binding strip, Device for fastening ends of.....	C. E. Morrill.....	134, 763	Jan. 14, 1873	251	82	3	41
Shoe-fastener.....	J. Coykendall.....	138, 863	May 13, 1873	363	113	3	537
Shoe-fastening.....	S. Babbitt.....	145, 776	Dec. 23, 1873	675	221	4	676
Shoe-fastening.....	L. Banister.....	138, 117	Apr. 22, 1873	773	246	3	453
Shoe-fastening.....	M. Boch.....	139, 109	May 20, 1873	584	183	3	568
Shoe-fastening.....	G. L. Fitch and H. M. Jones.....	143, 445	Oct. 7, 1873	42	15	4	384
Shoe-fastening.....	C. Goldthwait.....	136, 649	Mar. 11, 1873	277	93	3	276
Shoe-fastening.....	G. B. Hart.....	143, 148	Sept. 23, 1873	722	248	4	333
Shoe-fastening.....	G. Merrill.....	134, 761	Jan. 14, 1873	250	82	3	40
Shoe-gores, Machine for gumming the edges of elastic.....	J. Walden and G. Platts.....	143, 798	Oct. 21, 1873	387	129	4	430
Shoe-holding jack.....	A. K. Washburn.....	143, 267	Sept. 30, 1873	830	285	4	358
Shoe-knife.....	A. J. Hall.....	145, 295	Dec. 9, 1873	236	79	4	617
Shoemaker's finishing-tool.....	W. Wilson and J. Foster.....	138, 063	Apr. 22, 1873	731	231	3	450
Shoemaker's pinchers.....	T. B. Shelly.....	143, 594	Oct. 14, 1873	181	61	4	404
Shoek-holder.....	J. I. Berry.....	142, 553	Sept. 9, 1873	216	70	4	271
Shoulder-brace.....	N. C. Burnap.....	139, 366	May 27, 1873	824	254	3	585
Shoulder-pad.....	L. Kyser.....	145, 661	Dec. 16, 1873	563	185	4	655
Shoulder-strap.....	J. C. Merritt.....	140, 061	June 17, 1873	572	181	3	678
Shovel: <i>See</i> Fire-shovel. Sifting-shovel. Snow-shovel.							
Shovel and spade.....	W. T. Wells and G. E. Morehouse.....	135, 954	Feb. 18, 1873	525	173	3	194
Shovel-handle.....	C. Pomeroy and J. D. Owen.....	143, 714	Oct. 14, 1873	297	97	4	412
Shovels, &c., Manufacture of.....	H. L. Lowman.....	142, 859	Sept. 16, 1873	480	164	4	303
Shovels, Manufacture of.....	E. A. Yerkes.....	140, 334	June 24, 1873	898	263	3	708
Show-card.....	A. H. Dixon.....	135, 636	Feb. 11, 1873	238	75	3	158
Show-case.....	A. Arnold and H. Mers.....	135, 505	Feb. 4, 1873	101	32	3	135
Show-case.....	D. D. Elder.....	140, 689	July 8, 1873	308	105	4	45
Show-knife.....	J. C. Ratelle.....	142, 942	Sept. 16, 1873	551	187	4	309
Show-lacing.....	J. Harding.....	139, 713	June 10, 1873	257	81	3	645
Show-lacing fastening.....	B. B. Choat.....	139, 871	June 17, 1873	407	127	3	665
Shoe, Lady's gaiter.....	H. C. Letzinger.....	140, 836	July 15, 1873	440	150	4	63
Shoe-nail.....	J. F. Paine.....	139, 327	May 27, 1873	795	.....	3	593
Shoe, Rubber.....	L. L. Hyatt and J. H. Canfield.....	140, 829	July 15, 1873	435	148	4	63
Shoe, Turned.....	W. Duchemin.....	140, 258	June 24, 1873	757	239	3	702
Shoe-upper gumming-machine.....	P. E. Clark.....	143, 275	Sept. 30, 1873	836	288	4	359
Shoe-uppers, Method of laying off.....	C. Glanville.....	144, 067	Oct. 28, 1873	659	217	4	462
Shoe-uppers, Machinery for goring.....	A. J. Goodwin.....	141, 642	Aug. 12, 1873	918	69	4	161
Shoe-uppers, Mode of cutting out.....	E. H. Thurston.....	136, 561	Mar. 4, 1873	188	61, 62	3	260
Shoes, Manufacture of.....	C. W. Green.....	142, 691	Sept. 9, 1873	330	110	4	280
Shoes, Manufacture of.....	C. W. Green.....	142, 692	Sept. 9, 1873	330	111	4	280
Shoes, Pattern for cutting the uppers of.....	G. Leinroth.....	144, 341	Nov. 4, 1873	140	47	4	490
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Show-case.....	W. H. Relf.....	135, 848	Feb. 11, 1873	496	138	3	172
Show-case.....	W. C. Spellman.....	140, 089	June 17, 1873	596	188	3	680
Show-case, Jeweler's.....	M. Martin and J. A. Studer.....	142, 575	Sept. 9, 1873	235	76	4	273
Shower-bath, Hand.....	D. Stirling.....	144, 156	Oct. 23, 1873	713	237	4	467
Shutter and door fastener.....	D. J. Moffitt.....	140, 064	June 17, 1873	575	182	3	679
Shutter and window fastener, Combined.....	W. T. Fry.....	145, 343	Dec. 9, 1873	278	93	4	690
Shutter-bowling device.....	T. Royer.....	137, 031	Mar. 18, 1873	609	201	3	313
Shutter, Corrugated-metallic rolling.....	A. Clark.....	137, 595	Apr. 8, 1873	291	90	3	392
Shutter-fastener.....	N. H. Byerley.....	135, 319	Jan. 28, 1873	769	248	3	109
Shutter-fastener.....	P. Keffer.....	145, 951	Dec. 30, 1873	849	276	4	700
Shutter-fastener.....	J. A. Morris.....	143, 585	Oct. 14, 1873	175	59	4	403
Shutter fastener and bower, Combined.....	R. Ruhman.....	143, 189	Sept. 23, 1873	757	261	4	336
Shutter-fastening.....	E. D. Anderson.....	137, 647	Apr. 8, 1873	335	104	3	396
Shutter-fastening.....	J. P. Bush.....	143, 805	Oct. 21, 1873	397	131	4	430
Shutter-fastening.....	H. H. Miner.....	145, 888	Dec. 23, 1873	770	252	4	684
Shutter-fastening.....	A. J. Palmberg.....	143, 460	Oct. 7, 1873	52	18	4	385
Shutter-fastening.....	J. Parker.....	144, 126	Oct. 28, 1873	689	228	4	465
Shutter-fastening.....	H. A. Skinner.....	146, 028	Dec. 30, 1873	914	296	4	706
Shutter, Fire-proof.....	J. B. Cornell.....	141, 696	Aug. 12, 1873	265	86	4	164
Shutter, Fire-proof.....	A. Gottlieb.....	142, 563	Sept. 9, 1873	226	73	4	272
Shutter, Fire-proof.....	T. Hyatt.....	143, 156	Sept. 23, 1873	727	250	4	334
Shutter, Fire-proof.....	T. Hyatt.....	143, 157	Sept. 23, 1873	728	251	4	334
Shutter, Fire-proof.....	I. S. Mettler.....	140, 839	July 15, 1873	442	150	4	63
Shutter, Fire-proof.....	W. M. Vars.....	137, 158	Mar. 25, 1873	731	243	3	333
Shutter, Iron window.....	S. B. Munson, jr.....	140, 526	July 1, 1873	159	54	4	21
Shutter, Manufacture of corrugated-metal.....	A. Clark.....	137, 827	Apr. 15, 1873	505	158	3	422
Shutter, Metallic.....	W. H. Rodden.....	135, 246	Jan. 28, 1873	712	227	3	105
Shutter-worker.....	S. R. Foster.....	141, 267	July 29, 1873	872	285	4	115
Shutter-worker.....	A. H. Gibbs.....	138, 879	May 13, 1873	377	118	3	538
Shutter-worker.....	J. W. Jedkins.....	143, 159	Sept. 23, 1873	729	251	4	334
Shutter-worker.....	L. Muller.....	143, 416	Oct. 7, 1873	20	8	4	382
Shutter-worker.....	F. W. Nichols.....	143, 994	Oct. 23, 1873	580	193	4	456
Shutter-worker.....	H. S. Phillips.....	140, 217	June 24, 1873	724	228	3	699
Shutter-worker.....	T. & C. T. Rowe.....	145, 688	Dec. 16, 1873	586	192	4	657
Shutter-worker and blind-operator, Combined.....	D. M. Leonard.....	143, 289	Sept. 30, 1873	846	291	4	360
Shuttle-binder.....	F. Rea.....	136, 384	Mar. 4, 1873	29	11	3	248
Shuttle-box mechanism.....	G. Crompton.....	142, 441	Sept. 2, 1873	105	34	4	251
Shuttle-box mechanism.....	J. Schrack.....	142, 736	Sept. 9, 1873	367	124	4	283
Shuttle-box operating mechanism.....	R. B. Goodyear.....	144, 089	Oct. 28, 1873	660	217	4	462
Sickle-bar, Mode of attaching pitman to.....	V. Cox.....	134, 519	Jan. 7, 1873	16	6	3	9
Sickle-sections, Apparatus for tempering.....	F. Meyer.....	145, 960	Dec. 30, 1873	856	278	4	701
Sidewalk, Composition.....	C. H. Howard.....	136, 919	Mar. 18, 1873	514	.....	3	305
Sidewalk-plate, Bridge and furrow.....	T. Hyatt.....	140, 707	July 8, 1873	325	110	4	46
Sidewalk-plate, Bridge and furrow.....	T. Hyatt.....	140, 708	July 8, 1873	326	110	4	46
Siding-hook.....	P. J. Coon.....	143, 436	Oct. 7, 1873	35	12	4	383
Siding-hook.....	J. F. Elliott.....	140, 904	July 15, 1873	503	169	4	68
Sieve.....	G. Wright.....	138, 976	May 13, 1873	452	142	3	545

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Sieve	G. Wright	145, 924	Dec. 23, 1873	802	263	4	686
Sieve, Flour	J. T. Foster	137, 906	Apr. 15, 1873	575	180	3	428
Sieve, Grain	L. D. Carpenter	141, 917	Aug. 19, 1873	474	156	4	190
Sieve, Revolving	A. E. Neat	135, 355	Jan. 28, 1873	804	260	3	112
Sieve, Rotary	T. C. Strawn and W. C. Drum	138, 823	May 13, 1873	326	101	3	534
Sieve, Separator	B. & M. Miller	137, 145	Mar. 25, 1873	780	259	3	352
Sieves, Construction of metallic	R. J. Mann	135, 925	Feb. 18, 1873	503	164	3	193
Sieves, Construction of metallic	R. J. Mann	135, 926	Feb. 18, 1873	503	164	3	193
Sifter	A. Bardell	140, 869	July 15, 1873	467	158	4	65
Sifter	D. Pierce	143, 250	Sept. 30, 1873	815	280	4	357
Sifter, Ash	C. S. Collins	136, 902	Mar. 18, 1873	499	165	3	303
Sifter, Ash	L. Marsh	144, 466	Nov. 11, 1873	255	86	4	510
Sifter, Ash	S. Smith	137, 153	Mar. 25, 1873	726	241	3	333
Sifter, Coal	L. Tibbetts	141, 737	Aug. 12, 1873	297	97	4	167
Sifter, Flour	F. G. Ford	145, 410	Dec. 9, 1873	334	112	4	624
Sifter, Flour	G. Purple	144, 225	Nov. 4, 1873	48	14	4	482
Sifter, Sand	D. Brobston	142, 987	Sept. 23, 1873	594	202	4	323
Sifting shovel	C. Keatner	144, 850	Nov. 25, 1873	601	204	4	560
Sifting shovel, Ash	G. W. Dean	134, 647	Jan. 7, 1873	140	45	3	18
Sign	J. Harrison	141, 788	Aug. 12, 1873	349	115	4	171
Sign	W. Lambert	141, 281	July 29, 1873	882	289	4	116
Sign	E. M. May	136, 744	Mar. 11, 1873	356	117	3	283
Sign for moving vehicles	E. T. Clark and W. A. Lillendahl	138, 228	Apr. 29, 1873	894	282	3	472
Signs on cloth, Painting	A. Stempel	144, 574	Nov. 11, 1873	348	.....	4	518
Signal:							
<i>See</i> Flash-light signal.							
Fog-signal.							
Pneumatic-signal.							
Pyrotechnic-signal.							
Railway-signal.							
Railway-crossing signal.							
Railway-switch signal.							
Railway-time signal.							
Signal recorder, Flash-light	W. Gustin	138, 498	May 6, 1873	25	9	3	500
Silk, Machine for doubling and twisting	H. A. Chapin	135, 522	Feb. 4, 1873	115	36, 37	3	137
Silk, Machine for spreading	J. Sault	141, 017	July 22, 1873	626	211	4	87
Silk, Reel for skeining	R. Simon	142, 177	Aug. 26, 1873	717	237	4	220
Silk-winder, Guide for	J. H. Campbell	137, 417	Apr. 1, 1873	122	40	3	367
Silver from other metals, Process of separating	C. Wiegand	145, 265	Dec. 2, 1873	204	.....	4	601
Silver ores, Treating	J. H. Selwyn	136, 102	Feb. 18, 1873	654	.....	3	204
Single-trace	L. Williams and W. S. McKinnie	136, 888	Mar. 18, 1873	487	161	3	303
Single-trace, Horse-car	J. Willis	137, 990	Apr. 15, 1873	643	203	3	434
Sink	H. Miller	145, 069	Dec. 2, 1873	27	9	4	587
Sink-drain	G. R. Moore	137, 788	Apr. 15, 1873	473	148	3	420
Sink, kitchen	F. Wyttchenbach	136, 802	Mar. 11, 1873	403	{ 133 134 }	3	287
Sink-trap	N. Wright	136, 296	Feb. 25, 1873	838	271	3	231
Sinks and cesspools, Apparatus for emptying	F. J. Wildenthaler	141, 410	July 29, 1873	1, 008	327	4	125
Siphon	N. W. Paynter	135, 935	Feb. 18, 1873	511	166	3	193
Sizing compound	T. Gorrell	138, 147	Apr. 22, 1873	796	.....	3	453
Skate	E. H. Barney	137, 526	Apr. 8, 1873	332	71	3	387
Skate	C. W. Jenkins	145, 349	Dec. 9, 1873	282	94	4	620
Skate	J. T. Larkin	137, 760	Apr. 15, 1873	467	146	3	419
Skate	W. Strasser	139, 828	June 3, 1873	157	53	3	622
Skate	J. A. Whelpley	144, 718	Nov. 18, 1873	474	161	4	540
Skate, Fastening	G. W. Barlow	145, 551	Dec. 16, 1873	473	154	4	647
Skate-heel plate	G. Havell	137, 678	Apr. 8, 1873	365	113	3	398
Skate-roller	O. H. Dodge	136, 711	Mar. 11, 1873	327	108	3	280
Skate-roller	W. P. Gregg	138, 018	Apr. 22, 1873	685	216	3	446
Skins and leather, Machine for graining, pebbling, and softening	N. O. Lounsberry	135, 350	Jan. 28, 1873	800	258	3	112
Skins, Machine for pebbling and graining wet	N. O. Lounsberry	140, 633	July 8, 1873	264	89, 90	4	41
Skins, Machine for staking, glassing, and perching	W. A. Watson	139, 442	May 27, 1873	898	289	3	601
Skins, Machinery for removing dirt from	C. Turner	143, 733	Oct. 14, 1873	313	104	4	414
Skipping-rod	J. Murphy	140, 298	June 24, 1873	792	252	3	705
Skirt	W. S. Taylor	143, 198	Sept. 23, 1873	762	263	4	377
Skirt, Hoop and train	L. Guelle	136, 434	Mar. 4, 1873	69	24	3	251
Skirt, Printing and embossing machine	H. J. Davies	137, 184	Mar. 25, 1873	757	250	3	335
Skirt-protector	J. Jenkinson	144, 617	Nov. 18, 1873	392	131	4	533
Skirt-protector	G. E. King	145, 429	Dec. 9, 1873	350	117	4	626
Skirt-protector	J. C. Livermore	143, 361	Sept. 30, 1873	918	311	4	363
Skirt, Skeleton	P. Lippmann	144, 911	Nov. 25, 1873	646	220	4	565
Skylight	G. B. Clarke	135, 888	Feb. 18, 1873	475	153	3	190
Skylight	G. Hayes	143, 149	Sept. 23, 1873	723	249	4	333
Skylight	G. Hayes	143, 150	Sept. 23, 1873	724	249	4	333
Skylight	G. Hayes	143, 151	Sept. 23, 1873	724	249	4	334
Skylight-bar	C. Sellman	140, 650	July 8, 1873	278	94	4	42
Skylight-cover	G. Hayes	143, 152	Sept. 23, 1873	725	249	4	334
Skylight, Metallic	G. E. Dayton	137, 832	Apr. 15, 1873	511	160	3	423
Skylight-pane	O. F. Saunders	141, 820	Aug. 12, 1873	375	123	4	173
Skylight turret and conservatory	G. Hayes	143, 153	Sept. 23, 1873	725	250	4	334
Slag-iron, &c., Apparatus for granulating	C. Wood	143, 485	Oct. 7, 1873	74	25	4	386
Slate	C. Drasser	136, 591	Mar. 11, 1873	229	77	3	272
Slate	E. W. Roberts	135, 158	Jan. 21, 1873	605	197	3	84
Slate and blackboard rubber	H. W. Holly	144, 764	Nov. 18, 1873	514	174	4	543
Slate-cleaner	F. Hickman	136, 058	Feb. 18, 1873	615	202	3	202
Slate-dressing machine	F. Shenton	134, 773	Jan. 14, 1873	260	85	3	41
Slate-frame	A. H. Jocelyn	144, 104	Oct. 28, 1873	672	222	4	463
Slate-frame finishing machine	J. H. & G. S. Coffin	138, 005	Apr. 22, 1873	673	213	3	446
Slate-frame, Transparent	W. F. Boucher	135, 315	Jan. 28, 1873	765	247	3	109
Slate, Office	C. Boyle	143, 204	Oct. 21, 1873	396	131	4	430
Slate-washer	D. W. Leet and W. C. Shields	138, 662	May 6, 1873	173	55	3	511
Slate-washer	J. G. Murphy	144, 280	Nov. 4, 1873	92	30	4	485
Slate-washer	W. Westlake	138, 218	Apr. 22, 1873	863	273	3	461

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Slaughtering-apparatus.	M. Brenner	143,401	Oct. 7, 1873	3	1	4	381
Sled.	W. Nevers	136,750	Mar. 11, 1873	360	119	3	283
Sled, Bob.	J. W. Doty	142,902	Sept. 16, 1873	515	175	4	306
Sled, Boy's.	S. D. Mott	143,090	Sept. 23, 1873	679	234	4	330
Sled-brake.	P. Gable	142,623	Sept. 9, 1873	274	90	4	276
Sled-brake.	J. Slater	139,621	June 3, 1873	153	51	3	621
Sled, Reach for bob.	J. W. Smith	139,336	May 27, 1873	801	255	3	594
Sleigh.	A. A. Abbott	145,323	Dec. 9, 1873	263	88	4	619
Sleigh.	A. D. De Lano	144,746	Nov. 18, 1873	499	169	4	542
Sleigh.	S. Morrill	135,660	Feb. 11, 1873	257	81	3	160
Sleigh-brake.	T. H. Bromley	144,949	Nov. 25, 1873	672	230	4	567
Sleigh-brake.	F. A. Kirch	136,839	Mar. 18, 1873	447	148	3	300
Sleigh rave and fender, Combined.	S. M. Stewart	137,804	Apr. 15, 1873	488	152	3	421
Sleigh-runner.	C. Chenetto	134,977	Jan. 21, 1873	452	145	3	72
Sleigh-runner.	J. W. & E. W. Karn	139,396	May 27, 1873	858	274	3	598
Sleigh-shaft bell.	A. E. Taylor	141,674	Aug. 12, 1873	248	79	4	163
Slicer, Vegetable.	N. Botsford	144,596	Nov. 18, 1873	373	126	4	532
Slicing-machine for dried beef.	A. Iske	144,206	Nov. 4, 1873	33	10	4	421
Sliding-gauge.	J. Eaton	142,449	Sept. 2, 1873	114	36	4	251
Sling for raising animals.	F. Hohorst.	136,059	Feb. 18, 1873	616	202	3	202
Slop-jar.	W. S. Potwin	135,937	Feb. 18, 1873	512	167	3	193
Slatting and key-seat machine.	J. H. Cranston	134,857	Jan. 14, 1873	335	107	3	47
Smelting-furnace.	B. M. Smith	137,493	Apr. 1, 1873	197	60, 61	3	373
Smelting-furnace, Ore.	E. Balbach, jr.	141,912	Aug. 19, 1873	471	154	4	190
Smelting-furnace, Ore.	J. Neville	138,428	Apr. 29, 1873	1,077	340	3	486
Smoke-burning furnace.	S. A. Ford	135,420	Feb. 4, 1873	25	7	3	129
Smoke-burning furnace.	S. A. Ford	143,004	Sept. 23, 1873	609	{ 206 207 }	4	324
Smoke-burning furnace.	C. McGinness and W. Naylor.	141,574	Aug. 5, 1873	141	45	4	147
Smoke-consuming apparatus.	W. R. W. Smith	145,022	Nov. 25, 1873	741	250	4	573
Smoke-stack.	T. F. Conklin	145,279	Dec. 9, 1873	219	75	4	615
Smoking-pipe.	W. H. Morris	140,940	July 15, 1873	540	180	4	71
Smoking-pipes, Machine for molding clay.	H. E. Merrill	141,230	July 29, 1873	834	{ 272 273 }	4	112
Smoking-tube.	A. Brear	136,695	Mar. 11, 1873	313	104	3	279
Smoking-tube.	A. Gedies	140,360	July 1, 1873	22	7	4	10
Smoothing and fluting iron and holder.	J. Hewitt	135,335	Jan. 22, 1873	787	255	3	111
Smoothing-iron.	A. S. Mann	141,880	Aug. 19, 1873	445	145	4	188
Smoothing-iron.	L. L. Mivelar	136,170	Feb. 25, 1873	730	235	3	222
Smoothing-iron.	A. B. Wimpenny	136,401	Mar. 4, 1873	44	16	3	249
Smut-mill.	A. D. Ash	136,356	Mar. 4, 1873	3	1	3	245
Smut-mill.	H. A. Barnard	144,050	Oct. 28, 1873	627	207	4	460
Smut-mill.	J. Hinzey	142,465	Sept. 2, 1873	129	42	4	252
Smut-mill case, Metallic fabric for.	H. S. Jewell	140,199	June 24, 1873	711	224	3	697
Snap-hook.	J. C. Covert	143,332	Sept. 30, 1873	885	303	4	383
Snap-hook.	G. M. Hubbard	136,728	Mar. 11, 1873	342	113	3	282
Snap-hook.	W. W. Kitch	135,344	Jan. 28, 1873	795	257	3	111
Snap-hook.	O. B. North	140,531	July 1, 1873	161	55	4	21
Snap-hook.	S. Reynolds	138,935	May 13, 1873	421	132	3	549
Snow and ice from roadways, Machine for removing.	C. G. Waterbury	145,822	Dec. 23, 1873	709	233	4	679
Snow and ice from roadways of streets, Machine for removing.	C. G. Waterbury	144,488	Nov. 11, 1873	274	93	4	512
Snow from railways, Device for removing.	J. A. Bryant	145,623	Dec. 16, 1873	531	174	4	652
Snow from roadways, Machine for removing.	G. Hart	145,566	Dec. 16, 1873	483	158	4	648
Snow, Machine for clearing streets of.	W. E. Musgrove	143,176	Sept. 23, 1873	743	256	4	335
Snow, Machine for clearing streets of.	R. A. Shinn	143,470	Oct. 7, 1873	60	21	4	385
Snow-melting machine.	J. Mullaly	136,853	Mar. 18, 1873	458	152	3	301
Snow-melting machine.	J. Mullaly	136,854	Mar. 18, 1873	459	152	3	301
Snow-melting machine.	J. Mullaly	136,931	Mar. 18, 1873	523	172	3	305
Snow-melting machine.	J. Mullaly	136,932	Mar. 18, 1873	523	173	3	305
Snow-melting machine.	J. Mullaly	137,018	Mar. 18, 1873	599	198	3	312
Snow-melting machine.	J. Mullaly	137,019	Mar. 18, 1873	599	198	3	312
Snow-melting machine.	J. Mullaly	137,020	Mar. 18, 1873	600	199	3	312
Snow-melting machine.	J. Mullaly	143,834	Oct. 21, 1873	421	140	4	433
Snow-ram, Railway.	W. C. A. Frerichs	134,595	Jan. 7, 1873	90	28	3	14
Snow-shovel.	H. C. Cole	138,076	Apr. 22, 1873	741	235	3	451
Snow-shovel.	E. Hunter	137,001	Mar. 18, 1873	582	194	3	310
Snoof-packing apparatus.	A. H. Pflock	138,281	Apr. 29, 1873	946	299	3	476
Soup and other materials, Apparatus for mixing.	C. J. Schultze	134,706	Jan. 7, 1873	195	63	3	22
Soap-cutting machine.	S. Strunz	138,953	May 13, 1873	435	136	3	543
Soap-cutting machine.	J. Seibert	144,481	Nov. 11, 1873	269	91	4	512
Soap-cutting machine.	J. B. Ultsch	145,319	Dec. 9, 1873	259	86	4	618
Soap, Manufacture of.	F. M. Pleims	140,789	July 15, 1873	397	.....	4	60
Soap, Manufacture of.	R. P. Thomas	138,712	May 6, 1873	219	.....	3	515
Soap, Putting up alkalies for making.	J. H. Wylé	143,430	Oct. 7, 1873	31	.....	4	383
Soap, Surface-coating to hard.	W. V. Wallace	143,601	Oct. 14, 1873	187	.....	4	404
Sod-cutter and land-roller, Combined.	C. Leavitt	135,719	Feb. 11, 1873	311	99	3	164
Soda and mineral-water fountain.	W. Gee	144,086	Oct. 28, 1873	658	217	4	462
Soda-apparatus.	M. S. Andrews	135,617	Feb. 11, 1873	221	89	3	157
Soda, Apparatus for extracting nitrate of.	R. F. Fairlie	140,908	July 15, 1873	505	170	4	69
Soda-fountain.	W. H. Russel	135,940	Feb. 18, 1873	515	168	3	193
Soda-fountain draft-tube.	R. B. Robbins	135,010	Jan. 21, 1873	424	155	3	74
Soda-fountain draft-tube.	R. B. Robbins	142,513	Sept. 2, 1873	171	56	4	255
Soda-fountain sirup device.	W. Gee	134,890	Jan. 14, 1873	355	113	3	49
Soda-fountain, Apparatus for charging.	J. C. Kennedy	145,503	Dec. 16, 1873	420	138	4	643
Soda-fountain, Attachment for.	O. F. Stedman	144,234	Nov. 4, 1873	58	18	4	483
Soda or alkali, Package for caustic.	H. B. Hall	139,955	June 17, 1873	478	150	3	670
Soda, Process and apparatus for manufacture of carbonate of.	E. Solvay	136,463	Mar. 4, 1873	94	32, 33	3	253
Soda-water apparatus.	J. Matthews	137,702	Apr. 8, 1873	386	119	3	400
Soda-water apparatus.	J. W. Tufts	136,345	Feb. 25, 1873	881	283	3	234
Soda-water apparatus, Beer attachment for.	W. R. Cadly	138,002	Apr. 22, 1873	671	212	3	445
Soda-water apparatus, Device for dispensing sirup in.	J. Matthews	141,229	July 29, 1873	833	272	4	111

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Soda-water, &c., Apparatus for dispensing	J. Matthews	141, 154	July 22, 1873	747	246	4	97
Soda-water cooler	W. Gee	141, 133	July 22, 1873	727	241	4	96
Soda-water dispensing apparatus	W. Gee	137, 195	Mar. 25, 1873	770	254	3	336
Soda-water, &c., Draft-cock for	J. D. O'Donnell	143, 777	Oct. 21, 1873	370	122	4	498
Soda-water draft-tube	O. Zwietusch	144, 646	Nov. 18, 1873	490	141	4	535
Soda-water fountain	A. D. Puffer	139, 734	June 10, 1873	278	87	3	647
Soda-water fountain	F. W. Weissebrook	145, 139	Dec. 2, 1873	96	31	4	593
Soda-water tumbler-holder	J. Matthews	144, 913	Nov. 25, 1873	648	220	4	565
Sofa	W. R. Conger	136, 860	May 13, 1873	361	112	3	537
Sofa	J. I. Rand and J. F. McSherry	140, 306	June 24, 1873	799	254	3	705
Sofa-bottom, &c.	I. Mason	137, 784	Apr. 15, 1873	470	147	3	419
Sofa, chair, &c.	A. S. Newhouse	145, 811	Dec. 23, 1873	701	-930	4	678
Solder, Flux for	C. E. Yager	139, 490	June 3, 1873	43		3	612
Solder for sealing fruit and oyster cans, Preparation of	E. Morris	140, 840	July 15, 1873	443	151	4	64
Soldering apparatus	C. B. Koons	137, 917	Mar. 25, 1873	790	261	3	336
Soldering compound	C. Cox	139, 297	May 27, 1873	774		3	591
Soldering furnace	J. Day	143, 196	Sept. 23, 1873	707	242	4	332
Soldering furnace	J. A. Frey	136, 626	May 6, 1873	139	45	3	509
Soldering furnace	W. S. Potwin	141, 869	Aug. 19, 1873	451	147	4	189
Soldering-iron	G. F. Blaisse and J. Brannen	139, 537	June 3, 1873	78	37	3	615
Soldering-iron	A. E. Burnham	138, 732	May 13, 1873	249	77	3	597
Soldering-iron	J. D. Norton	134, 923	Jan. 14, 1873	394	125	3	52
Soldering-irons, Furnace for heating	J. Burgess	145, 784	Dec. 23, 1873	681	223	4	677
Soldering-irons, Tinner's stove for heating	C. A. Buttles	137, 890	Apr. 15, 1873	558	175	3	497
Soldering-irons, Vapor stove for heating	D. Berkey	134, 583	Jan. 7, 1873	79	25	3	13
Soldering-machine	W. D. Brooks	137, 888	Apr. 15, 1873	556	174	3	426
Soldering-machine	W. D. Brooks	139, 539	June 3, 1873	80	28	3	615
Soldering-machine	W. D. Brooks	139, 763	June 10, 1873	307	95	3	649
Soldering-machine	W. D. Brooks	140, 679	July 8, 1873	301	101	4	44
Soldering-machine	E. Morris and W. H. Kimball	136, 748	Mar. 11, 1873	359	118	3	283
Soldering-machine	J. F. Spence	142, 956	Sept. 16, 1873	563	191	4	310
Soldering-machine, Tin-can	J. Redheffer	135, 847	Feb. 11, 1873	425	138	3	172
Soldering-tool	L. Cutting	136, 367	Mar. 4, 1873	12	5	3	246
Soldering-tool	L. Cutting	145, 156	Dec. 2, 1873	108	36	4	594
Soldering-tool	R. J. Hollingsworth	140, 042	June 17, 1873	553	175	3	677
Soldering-tool	J. Sears	137, 244	Mar. 25, 1873	813	267	3	339
Soldering-tool	W. H. Wight	135, 025	Jan. 21, 1873	498	160	3	75
Sole-buffing machinery, Cylinder for	J. Howe	136, 727	Mar. 11, 1873	341	113	3	282
Sole-burnishing machine, Boot and shoe	G. C. Hawkins	136, 322	Feb. 25, 1873	856	276	3	232
Sole-channeling machine	C. C. Ballou	141, 025	July 22, 1873	631	213	4	88
Sole-channeling machine	H. S. Vrooman	139, 637	June 3, 1873	169	56	3	693
Sole-edge-bending machinery, Boot and shoe	B. H. Hadley	140, 035	June 17, 1873	547	173	3	676
Sole-edge-finishing machinery, Boot and shoe	H. P. Fairfield and W. W. Messer, jr.	143, 682	Oct. 14, 1873	263	87	4	410
Sole-edge-finishing machinery, Boot and shoe	H. F. Wheeler	141, 843	Aug. 12, 1873	395	129	4	175
Sole-edge of boot and shoe, Machinery for burnishing	J. and J. Beasley, jr.	141, 963	Aug. 19, 1873	524	173	4	185
Sole-edge of boot and shoe, Machinery for finishing	C. M. Chase	141, 997	Aug. 19, 1873	537	177	4	196
Sole-edge of boot and shoe, Machinery for trimming	R. C. Lambert	142, 029	Aug. 19, 1873	568	188	4	198
Sole-edge setting-tool	J. H. Morrison	136, 087	Feb. 18, 1873	640	209	3	203
Sole-edge trimming-tool	I. R. Rogers	136, 096	Feb. 18, 1873	648	212	3	204
Sole for boots and shoes, Inner	J. Gascoigne	142, 332	Sept. 2, 1873	10	4	4	243
Sole for boots and shoes, Rubber	D. E. Hayward	142, 161	Aug. 26, 1873	704	232	4	219
Sole-nailing machine	A. S. Libby	138, 668	May 6, 1873	177	56	3	512
Sole-nailing machine, Nail-carrier for	A. S. Libby	135, 924	Feb. 11, 1873	408	132	3	171
Sole-pressing machine	F. W. Coy	136, 706	Mar. 11, 1873	322	107	3	290
Sole-pressing machine	C. M. Hayden	139, 577	June 3, 1873	114	38	3	618
Sole pressing-machine, Boot and shoe	G. F. Seaver, E. W. Southworth, and J. M. Anthony	137, 245	Mar. 25, 1873	814	267	3	339
Sole trimming and burnishing machine, Shoe	B. J. Tayman	140, 601	July 8, 1873	237	80	4	39
Sole-trimming machine	B. Gallagher and J. Coyle	137, 066	Mar. 25, 1873	652	216	3	297
Sole-trimming-machine, Boot and shoe	B. J. Tayman	136, 790	Mar. 11, 1873	393	130	3	286
Soles, Die for molding shoe	S. B. Fuller	141, 216	July 29, 1873	823	269	4	111
Soles, Forming boot and shoe	C. H. Brigham	142, 893	Sept. 16, 1873	508	173	4	306
Soles, Machine for burnishing and trimming the edge of boot and shoe	J. W. Maloy	135, 229	Jan. 23, 1873	692	222	3	103
Soles, Machine for burnishing the edge of boot and shoe	J. and J. Beasley, jr.	141, 984	Aug. 19, 1873	525	174	4	195
Soles, Machine for skiving and feather-edging boot and shoe	E. P. Pieroe	142, 507	Sept. 2, 1873	167	54	4	255
Soles, Machine for trimming and burnishing boot and shoe	L. Coté	135, 694	Feb. 11, 1873	291	92	3	162
Soles, Machine for trimming the edge of boot and shoe	J. W. Maloy	136, 080	Feb. 18, 1873	634	208	3	203
Soles, Machine for shaping boot and shoe	J. B. Johnson	141, 058	July 22, 1873	655	221	4	90
Soles, Mode of finishing shoe	B. S. Bryant	140, 941	June 24, 1873	743	234	3	700
Soles of boots and shoes, Tool for marking edges of	J. W. Dodge	144, 515	Nov. 11, 1873	294	99	4	514
Soles to boots and shoes, Nail for attaching	W. Wickersham	136, 014	Feb. 18, 1873	578	190	3	199
Soles to uppers, Uniting boot and shoe	W. Strasser	140, 964	July 15, 1873	563	188	4	73
Soling-machine, Spool for boot and shoe	L. Goddu	143, 137	Sept. 23, 1873	714	245	4	333
Sower, Fertilizing attachment to seed	H. Springer	141, 606	Aug. 5, 1873	171	55	4	149
Sower, Hand seed	G. Hall	139, 785	June 10, 1873	326	101	3	651
Sower, planter, and cultivator	S. D. Hopkins	144, 099	Oct. 28, 1873	667	220	4	463
Sower, Plaster	G. Sweet	140, 317	June 24, 1873	811	256	3	706
Sower, Seed	B. Morse	145, 520	Dec. 16, 1873	444	145	4	645
Spade and fork combined	H. Stone	140, 855	July 15, 1873	456	155	4	65
Spading-machine	J. G. Jones	145, 737	Dec. 23, 1873	642	209	4	673
Spark-arrester	E. Ash	141, 195	July 29, 1873	799	261	4	109
Spark-arrester	J. Bardsley	144, 049	Oct. 28, 1873	626	207	4	459
Spark-arrester	A. W. Cram	139, 659	June 10, 1873	201	66	3	641
Spark-arrester	J. E. Dustin	142, 904	Sept. 16, 1873	517	176	4	306
Spark-arrester	W. D. Farrand	141, 869	Aug. 19, 1873	435	142	4	187
Spark-arrester	J. L. Ferris	144, 081	Oct. 28, 1873	653	215	4	462

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Spark-arrester.....	E. Fontaine.....	139,053	May 20, 1873	531	168	3	564
Spark-arrester.....	W. F. Grassler.....	137,438	Apr. 1, 1873	142	46	3	368
Spark-arrester.....	J. Hughes.....	144,275	Nov. 4, 1873	88	29	4	485
Spark-arrester.....	T. D. Kendrick.....	139,509	June 3, 1873	57	19	3	613
Spark-arrester.....	E. Launay.....	139,389	May 27, 1873	864	276	3	598
Spark-arrester.....	H. C. Parmalee and S. M. Jones.....	145,232	Dec. 2, 1873	175	60	4	599
Spark-arrester.....	J. Richards and J. Meehl.....	143,931	Oct. 21, 1873	498	168	4	439
Spark-arrester.....	J. W. Seigh.....	145,596	Dec. 16, 1873	507	167	4	650
Spark-arrester.....	G. Swenson.....	144,932	Nov. 25, 1873	663	225	4	566
Spark-arrester.....	J. White.....	142,308	Aug. 26, 1873	824	273	4	229
Spark-arrester.....	M. Zech.....	141,531	Aug. 5, 1873	104	32	4	143
Spark-arrester and conductor.....	E. Shoemaker.....	144,637	Nov. 18, 1873	408	137	4	534
Spark-arrester and extinguisher, Locomotive.....	J. W. Gray.....	139,002	May 20, 1873	490	155	3	561
Spark-arrester, Locomotive.....	M. Brassill.....	143,664	Oct. 14, 1873	243	82	4	409
Spark-arrester, Locomotive.....	J. Gibbs.....	137,134	Mar. 25, 1873	711	236	3	332
Spark-arrester, Locomotive.....	M. B. Mason.....	142,251	Aug. 28, 1873	779	257	4	225
Speaking-tube.....	C. A. Fredericks.....	135,421	Feb. 4, 1873	26	8	3	129
Speaking-tube.....	A. Rankin.....	140,539	July 1, 1873	168	57	4	22
Spectacles.....	J. King.....	134,897	Jan. 14, 1873	370	118	3	50
Spectacles, Temple for.....	G. W. Meigs.....	139,909	June 17, 1873	444	138	3	667
Speed-gage.....	J. W. Osborne.....	139,184	May 20, 1873	658	206 207	3	574
Speed in machinery, Mode of changing.....	W. H. Wilson.....	140,751	July 8, 1873	363	123	4	49
Speed in machinery, Regulating.....	L. H. Olmsted.....	142,504	Sept. 2, 1873	164	53	4	255
Speed of machinery, Changing.....	A. Betts.....	144,499	Nov. 11, 1873	283	96	4	513
Speed-regulator.....	G. W. Parker.....	138,522	May 6, 1873	50	17	3	501
Speeder.....	G. W. Olney.....	139,603	June 3, 1873	138	45	3	620
Spice-box.....	E. Norton.....	139,688	June 10, 1873	228	73	3	643
Spice-box.....	J. Sears.....	141,595	Aug. 5, 1873	158	51	4	148
Spiegelisen, Manufacture of.....	E. Baker.....	139,649	June 10, 1873	193	.....	3	641
Spike.....	S. Redfern.....	139,972	June 17, 1873	490	155	3	671
Spike.....	G. N. Sanders, jr.....	142,284	Aug. 26, 1873	805	266	4	227
Spike.....	G. N. and G. N. Sanders, jr.....	140,844	July 15, 1873	445	152	4	64
Spike.....	G. Douglass.....	144,074	Oct. 28, 1873	647	213	4	461
Spike-bar.....	J. Barsalouse and R. Graham.....	138,988	May 20, 1873	476	150	3	560
Spike-extracting machine.....	A. F. Jackson.....	140,371	July 1, 1873	31	10	4	10
Spike-extractor.....	G. A. Prescott and J. Barsaloux.....	136,093	Feb. 18, 1873	646	211	3	204
Spike-machine.....	W. A. D. Bowman.....	141,754	Aug. 12, 1873	313	102	3	169
Spike-machine.....	T. O'Connor.....	137,709	Apr. 8, 1873	392	122	3	400
Spike-making machine.....	D. Eynon.....	137,427	Apr. 1, 1873	131	43	3	367
Spike-pointing machine.....	J. Waldron and D. G. Moore.....	138,058	Apr. 22, 1873	727	230	3	450
Spindle.....	See Knob-spindle. Mill-spindle. Millstone-spindle. Spinning-frame spindle. Spinning-machine spindle.						
Spindle.....	L. C. Crocker.....	144,067	Oct. 28, 1873	642	211	4	461
Spindle-bearings.....	J. Taylor, jr., and J. Prest.....	135,295	Jan. 28, 1873	749	241	3	108
Spindle-bolster.....	J. Barnes.....	135,960	Feb. 18, 1873	530	175	3	195
Spindle-bolster.....	G. Richardson.....	137,239	Mar. 25, 1873	808	266	3	339
Spindle-bolster.....	G. Richardson.....	143,785	Oct. 21, 1873	378	125	4	429
Spindle, Lubricating.....	J. Goulding.....	136,504	Mar. 4, 1873	132	43	3	256
Spindle-step.....	J. J. Henry.....	137,443	Apr. 1, 1873	147	48	3	369
Spinning and twisting machine.....	H. A. Chapin.....	144,191	Nov. 4, 1873	18	5	4	480
Spinning-frame.....	G. Draper.....	134,864	Jan. 14, 1873	342	109	3	47
Spinning-frame, Device for stopping the spindle of.....	H. T. Potter.....	138,929	May 13, 1873	416	130	3	542
Spinning-frame, Drawing mechanism for.....	R. Ackroyd and W. Cockeroff.....	135,616	Feb. 11, 1873	221	69	3	157
Spinning-frame spindle and bobbin.....	R. Gursed.....	134,535	Jan. 7, 1873	30	10	3	9
Spinning-frame, spindle-bolster, and step.....	G. Draper.....	134,863	Jan. 14, 1873	340	109	3	47
Spinning-frame twist-regulating device.....	C. Martin.....	140,056	June 17, 1873	566	178 179	3	678
Spinning-jack, Self-acting.....	J. E. Knight.....	137,777	Apr. 15, 1873	465	145	3	419
Spinning-jack, Self-acting.....	A. Paul.....	137,386	Apr. 1, 1873	93	31	3	364
Spinning-jack, Self-acting.....	J. Shaw.....	134,567	Jan. 7, 1873	61	18, 19	3	12
Spinning-jack winding mechanism.....	J. Shaw.....	135,852	Feb. 11, 1873	428	139	3	173
Spinning-machine.....	H. Ashworth.....	139,755	June 10, 1873	299	92	3	648
Spinning-machine.....	C. S. M., and H. M. Williams.....	145,322	Dec. 9, 1873	261	87, 88	4	619
Spinning-machine bobbin.....	P. Laflin.....	142,245	Aug. 26, 1873	775	255	4	225
Spinning-machine condensing-tube.....	J. Good.....	143,508	Oct. 7, 1873	93	33	4	388
Spinning-machine quill-bobbin.....	D. Bass, jr.....	139,652	June 10, 1873	196	64	3	641
Spinning-machine spindle.....	W. T. Carroll.....	144,601	Nov. 18, 1873	377	127	4	532
Spinning-machine spindle.....	W. G. Perry.....	137,236	Mar. 25, 1873	805	265	3	339
Spinning-machine spindle.....	W. G. Perry.....	145,009	Nov. 25, 1873	729	246	4	572
Spinning-machine spindle.....	D. H. Rice.....	134,771	Jan. 14, 1873	259	85	3	41
Spinning-machine spindle.....	D. H. Rice.....	135,939	Feb. 18, 1873	513	167 168	3	193
Spinning-machine spindle-bolster.....	J. Birkenhead.....	141,751	Aug. 12, 1873	310	101	4	168
Spinning-machine spindle-bolster.....	B. H. Jenks.....	141,440	Aug. 5, 1873	26	9	4	137
Spinning-machine spindle-bolster.....	B. H. Jenks.....	141,141	Aug. 5, 1873	27	9	4	137
Spinning-machine spindle-bolster.....	C. F. Wilson.....	135,190	Jan. 21, 1873	630	206	3	86
Spinning-machine spindle-step.....	C. F. Wilson.....	135,189	Jan. 21, 1873	630	205	3	86
Spinning-machines, Roller-clearer for.....	C. B. Brown.....	141,031	July 22, 1873	636	214	4	88
Spinning-machines, Spindle-whirl for.....	M. A. Furbush.....	146,059	Dec. 30, 1873	943	304	4	708
Spinning machinery, Electrical stop for.....	H. A. Chapin.....	138,993	May 20, 1873	480	152	3	560
Spinning mule.....	J. J. Dewey.....	139,051	May 20, 1873	527	166	3	564
Spinning mule.....	T. Houlding.....	145,569	Dec. 16, 1873	485	159	4	648
Spinning mule.....	M. Moffatt.....	140,587	July 8, 1873	225	76	4	38
Spinning mule.....	T. H. Rushton and R. Touge.....	139,737	June 10, 1873	282	87, 88	3	647
Spinning mule brake.....	J. W. Whitehead.....	134,960	Jan. 14, 1873	424	135	3	54
Spinning mule, Self-acting.....	T. McGovern.....	138,511	May 6, 1873	38	13, 14	3	500
Spinning mule, Self-acting.....	A. Metcalf and W. Gibbons.....	134,915	Jan. 14, 1873	386	123	3	51
Spinning mule, Self-acting.....	A. Paul.....	135,008	Jan. 21, 1873	482	155	3	74
Spinning mule, Self-acting.....	A. Paul.....	137,334	Apr. 1, 1873	55	16	3	361
Spinning-ring.....	J. W. Wattles.....	144,004	Oct. 28, 1873	588	195	4	456

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Spinning-ring, Adjustable	J. B. Bancroft	140,757	July 15, 1873	372	127	4	58
Spinning-ring, Process of repairing	H. L. Peirce	144,630	Nov. 18, 1873	402	135	4	534
Spinning-ring rail and holder	G. W. Spaulding and W. T. Carroll	135,944	Feb. 18, 1873	518	169	3	194
Spinning-ring, Restoring ring-traveler	F. Tully	134,712	Jan. 7, 1873	199	64	3	22
Spinning-ring traveler	J. Goulding	136,719	Mar. 11, 1873	345	111	3	281
Spiral springs for furniture	H. Hard	136,507	Mar. 4, 1873	135	44	3	256
Spirits and prevention of fraud upon the revenue, Apparatus for the production of.	J. Dawson	134,524	Jan. 7, 1873	20	7	3	9
Spittoon	F. Galsberg	140,027	June 17, 1873	538	170	3	675
Spittoon	J. L. Howard	136,060	Feb. 18, 1873	616	202	3	202
Spittoon	E. Mather	135,234	Jan. 28, 1873	698	224	3	104
Spittoon	H. Tongue	139,213	May 20, 1873	684	215	3	576
Spittoon	W. H. Tyrrell	140,323	June 24, 1873	618	259	3	707
Spittoon, Railway-car	H. J. Zimmerman	138,464	Apr. 29, 1873	1,109	350	3	488
Splint	A. Wheat	140,662	July 8, 1873	287	97	4	43
Splint-cutting machine	C. P. and C. D. Clark	138,378	Apr. 29, 1873	1,030	325	3	482
Splitting-gauge	T. Rice	142,584	Sept. 9, 1873	242	79	4	273
Spoke-machine	R. W. Coffee	138,616	May 6, 1873	129	42	3	506
Spoke-machine	A. McNeilo	142,034	Aug. 19, 1873	574	189	4	199
Spoke-polishing machine	G. L. Rouse	140,732	July 8, 1873	344	116	4	48
Spoke-sawing machine	J. L. Thralls	142,749	Sept. 9, 1873	381	128	4	284
Spoke-setting machine	W. R. Greene	144,900	Nov. 25, 1873	637	217	4	564
Sponge-cup	W. McCConnell	141,573	Aug. 5, 1873	141	45	4	147
Spool	A. Carmichel	135,626	Feb. 11, 1873	230	72	3	158
Spool-blanks, machine for making	J. T. Hawkins	137,136	Mar. 25, 1873	712	236	3	332
Spool-box	J. C. Bohn	135,071	Jan. 21, 1873	536	174	3	78
Spool-case	A. W. Harper	144,762	Nov. 18, 1873	513	174	4	543
Spool-exhibiting case	J. D. Cutter	135,782	Feb. 11, 1873	362	117	3	168
Spool-heads, Machinery for embossing	L. H. Dwelley	137,601	Apr. 8, 1873	297	92	3	393
Spool-holder	L. F. Ward	134,952	Jan. 14, 1873	418	134	3	54
Spool-holder and thread-cutter	A. P. Ayers	137,282	Apr. 1, 1873	3	1	3	357
Spool-stand	W. Harris	145,297	Dec. 9, 1873	237	80	4	617
Spool-stand and thread-cutter	L. F. Ward	135,609	Feb. 4, 1873	206	64	3	143
Spool-turning machine	E. C. Walker and W. M. Gooding	139,935	June 17, 1873	463	145	3	669
Spools, Machine for making	J. F. C. Rider	135,443	Feb. 4, 1873	46	14, 15	3	131
Spools, Mandrel for making	J. W. Foster	134,534	Jan. 7, 1873	29	9	3	9
Spooling-machine	J. F. Stone	139,930	June 17, 1873	460	144	3	669
Spooling-machine, Bobbin-holder for	A. M. Wade	144,041	Oct. 28, 1873	618	204	4	459
Spooling-machine, Measuring device for	T. K. Keith	144,985	Nov. 25, 1873	707	239	4	570
Spoon	J. Hart	146,070	Dec. 30, 1873	951	307	4	709
Spoon, fork, &c.	G. C. Robinson	135,500	Feb. 4, 1873	188	58	3	142
Spoon, Medicine	J. L. Colby and L. B. Thompson	139,944	June 17, 1873	471	148	3	670
Spoon, Mustache	E. B. A. Mitcheson	135,141	Jan. 21, 1873	593	193	3	83
Spring:							
<i>See</i> Air-spring.							
Bed-spring.							
Bed-bottom spring.							
Car-spring.							
Carriage-spring.							
Chair-spring.							
Coil-spring.							
Corset-spring.							
Door-spring.							
Door and gate spring.							
Furniture-spring.							
India-rubber spring.							
Rocking-chair spring.							
Spiral spring.							
Torsion-spring.							
Truss-spring.							
Vehicle-spring.							
Volute-spring.							
Wagon-spring.							
Watch-case spring.							
Spring coupling and brake, Internal	L. Mégy, J. DeEcheverria and F. Bazan	143,293	Sept. 30, 1873	850	292	4	360
Spring cushion, mattress, &c.	D. N. Selleg	144,362	Nov. 4, 1873	159	52	4	491
Spring-plate washer	F. R. Gridley	138,149	Apr. 22, 1873	797	254	3	456
Spring-power	T. Ebeling	144,894	Nov. 25, 1873	633	215	4	563
Spring-seat for wagons and carts	P. Weyand and P. Hill	144,426	Nov. 11, 1873	226	75	4	508
Square, Adjustable try	C. H. Schaeffer	139,821	June 10, 1873	358	111	3	653
Square, Attachment to carpenter's	J. Hyman	136,653	Mar. 11, 1873	280	94	3	277
Square, protractor, rule, bevel, plumb, and level, Combined.	C. J. Shoff	143,395	Oct. 14, 1873	182	62	4	404
Square, Try	W. F. Arnold	138,113	Apr. 22, 1873	770	245	3	453
Square, Try	L. Bailey	145,715	Dec. 23, 1873	620	203	4	672
Square, Try	W. H. Cooper	142,557	Sept. 9, 1873	219	71	4	271
Stage-machinery	J. Schönberg	137,725	Apr. 8, 1873	409	126	3	402
Stair-rail molding-machine	J. B. Margeson	144,402	Nov. 11, 1873	202	68	4	506
Stair-rod	E. J. Smith	138,704	May 6, 1873	210	66	3	514
Stair-rod fastener	W. B. Gould	144,758	Nov. 18, 1873	510	173	4	543
Stair-rod fastener	W. B. Gould	144,759	Nov. 18, 1873	511	173	4	543
Stalk-binding apparatus	S. Kuh	145,739	Dec. 23, 1873	643	210	4	673
Stalk-chopper	C. L. Spielman	136,106	Feb. 18, 1873	658	215	3	204
Stalk-cutter	V. Ansley and J. W. Weaver	142,187	Aug. 26, 1873	724	229	4	220
Stalk-cutter	J. and G. Armstrong	137,281	Apr. 1, 1873	2	1	3	357
Stalk-cutter	B. R. Harness	140,413	July 1, 1873	61	22	4	13
Stalk-cutter	S. B. Miller	137,707	Apr. 8, 1873	390	121	3	400
Stalk-cutter and land-roller, Combined.	J. Price	136,866	Mar. 18, 1873	467	155	3	301
Stall for horses, Portable	J. W. Adams	144,304	Nov. 4, 1873	108	37	4	427
Stamp-affixer	R. P. Thian	142,822	Sept. 16, 1873	450	152	4	301
Stamp, Boot and shoe sole	A. M. Burnham	136,901	Mar. 18, 1873	498	165	3	303
Stamp, Branding	J. W. Dodge	136,710	Mar. 11, 1873	326	108	3	280

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Stamp-canceler, Rotary	W. Schacht	140, 219	June 24, 1873	736	228	3	699
Stamp for cutting out figures	E. J. Fischer	132, 559	May 6, 1873	3	27	3	504
Stamp, Fountain hand	F. J. Coutant	142, 617	Sept. 9, 1873	269	22	4	275
Stamp, Hand	W. B. Gorham	142, 099	Aug. 26, 1873	653	215	4	215
Stamp, Hand	G. H. Hountree	136, 458	Mar. 4, 1873	28	30	3	253
Stamp, Hand-canceling	E. H. Thomas	139, 486	June 3, 1873	39	13	3	612
Stamp, Revenue	R. F. Hunter	138, 891	May 13, 1873	386	121	3	539
Stamp to letter, Machine for affixing	W. Benseman and E. Slocum	138, 120	Apr. 22, 1873	775	247	3	454
Stamping sheet-metal ware, Machine for	T. P. Austin	135, 750	Feb. 11, 1873	335	107	3	166
Stand:							
<i>See</i> Barrel-stand.							
Boiler-stand.							
Book-stand.							
Bottle-stand.							
Camera-stand.							
Caster-stand.							
Compositor's stand.							
Dish-stand.							
Dry-goods stand.							
Flower-stand.							
Lady's work stand.							
Muff-stand.							
Music-stand.							
Painter's stand.							
Sewing-stand.							
Sewing-machine stand.							
Spool-stand.							
Toilet-stand.							
Wash-stand.							
Wire-stand.							
Work-stand.							
Staple-making machine	W. Malick	142, 574	Sept. 9, 1873	234	76	4	273
Staple-pointing machine	W. Malick	144, 401	Nov. 11, 1873	201	68	4	506
Starch, Apparatus for manufacture of	C. Gilbert	137, 911	Apr. 15, 1873	578	182	3	428
Starch, Apparatus for manufacture of	T. Kingsford	140, 141	June 24, 1873	660	208	3	693
Starch, Apparatus for manufacture of	T. Kingsford	141, 442	Aug. 5, 1873	28	9	4	137
Starch, Apparatus for manufacture of	T. Kingsford	145, 213	Dec. 2, 1873	157	54	4	598
Starch, Manufacture of	C. Gilbert	135, 904	Feb. 18, 1873	486	157	3	191
Starch-mill	C. Gilbert	137, 912	Apr. 15, 1873	579	182	3	428
Starching-machine	A. M. Dolph	144, 071	Oct. 28, 1873	645	212	4	461
Starching-machine	L. Sternberger	135, 171	Jan. 21, 1873	614	200	3	85
Station-indicator	C. Barton	138, 989	May 20, 1873	477	150	3	560
Station-indicator	O. B. Griggs	138, 496	May 6, 1873	23	8	3	499
Station-indicator	J. K. Magie	137, 853	Apr. 15, 1873	530	163	3	424
Station-indicator	J. W. Newlin and J. S. Simmerman	145, 583	Dec. 16, 1873	497	163	4	650
Station-indicator, Pneumatic	J. P. Kealy and J. Rigney	144, 909	Nov. 25, 1873	643	219	4	564
Stave crozing and chamfering machine	S. S. Gray	134, 597	Jan. 7, 1873	93	30	3	14
Stave-dressing machine	J. J. Ralya	144, 138	Oct. 28, 1873	698	232	4	465
Stave-jointer	J. E. Green	140, 699	July 8, 1873	318	108	4	45
Stave-jointer	J. J. Ralya	138, 762	May 13, 1873	273	85	3	530
Stave-jointing and planing machine	R. W. George	139, 242	May 27, 1873	723	228	3	587
Stave-jointing machine	R. W. George	135, 903	Feb. 18, 1873	486	157	3	191
Stave-jointing machine	S. S. Gray	134, 596	Jan. 7, 1873	91	29	3	14
Stave-jointing machine	E. and B. Holmes	141, 003	July 22, 1873	612	207	4	86
Stave-jointing machine	C. Murdock	143, 991	Oct. 28, 1873	573	191	4	455
Stave-machine	B. W. Warner	140, 101	June 17, 1873	606	191	3	681
Stave-sawing machine	C. Murdock	143, 992	Oct. 28, 1873	575	191	4	455
Stave-sawing machine	N. J. Templeton	136, 559	Mar. 4, 1873	187	60	3	260
Staves, Machine for chamfering and crozing barrel	J. W. Jones	134, 892	Jan. 14, 1873	367	116	3	49
Staves, Machine for cutting gores in	C. Ruggles	143, 466	Oct. 7, 1873	58	29	4	385
Stay-ends, Die for forging	P. N. Lowe	138, 668	May 6, 1873	179	57	3	512
Stay-log	J. A. Squires	135, 945	Feb. 18, 1873	518	169	3	194
Steam and air brake	W. Lougbridge	135, 828	Feb. 11, 1873	410	133	3	171
Steam and air brake	A. Q. Smith and H. M. Ogden	134, 774	Jan. 14, 1873	261	85	3	41
Steam and air brake	B. W. Smith and E. O. Frink	136, 462	Mar. 4, 1873	91	32	3	253
Steam and air brake	J. Y. Smith	136, 781	Mar. 11, 1873	386	127	3	285
Steam and air brake	G. Westinghouse, jr.	144, 006	Oct. 28, 1873	590	196	4	457
Steam and air brake for railway-cars	C. E. Moore and M. L. Wyman	141, 805	Aug. 12, 1873	363	119	4	172
Steam and air brakes, Slack taking-up apparatus for	G. Westinghouse, jr.	144, 582	Nov. 11, 1873	354	120	4	518
Steam and air engine	F. J. Crouch	145, 281	Dec. 9, 1873	222	75	4	616
Steam and vapor generator	R. Breerton	145, 086	Dec. 2, 1873	45	14	4	589
Steam and water piping for buildings, System of	J. H. Mills	145, 962	Dec. 30, 1873	858	279	4	701
Steam bathing-apparatus	W. Wolf	142, 185	Aug. 26, 1873	723	239	4	920
Steam-boiler	O. W. Allison	146, 039	Dec. 30, 1873	921	298	4	706
Steam-boiler	H. Camp	134, 784	Jan. 14, 1873	272	89	3	42
Steam-boiler	E. R. Cole	136, 214	Feb. 25, 1873	764	247	3	225
Steam-boiler	W. H. Davis and R. V. De Guinon	136, 041	Feb. 18, 1873	599	197	3	200
Steam-boiler	W. Douglass and J. H. Brown	142, 330	Sept. 2, 1873	7	3	4	242
Steam-boiler	G. G. Lohdell	144, 778	Nov. 18, 1873	525	179	4	544
Steam-boiler	T. W. Pratt	142, 273	Aug. 26, 1873	796	263	4	326
Steam-boiler	S. Ritty	141, 172	July 22, 1873	766	252	4	99
Steam-boiler	C. Stewart	142, 180	Aug. 26, 1873	719	238	4	220
Steam-boiler	F. A. Woodson	134, 720	Jan. 7, 1873	295	66	3	23
Steam-boiler	J. R. Worswick and E. Lewis	144, 378	Nov. 4, 1873	171	57, 58	4	492
Steam-boiler, Apparatus for feeding and returning water of condensation to	T. E. McNeil	138, 673	May 6, 1873	184	59	3	512
Steam-boiler connection, Sectional	J. B. Root	146, 097	Dec. 30, 1873	976	315	4	711
Steam-boiler, Dead-light for	J. C. Hoadley	143, 574	Oct. 14, 1873	166	56	4	402
Steam-boiler feed and blow-off	R. P. Garsed and I. D. Buck	143, 006	Sept. 23, 1873	610	207	4	324
Steam-boiler fire-plate	E. Boileau	135, 759	Feb. 11, 1873	343	110	3	167
Steam-boiler for warming buildings	G. W. Blake	142, 196	Aug. 26, 1873	733	242	4	221

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Steam-boiler heater	D. Coughlin	145,095	Dec. 2, 1873	52	16	4	589
Steam-boiler heater and feeder	J. Pilkington	140,301	June 24, 1873	794	252	3	705
Steam boiler, Sectional	J. K. Abbott	142,976	Sept. 23, 1873	585	109	4	322
Steam-boiler, Sectional	G. H. Babcock and S. Wilcox	134,505	Jan. 7, 1873	1	1	3	7
Steam-boiler, Sectional	G. H. Babcock and S. Wilcox	135,877	Feb. 18, 1873	466	150	3	190
Steam-boiler, Sectional	J. Harris	135,910	Feb. 18, 1873	491	159	3	192
Steam-boiler, Sectional	T. E. McNeill	139,724	June 10, 1873	267	84	3	646
Steam-boiler, Sectional	H. B. Pancost and F. I. Maulo	136,453	Mar. 4, 1873	85	29	3	252
Steam-boiler, Upright	G. W. Rawson	140,729	July 8, 1873	342	116	4	47
Steam-boiler, Vertical	C. M. Miller	141,656	Aug. 12, 1873	232	73	4	162
Steam-boilers, Composition for covering	J. M. Allison	138,358	Apr. 29, 1873	1,015		3	4-1
Steam-boilers, Composition for preventing incrustation in	R. Hatfull	143,240	Sept. 30, 1873	807		4	356
Steam-boilers, Composition for removing and preventing incrustations in	C. Burfitt	144,254	Nov. 4, 1873	73		4	484
Steam-boilers, Compound for preventing incrustation of	J. J. Lavo	137,935	Apr. 15, 1873	596		3	430
Steam-boilers, Compound for preventing incrustation in	T. E. Petersen	140,589	July 8, 1873	227		4	38
Steam-boilers, Means for preventing incrustation in	R. A. Fisher	140,963	June 24, 1873	761		3	702
Steam-boilers, Plug or ferrule for stopping leaks in the tubes of	R. A. Copeland	145,631	Dec. 16, 1873	537	176	4	653
Steam-boilers, Preventing corrosion of stay-bolts in	J. Cochrane	136,213	Feb. 25, 1873	763		3	925
Steam-boilers, Sediment-collector and blow-off for	J. P. Leonard and G. Hancock	134,811	Jan. 14, 1873	296	95	3	44
Steam-boilers, Straw-burning attachment for	D. W. Kellogg and B. C. Coffin	141,359	July 29, 1873	960	313	4	122
Steam-boiling apparatus	E. Monouse	135,142	Jan. 21, 1873	594	193	3	83
Steam-brake for railway car	N. Nilson	144,410	Nov. 11, 1873	208	70	4	507
Steam-condensing and water-heating tank	C. N. Tyler	139,634	June 3, 1873	162	54	3	622
Steam-cylinder and piston-valve	G. G. Pickling	144,788	Nov. 18, 1873	522	181	4	545
Steam-elevator	T. W. Eaton	143,971	Oct. 28, 1873	555	184	4	454
Steam-engine	R. T. P. Allen	142,660	Sept. 9, 1873	205	101	4	278
Steam-engine	G. H. Babcock and S. Wilcox	139,448	June 3, 1873	1	1	3	609
Steam-engine	A. Beekman	144,883	Nov. 25, 1873	627	213	4	563
Steam-engine	A. Fraser	141,343	July 29, 1873	915	307	4	121
Steam-engine	J. H. Strehli	142,295	Aug. 26, 1873	815	269	4	228
Steam-engine, Compound	J. H. Cooper and A. D. Emery	140,892	July 15, 1873	4-7	164	4	67
Steam-engine crank attachment	J. H. McGowan and D. B. Caldwell	143,292	Sept. 30, 1873	848	292	4	360
Steam-engine cylinder	H. Gerner	143,008	Sept. 23, 1873	612	208	4	324
Steam-engine, Hydro	J. Widmer	135,024	Jan. 21, 1873	497	160	3	75
Steam-engine, Hydrodynamic	W. Burnett	137,759	Apr. 15, 1873	449	140	3	418
Steam-engine lubricator	W. R. Patterson	138,343	Apr. 29, 1873	1,062	315	3	4-0
Steam-engine, Portable	R. Scheidler and J. H. McNamar	141,955	Aug. 19, 1873	503	166	4	193
Steam-gage, Recording	J. B. Edson	145,495	Dec. 16, 1873	414	136	4	643
Steam-gage, Registering	E. H. Ashcroft	141,307	July 29, 1873	904	296	4	118
Steam-gage, Registering	G. H. Crosby	140,018	June 17, 1873	529	168	3	675
Steam-gage, Registering	P. Maltby	143,630	Oct. 14, 1873	214	72	4	406
Steam-generator	G. H. Babcock and S. Wilcox	136,691	Mar. 11, 1873	310	105	3	279
Steam-generator	W. C. Baker	144,047	Oct. 22, 1873	624	206	4	459
Steam-generator	J. S. Baldwin	135,062	Jan. 21, 1873	530	172	3	78
Steam-generator	I. Barton	140,872	July 15, 1873	469	159	4	66
Steam-generator	J. W. Bookwalter	134,635	Jan. 7, 1873	127	41	3	17
Steam-generator	N. P. Brightman	138,607	May 6, 1873	120	40	3	507
Steam-generator	R. Gerner	143,007	Sept. 23, 1873	611	208	4	324
Steam-generator	E. Goddard	144,024	Oct. 28, 1873	605	200	4	458
Steam-generator	E. Goddard	145,293	Dec. 9, 1873	234	79	4	616
Steam-generator	W. Golding	144,088	Oct. 28, 1873	659	217	4	462
Steam-generator	T. Harang	135,219	Jan. 28, 1873	681	220	3	102
Steam-generator	R. Hooper	138,025	Apr. 22, 1873	691	218	3	447
Steam-generator	W. E. Kelly	141,798	Aug. 12, 1873	358	118	4	172
Steam-generator	A. R. McDonald	135,236	Jan. 28, 1873	700	224	3	104
Steam-generator	P. J. McMahon	135,996	Feb. 18, 1873	561	185	3	197
Steam-generator	T. E. McNeill and R. N. Pratt	141,578	Aug. 5, 1873	144	46	4	147
Steam-generator	J. H. Mills	138,269	Apr. 29, 1873	935	295	3	475
Steam-generator	D. Parsell	137,953	Apr. 15, 1873	610	192	3	431
Steam-generator	H. Pease	140,070	June 17, 1873	579	183	3	679
Steam-generator	H. M. Quackenbush	145,682	Dec. 16, 1873	581	191	4	656
Steam-generator	J. Ryan	141,239	July 29, 1873	843	275	4	112
Steam-generator	J. Ryan	145,530	Dec. 16, 1873	455	149	4	646
Steam-generator	W. P. Trowbridge	142,534	Sept. 2, 1873	190	62	4	257
Steam-generator	H. P. Wright	141,974	Aug. 19, 1873	517	171	4	194
Steam-generator	D. L. Latourette	145,577	Dec. 16, 1873	491	162	4	649
Steam-generator, Device for cleaning	O. W. Ketchum	136,524	Mar. 4, 1873	154	50	3	258
Steam-generator, Oil-burning	W. W. Craue	138,791	May 13, 1873	300	92	3	532
Steam-generator, Sectional	W. W. Crane	138,792	May 13, 1873	301	92, 93	3	532
Steam-generator, Sectional	M. T. Davidson	138,866	May 13, 1873	365	113	3	537
Steam-generator, Sectional	W. E. Kelly	141,799	Aug. 12, 1873	359	118	4	172
Steam-generator, Sectional	J. D. Lynde	145,743	Dec. 23, 1873	645	211	4	674
Steam-generator, Sectional	D. Renshaw	143,842	Oct. 21, 1873	426	142	4	433
Steam-generator, Sectional	D. Renshaw	143,843	Oct. 21, 1873	427	143	4	433
Steam-generator, Sectional	D. Renshaw	143,844	Oct. 21, 1873	428	143	4	433
Steam-generator, Sectional	D. Renshaw	143,845	Oct. 21, 1873	429	143	4	433
Steam-generator, Sectional	J. B. Sweetland	135,862	Feb. 11, 1873	435	142	3	173
Steam-generator, Tubular	J. M. Hicks	134,803	Jan. 14, 1873	286	93	3	43
Steam-heater	W. M. Fuller	144,527	Nov. 11, 1873	307	103	4	515
Steam-heater	W. M. Fuller	145,167	Dec. 2, 1873	118	39	4	585
Steam-heater	P. H. Merrill	143,525	Oct. 7, 1873	108	37	4	389
Steam-heater	G. B. Riggins	138,936	May 13, 1873	421	132	3	542
Steam-heater	E. Russell	138,200	Apr. 22, 1873	848	268	3	459
Steam-heater coupling for railway-cars	W. N. McDuffy and B. F. Jaques	135,137	Jan. 21, 1873	529	191	3	82
Steam-jet apparatus for forcing and exhausting air and condensing steam	E. Korting	142,856	Sept. 16, 1873	477	163	4	303

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Steam-lubricator	R. A. Filkins	142,385	Sept. 2, 1873	50	20	4	247
Steam-lubricator	W. Gowenlock	137,070	Mar. 25, 1873	657	218	3	328
Steam-lubricator	W. Hamilton	137,073	Mar. 25, 1873	660	219	3	328
Steam-lubricator	W. Hamilton	140,270	June 24, 1873	768	243	3	702
Steam or air brake, Operating	S. F. Clouser	138,859	May 13, 1873	361	112	3	537
Steam-pipe covering	C. M. O'Hara	139,968	June 17, 1873	488	154	3	671
Steam-pipe trap	M. T. Davidson	145,157	Dec. 2, 1873	109	36	4	594
Steam-pressure regulator	A. J. Ballard	136,202	Feb. 25, 1873	755	244	3	224
Steam-trap	R. J. Barr	145,460	Dec. 16, 1873	401	132	4	642
Steam-trap	J. Bishop	145,387	Dec. 9, 1873	313	109	4	623
Steam-trap	J. H. Blessing	137,985	Apr. 1, 1873	5	2	3	357
Steam-trap	J. H. Blessing	142,323	Sept. 2, 1873	1	1	4	242
Steam-trap	J. W. Hodges	143,761	Oct. 21, 1873	356	118	4	427
Steam-trap	H. S. Maxim and L. P. Hawes	141,063	July 22, 1873	663	223	4	91
Steam-trap	E. L. Perkins, J. H. Moulton, and C. E. Sawyer	141,946	Aug. 19, 1873	496	164	4	192
Steam-washer	C. A. Bradley	137,591	Apr. 8, 1873	289	89	3	392
Steam-washer	J. Davis	137,286	Apr. 1, 1873	15	5	3	358
Steamer, Culinary	H. and J. Wooten	138,550	May 6, 1873	75	24	3	504
Steaming apparatus, Grain	J. C. Hunt	142,237	Aug. 26, 1873	768	253	4	224
Steel, Apparatus for converting iron into	J. Webster	137,742	Apr. 8, 1873	426	131	3	403
Steel for boiler-plates, &c., Manufacture of	O. Bolton, jr., and J. Pedder	140,673	July 8, 1873	296	96	4	43
Steel, Manufacture of	J. Absterdam	139,751	June 10, 1873	295	95	3	648
Steel, Manufacture of	J. G. Blunt	137,885	Apr. 15, 1873	553	173	3	426
Steel, Manufacture of	T. Brooks	135,768	Feb. 11, 1873	352	112	3	167
Steel, Manufacture of	C. Bnrgess	141,320	July 29, 1873	918	298	4	119
Steel, Manufacture of	W. Dougherty	139,778	June 10, 1873	320	99	3	650
Steel, Manufacture of	H. A. Levallois	134,685	Jan. 7, 1873	176	57	3	20
Steel, Manufacture of	C. M. Nes	145,005	Nov. 25, 1873	725	235	4	572
Steel plates, Manufacture of	O. Bolton, jr.	140,762	July 15, 1873	376	128	4	58
Steel, Process of hardening	S. W. Etchell	134,872	Jan. 14, 1873	349	112	3	48
Steel wire and sheets of steel, Hardening	A. Benjamin	141,105	July 22, 1873	703	223	4	94
Steering-apparatus	D. N. B. Coffin, jr.	134,516	Jan. 7, 1873	13	5	3	8
Steering-apparatus	H. Keen	143,017	Sept. 23, 1873	620	211	4	325
Steering-apparatus	J. Myers	141,660	Aug. 12, 1873	235	74	4	162
Steering-apparatus	M. R. Perkins	144,220	Nov. 4, 1873	45	13	4	482
Steering-apparatus	C. A. Seavey	141,958	Aug. 19, 1873	505	167	4	193
Steering-apparatus	H. F. Shaw	142,047	Aug. 19, 1873	591	194	4	200
Steering-apparatus	J. F. Sparr	136,464	Mar. 4, 1873	97	33	3	253
Steering-apparatus	W. E. Thomas	143,200	Sept. 23, 1873	764	264	4	357
Steering apparatus, Vessel	C. W. Buffington	145,394	Dec. 9, 1873	318	108	4	623
Steering apparatus, Vessel	S. Hunt	138,652	May 6, 1873	162	52	3	511
Steering apparatus, Vessel	A. Siebenthal	141,598	Aug. 5, 1873	163	52	4	148
Steering apparatus, Vessel	H. J. Smith	137,574	Apr. 8, 1873	276	85	3	391
Steering vessel by steam, Apparatus for	W. W. Dungan	136,493	Mar. 4, 1873	122	39	3	255
Stench-trap	P. W. Doherty	134,652	Jan. 7, 1873	144	46	3	18
Stench-trap	J. P. Hyde	143,907	Oct. 21, 1873	420	161	4	437
Stench-trap	T. Ledbetter	140,145	June 24, 1873	664	209	3	694
Stench-trap	J. Semple	142,739	Sept. 9, 1873	372	125	4	284
Stench-trap, Core for casting	M. Gafney	137,133	Mar. 25, 1873	711	236	3	332
Stench-trap, Mold for casting	A. H. Hook	141,353	July 29, 1873	955	311	4	121
Stencil-plate	F. L. Morrison	137,317	Apr. 1, 1873	35	11	3	360
Stereoscope	P. Murphy	136,333	Feb. 25, 1873	868	279	3	233
Stereoscope	A. Quirolo	138,930	May 13, 1873	416	130	3	542
Stereoscope	L. D. Sibley	141,822	Aug. 12, 1873	376	123	4	173
Stereoscope, Folding	J. A. Bazin	139,534	June 3, 1873	76	26	3	615
Stereoscopic camera	W. Harris	145,296	Dec. 9, 1873	226	79	4	617
Stereoscopic picture-holder	S. D. Samson and G. H. Smith	143,467	Oct. 7, 1873	58	20	4	385
Stereotype-block holder	M. J. Hughes	136,244	Feb. 25, 1873	787	255	3	227
Stereotype, Making rubber	G. K. Cooke	138,006	Apr. 22, 1873	674	213	3	446
Stereotype-molds, Machine for making	R. A. Hill	140,921	July 15, 1873	518	174	4	69
Stereotype-plate holder	C. Hurst	139,393	May 27, 1873	854	273	3	598
Stereotype-plate holder	W. Schnauffer	136,769	Mar. 11, 1873	375	124	3	284
Stereotype-plate holder	F. Scholefield	138,290	Apr. 29, 1873	956	301	3	476
Stereotype-plate holder	M. J. Hughes	145,179	Dec. 2, 1873	132	43	4	596
Stereotype-plates in casting, Blocking	J. A. Marquez	136,442	Mar. 4, 1873	76	26	3	251
Stereotype-plates, Machine for making matrices for	H. Barth	136,204	Feb. 25, 1873	756	244	3	224
Stereotype-plates, Machine for planing	J. Watson	140,977	July 15, 1873	575	193	4	74
Step and step-box	F. H. Niemann	139,602	June 3, 1873	137	45	3	620
Step-cover and wheel-fender combined	T. Hyatt	145,209	Dec. 2, 1873	152	52	4	597
Step, Illuminating ventilating	G. W. Griswold	136,596	Mar. 11, 1873	232	78	3	273
Stew-pan	C. E. Werner	145,704	Dec. 16, 1873	602	197	4	658
Still for alcoholic spirits	A. H. Tait and J. W. Avis	135,673	Feb. 11, 1873	271	85	3	161
Still for petroleum and other liquids	E. Schalk	136,008	Feb. 18, 1873	571	189	3	198
Still, Oil	W. B. Snow	137,496	Apr. 1, 1873	201	61	3	373
Still, Oil	J. L. Stewart and J. B. Dubler	136,557	Mar. 4, 1873	185	59, 60	3	260
Still, Turpentine	A. K. Lee	138,508	May 6, 1873	32	11, 12	3	500
Stilts	N. W. Ainee	144,491	Nov. 11, 1873	277	93	4	512
Stilts	T. J. Sheears	144,799	Nov. 18, 1873	544	185	4	545
Stilts	G. J. Stevens	137,869	Apr. 15, 1873	541	169	3	435
Stirrup	J. S. Fee	137,668	Apr. 8, 1873	356	110	3	397
Stirrup	A. J. Herring	145,869	Dec. 23, 1873	753	245	4	682
Stirrup	N. C. Thompson	143,732	Oct. 14, 1873	313	103	4	414
Stirrup, Riding	A. J. Herring	135,547	Feb. 4, 1873	143	46	3	139
Stirrup, Safety	L. R. Jones	139,160	May 20, 1873	639	199	3	572
Stock and die	J. W. Hardie	145,500	Dec. 16, 1873	418	137	4	643
Stocking-darning machine	B. Arnold	138,981	May 20, 1873	469	147	3	559
Stocking-darning machine	B. Arnold	138,982	May 20, 1873	470	148	3	559
Stocking-supporter	A. C. Adams	144,302	Nov. 4, 1873	107	36	4	487
Stocking-supporter	A. C. Adams	144,303	Nov. 4, 1873	108	36	4	487
Stocking-supporter	E. K. Rand	142,118	Aug. 26, 1873	669	220	4	216

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Stockings, &c., Clasp for supporting.....	J. E. Treat.....	145, 074	Dec. 2, 1873	30	10	4	588
Stone and glass polishing machine.....	J. Meisse.....	140, 937	July 15, 1873	538	179	4	71
Stone and range broiler-attachment.....	J. S. York.....	137, 278	Mar. 25, 1873	842	277	3	342
Stone, Artificial.....	J. J. Bartlett.....	140, 239	June 24, 1873	741	.....	3	700
Stone, Artificial.....	T. Chrimas.....	145, 277	Dec. 9, 1873	218	.....	4	615
Stone, Artificial.....	P. Daniels.....	136, 904	Mar. 18, 1873	509	.....	3	303
Stone, Artificial.....	R. Lemare.....	136, 604	Mar. 11, 1873	238	.....	3	273
Stone, Artificial.....	W. H. Lewis.....	139, 167	May 20, 1873	645	.....	3	573
Stone, Artificial.....	A. Ott.....	137, 859	Apr. 15, 1873	534	.....	3	425
Stone-channeling machine.....	A. S. Gear.....	142, 096	Aug. 26, 1873	651	214	4	214
Stone, Composition for artificial.....	W. Hedley.....	136, 160	Feb. 25, 1873	723	.....	3	292
Stone, &c., Composition for forming.....	J. J. Bartlett.....	134, 628	Jan. 7, 1873	120	.....	3	16
Stone, Compound for making artificial.....	W. E. Fersden.....	143, 563	Oct. 14, 1873	157	.....	4	402
Stone-crusher.....	H. R. Marsden.....	137, 939	Apr. 15, 1873	600	188	3	430
Stone-crusher.....	A. H. Smith.....	140, 085	June 17, 1873	594	187	3	680
Stone-cutter.....	G. Stacy.....	144, 640	Nov. 18, 1873	411	138	4	534
Stone-cutter and other tools, Mode of fastening cutter in.....	G. Stacy.....	144, 639	Nov. 18, 1873	410	138	4	534
Stone-cutting machine.....	A. S. Gear.....	135, 642	Feb. 11, 1873	243	77	3	159
Stone-cutting machine.....	C. E. Odgers.....	136, 001	Feb. 18, 1873	566	186 187	3	198
Stone cutting and dressing machine.....	W. A. Forman.....	137, 354	Apr. 1, 1873	70	22, 23	3	362
Stone cutting and dressing machine.....	J. B. West and J. C. Fish.....	145, 376	Dec. 9, 1873	301	101	4	622
Stone-cutting tool.....	H. Cottrell.....	144, 318	Nov. 4, 1873	121	40	4	488
Stone, Doublet.....	S. Bruhl.....	138, 314	Apr. 29, 1873	979	307	3	478
Stone-dressing machine.....	G. R. Ray.....	136, 100	Apr. 22, 1873	760	241	3	453
Stone, Expelling air from composition for artificial.....	G. A. Frear.....	137, 193	Mar. 25, 1873	768	254	3	336
Stone facing-machine, Cobble.....	L. Dutertre.....	142, 069	Aug. 26, 1873	645	212	4	214
Stone grinding and polishing machine.....	J. Funn.....	135, 535	Feb. 4, 1873	130	41	3	138
Stone, Machine for cutting and working.....	H. Cottrell.....	144, 316	Nov. 4, 1873	118	40	4	488
Stone, Machine for cutting cobble.....	H. Lombard, J. P. Morrill, and L. A. Sweatt.....	144, 396	Nov. 11, 1873	199	67	4	506
Stone, Machine for cutting, rubbing, and drilling.....	P. H. Hopkins.....	142, 019	Aug. 19, 1873	559	185	4	198
Stone, Machine for turning.....	A. S. Gear.....	136, 432	Mar. 4, 1873	68	24	3	251
Stone, Making artificial.....	D. M. Spiggle.....	139, 274	May 27, 1873	756	239	3	590
Stone, Manufacture of artificial.....	J. L. Rowland.....	137, 322	Apr. 1, 1873	40	13	3	360
Stone, Marbleized composition.....	T. Carson.....	137, 127	Mar. 25, 1873	706	.....	3	331
Stone, Method of splitting.....	D. Croghan.....	140, 681	July 8, 1873	303	102	4	44
Stone-planing machine.....	A. T. Merriman.....	139, 409	May 27, 1873	872	279	3	599
Stone, Process of manufacturing artificial.....	E. L. Ransome.....	145, 363	Dec. 9, 1873	292	.....	4	621
Stone-puller.....	G. Sprinkel.....	136, 941	Mar. 18, 1873	531	176	3	306
Stone-sawing machine.....	H. Cottrell.....	144, 317	Nov. 4, 1873	120	40	4	488
Stone, tile, pavement, &c., Composition for artificial.....	A. Pelletier.....	136, 862	Mar. 18, 1873	464	.....	3	301
Stone-tool.....	I. Curtner.....	146, 051	Dec. 30, 1873	936	308	4	708
Stool.....	C. B. Sheldon.....	141, 391	July 29, 1873	990	321	4	124
Stool, Adjustable.....	A. Doll.....	141, 208	July 29, 1873	813	266	4	110
Stool and table pedestal.....	J. R. Lomas.....	140, 054	June 17, 1873	564	178	3	678
Stool, Dentist's.....	I. W. Lyon.....	135, 924	Feb. 18, 1873	502	163	3	193
Stool, Milking.....	G. T. Lincoln.....	142, 247	Aug. 26, 1873	776	255	4	225
Stool, Office and counting-house.....	A. D. Cartwright.....	144, 441	Nov. 11, 1873	236	79	4	509
Stool or chair.....	H. Ocorr.....	139, 730	June 10, 1873	273	85	3	647
Stool or chair, Revolving.....	J. J. Vollrath.....	144, 806	Nov. 18, 1873	550	186	4	546
Stool, Piano and other.....	R. W. Archer.....	138, 600	May 6, 1873	115	38	3	507
Stool, Store.....	A. A. Murphy.....	138, 271	Apr. 29, 1873	938	296	3	475
Stools, tables, &c., Standard for.....	S. H. Newcomb.....	143, 836	Oct. 21, 1873	422	141	4	433
Stopper:							
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Cable-stopper.							
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Stove.....	B. Dierstock.....	141, 771	Aug. 12, 1873	329	108	4	170
Stove and heater, Railway-car.....	J. Q. C. Searle.....	136, 773	Mar. 11, 1873	378	125	3	285
Stove, Base-burning.....	F. W. Born.....	139, 231	May 27, 1873	715	225	3	586
Stove, Base-burning.....	W. Doyle.....	141, 770	Aug. 12, 1873	328	108	4	170
Stove, Base-burning.....	A. Hathaway.....	143, 693	Oct. 14, 1873	274	90, 91	4	411
Stove, Base-burning.....	S. H. La Rue.....	144, 461	Nov. 11, 1873	251	84	4	510
Stove, Base-burning.....	J. Q. C. Searle.....	136, 772	Mar. 11, 1873	377	125	3	284
Stove, Base-burning cooking.....	H. Ingraham.....	140, 138	June 24, 1873	658	207	3	693
Stove, Base-burning fire-place.....	S. B. Sexton.....	141, 821	Aug. 12, 1873	375	133	4	173
Stove-board and floor-protector, Metallic.....	P. H. Ross.....	134, 563	Jan. 7, 1873	58	17	3	11
Stove, Coal.....	H. Meldinger.....	137, 855	Apr. 15, 1873	531	165	3	424
Stove, Coal-oil.....	J. H. Thorp.....	140, 743	July 6, 1873	357	121	4	49
Stove, Combined heating and cooking.....	B. McConnell.....	139, 172	May 20, 1873	648	202	3	573
Stove, Cooking.....	A. C. Barstow.....	137, 996	Apr. 22, 1873	661	209	3	445
Stove, Cooking.....	R. H. Brown.....	145, 089	Dec. 2, 1873	49	15	4	589
Stove, Cooking.....	L. E. Clow.....	145, 276	Dec. 9, 1873	218	74	4	615
Stove, Cooking.....	C. H. Douglas.....	140, 996	July 22, 1873	606	204	4	46
Stove, Cooking.....	M. G. Fagan.....	135, 325	Jan. 28, 1873	777	251	3	110
Stove, Cooking.....	W. A. Greene.....	135, 273	Jan. 28, 1873	730	234	3	106
Stove, Cooking.....	H. A. Hummer.....	142, 467	Sept. 2, 1873	131	43	4	253
Stove, Cooking.....	J. R. Hyde.....	140, 044	June 17, 1873	554	175	3	677
Stove, Cooking.....	W. W. Karlsruher.....	141, 508	Aug. 5, 1873	88	27	4	142
Stove, Cooking.....	D. G. Littlefield.....	138, 093	Apr. 22, 1873	755	239	3	452
Stove, Cooking.....	S. Long.....	145, 355	Dec. 9, 1873	287	96	4	621
Stove, Cooking.....	G. McAdams.....	140, 210	June 24, 1873	719	226	3	698
Stove, Cooking.....	J. McMaster.....	144, 279	Nov. 4, 1873	92	30	4	485
Stove, Cooking.....	D. H. Nation and E. C. Little.....	142, 935	Sept. 16, 1873	544	185	4	309
Stove, Device for feeding.....	B. Connelly.....	135, 265	Jan. 28, 1873	725	232	3	106
Stove, Device for retaining fire in.....	E. Y. Robbins.....	144, 357	Nov. 4, 1873	155	51	4	491
Stove, Dome for.....	A. Taylor.....	137, 976	Apr. 15, 1873	631	199	3	433
Stove-door.....	A. S. Shontz.....	144, 230	Nov. 4, 1873	56	17	4	482
Stove-door attachment.....	W. O. Smith.....	145, 138	Dec. 2, 1873	90	29	4	592
Stove-door frame.....	S. Smith.....	137, 328	Apr. 1, 1873	49	14	3	361
Stove-door to frame, Mode of attaching.....	S. Smith.....	139, 740	June 10, 1873	285	88	3	648
Stove, Elevated-oven attachment for.....	G. Craine and J. W. Bloss.....	142, 558	Sept. 9, 1873	220	71	4	272

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Stove-foot shoe.....	A. D. Coles.....	140, 576	July 8, 1873	216	72	4	37
Stove for smoke-houses.....	I. N. Deardorff.....	145, 054	Dec. 2, 1873	12	4	4	587
Stove, Heating.....	W. R. Akers and J. E. Johnson.....	137, 818	Apr. 15, 1873	500	156	3	422
Stove, Heating.....	P. D. Beckwith.....	135, 621	Feb. 11, 1873	225	71	3	157
Stove, Heating.....	R. H. Brown.....	142, 078	Aug. 26, 1873	633	308	4	213
Stove, Heating.....	R. H. Brown.....	142, 079	Aug. 26, 1873	634	308	4	213
Stove, Heating.....	L. R. Comstock.....	141, 765	Aug. 12, 1873	323	106	4	169
Stove, Heating.....	J. Johnson.....	144, 105	Oct. 28, 1873	673	222	4	463
Stove, Heating.....	J. Johnson.....	145, 424	Dec. 9, 1873	346	116	4	625
Stove, Heating.....	E. C. Little and D. H. Nation.....	142, 707	Sept. 9, 1873	343	115	4	281
Stove, Heating.....	I. G. Macfarlane.....	145, 744	Dec. 23, 1873	046	212	4	674
Stove, Heating.....	D. N. Mason.....	139, 256	May 27, 1873	735	232	3	588
Stove, Heating.....	G. R. Moore.....	137, 467	Apr. 1, 1873	171	54	3	371
Stove, Heating.....	G. R. Moore.....	140, 155	June 24, 1873	673	211	3	694
Stove, Heating.....	S. B. Patterson.....	142, 270	Aug. 26, 1873	794	262	4	226
Stove, Heating.....	J. L. Ring.....	140, 843	July 15, 1873	445	151	4	64
Stove, Heating.....	T. H. Salmon.....	139, 618	June 3, 1873	151	50	3	621
Stove, Heating.....	S. Smith.....	135, 449	Feb. 4, 1873	54	18	3	131
Stove, Heating.....	C. G. Thompson.....	139, 035	May 20, 1873	515	162	3	563
Stove, Heating.....	W. B. Treadwell.....	134, 573	Jan. 7, 1873	68	21	3	12
Stove, Lamp.....	F. Janke.....	136, 063	Feb. 18, 1873	619	203	3	202
Stove, Lamp.....	E. Savoral.....	145, 531	Dec. 16, 1873	456	149	4	646
Stove, Laundry.....	J. H. Mitchell.....	142, 259	Aug. 26, 1873	785	250	4	226
Stove-leg.....	W. Doyle.....	145, 932	Dec. 30, 1873	829	270	4	699
Stove-leg.....	J. Q. C. Searle.....	135, 012	Jan. 21, 1873	485	156	3	74
Stove, Magazine for.....	J. R. Painter.....	141, 566	Aug. 5, 1873	150	48	4	147
Stove, Name-plate for.....	P. Klotz.....	143, 913	Oct. 21, 1873	484	163	4	438
Stove-pipe.....	L. Jurgens.....	137, 928	Apr. 15, 1873	590	186	3	429
Stove-pipe.....	H. L. Palmer.....	136, 755	Mar. 11, 1873	363	121	3	223
Stove-pipe.....	W. H. Stephenson.....	135, 170	Jan. 21, 1873	614	200	3	84
Stove-pipe connection.....	G. F. Brinkerhoff.....	143, 120	Sept. 23, 1873	703	241	4	332
Stove-pipe coupling.....	H. A. Mears.....	142, 254	Aug. 26, 1873	781	258	4	225
Stove-pipe cover, Adjustable.....	T. M. Leslie.....	137, 457	Apr. 1, 1873	159	51	3	370
Stove-pipe-elbow machine.....	J. Beckman and J. Gibson.....	135, 690	Feb. 18, 1873	469	151	3	190
Stove-pipe extension-attachment.....	S. Johnson.....	136, 922	Mar. 18, 1873	516	170	3	305
Stove-pipe for vessel.....	J. Hall.....	142, 567	Sept. 9, 1873	228	74	4	272
Stove-pipe holder.....	G. Eckel.....	142, 777	Sept. 16, 1873	417	140	4	298
Stove-pipe joint.....	A. C. Sweetland.....	139, 932	June 17, 1873	462	144	3	699
Stove-pipe joint.....	J. Weaver.....	142, 879	Sept. 16, 1873	496	160	4	305
Stove-pipe shelf.....	J. F. Beckwith.....	143, 320	Sept. 30, 1873	875	299	4	362
Stove-pipe shelf.....	W. B. Elliott.....	138, 385	Apr. 29, 1873	1, 036	326	3	423
Stove-pipe shelf, &c.....	D. R. Moore.....	140, 939	July 15, 1873	539	180	4	71
Stove-pipe shelf.....	W. Patterson.....	140, 788	July 15, 1873	397	136	4	60
Stove-pipe shelf.....	W. J. and D. W. Stephenson.....	145, 251	Dec. 2, 1873	191	66	4	600
Stove-pipe shelf and drum, Combined.....	T. Bladon.....	140, 454	July 1, 1873	92	32	4	16
Stove-pipe stretcher, &c.....	G. Eley.....	144, 967	Nov. 25, 1873	693	234	4	569
Stove-pipe thimble.....	V. Fath.....	143, 973	Oct. 28, 1873	559	185	4	454
Stove-pipe thimble.....	J. R. Fulton.....	142, 784	Sept. 16, 1873	422	142	4	298
Stove-pipe thimble.....	N. Linden.....	145, 579	Dec. 16, 1873	493	162	4	649
Stove-pipe thimble.....	T. D. Slauson.....	143, 852	Oct. 21, 1873	428	146	4	434
Stove-pipe thimble.....	H. Smith.....	140, 553	July 1, 1873	181	61	4	23
Stove-pipe thimble.....	F. Tarrant.....	139, 210	May 20, 1873	681	214	3	576
Stove-platform.....	G. E. Bingham and J. F. Ewing.....	141, 106	July 22, 1873	704	225	4	94
Stove-platform.....	C. Brownell.....	143, 492	Oct. 7, 1873	5	2	4	381
Stove-platform.....	W. M. Conger.....	136, 589	Mar. 11, 1873	228	76	3	273
Stove-platform.....	W. Westlake.....	140, 393	July 1, 1873	48	16	4	12
Stove-polish.....	E. Chamnees and J. Vaughn.....	141, 321	July 29, 1873	918	.....	4	119
Stove-polish.....	J. I. Danforth.....	139, 047	May 20, 1873	523	.....	3	563
Stove-polish.....	J. I. Danforth.....	139, 879	June 17, 1873	416	.....	3	665
Stove, Portable.....	N. E. Chase.....	137, 584	Apr. 8, 1873	290	90	3	392
Stove, Portable.....	S. J. Dibble.....	145, 491	Dec. 16, 1873	410	135	4	642
Stove, Portable.....	G. B. Isham.....	136, 521	Mar. 4, 1873	152	49	3	257
Stove, Portable.....	R. Moore.....	144, 469	Nov. 11, 1873	258	87	4	511
Stove, Portable cooking.....	N. O. Bond.....	139, 760	June 10, 1873	303	94	3	649
Stove, Railway-car.....	W. S. Jones.....	140, 831	July 15, 1873	436	148	4	63
Stove, Railway-car.....	M. Mooney, T. D. Van Dorn, and C. C. Winterberg.....	143, 526	Oct. 7, 1873	109	38	4	389
Stove, Railway-car.....	A. Reese.....	142, 867	Sept. 16, 1873	487	166	4	304
Stove, Reservoir cooking.....	R. H. Brown.....	142, 080	Aug. 26, 1873	635	209	4	213
Stove, Reservoir cooking.....	A. B. Fales and H. Seabury.....	140, 354	July 1, 1873	19	6	4	9
Stove, Reservoir cooking.....	S. W. France.....	137, 355	Apr. 1, 1873	71	23	3	362
Stove, Reservoir cooking.....	J. R. Hyde.....	136, 730	Mar. 11, 1873	343	113	3	282
Stove, Reservoir cooking.....	H. Lappin.....	134, 683	Jan. 7, 1873	175	57	3	20
Stove, Reservoir cooking.....	D. G. Littlefield.....	139, 720	June 10, 1873	264	83	3	646
Stove, Reservoir cooking.....	D. H. Nation.....	142, 717	Sept. 9, 1873	351	118	4	282
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little.....	138, 682	May 6, 1873	191	61	3	513
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little.....	142, 931	Sept. 16, 1873	540	184	4	308
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little.....	142, 932	Sept. 16, 1873	540	184	4	308
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little.....	142, 933	Sept. 16, 1873	541	184	4	309
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little.....	142, 934	Sept. 16, 1873	543	185	4	309
Stove, Reservoir cooking.....	H. Stephens.....	137, 500	Apr. 1, 1873	205	62	3	373
Stove, Subaqueous gas.....	S. H. Starr.....	145, 458	Dec. 9, 1873	372	124	4	627
Stove, Summer.....	W. A. Barlow.....	140, 870	July 15, 1873	467	158	4	65
Stove, Supplemental attachment for cooking.....	J. Day.....	140, 252	June 24, 1873	751	237	3	701
Stove-support.....	W. M. Conger.....	137, 291	Apr. 1, 1873	11	4	3	358
Stove-support.....	W. M. Conger.....	137, 292	Apr. 1, 1873	12	4	3	358
Stove, Top-plate for cooking.....	J. Van.....	141, 838	Aug. 12, 1873	391	127	4	174
Stove, Top-plate for cooking.....	E. R. Wehrle.....	135, 457	Feb. 4, 1873	61	19	3	132
Stove-window.....	F. Warriner.....	136, 824	Mar. 18, 1873	462	160	3	302
Strainer, Beer.....	C. M. Powers.....	139, 971	June 17, 1873	490	155	3	671
Strainer, Cistern.....	N. G. Thomas.....	138, 504	May 6, 1873	111	36	3	507

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Strainer, Cream	R. W. Barnard	143, 115	Sept. 23, 1873	700	240	4	331
Strainer, Pulp	H. H. Olds	136, 002	Feb. 18, 1873	567	187	3	198
Strainer, Water	F. W. Mass	142, 711	Sept. 9, 1873	346	116	4	282
Strap:							
See Car-strap.							
Harness safety-strap.							
Hitching-strap.							
Leather-strap.							
Razor-strap.							
Shawl-strap.							
Shoulder-strap.							
Tug-strap.							
Strap-coupling	T. Cogswell	144, 957	Nov. 25, 1873	683	231	4	568
Straw-cutter	T. D. Anderson	145, 476	Dec. 16, 1873	397	131	4	641
Straw-cutter	J. F. Keller	135, 816	Feb. 11, 1873	401	129	3	171
Straw-cutter	A. Kindermann	143, 356	Sept. 30, 1873	912	310	4	365
Straw-cutter	R. A. Rash	142, 726	Sept. 9, 1873	357	121	4	283
Straw-cutter	T. Webb	141, 527	Aug. 5, 1873	101	31	4	143
Straw-cutter, Feed-roller for	J. H. Sharp	136, 774	Mar. 11, 1873	378	125	3	285
Straw or mill board	J. L. Thomson	135, 452	Feb. 4, 1873	56			132
Street-sweeper	C. Geiger	142, 847	Sept. 16, 1873	472	160	4	302
Street-sweeper	O. W. Kellogg	136, 438	Mar. 4, 1873	73	25	3	251
Street-sweeper	W. Smith	141, 241	July 29, 1873	846	276	4	112
Street-sweeping machine	L. J. O'Connor	143, 888	Oct. 21, 1873	423	141	4	433
Streets and roads, Watering	I. Brown	144, 055	Oct. 28, 1873	632	208	4	460
Stubble-shaver and scraper combined	H. Von Phul, jr., and J. Mallon	144, 933	Nov. 25, 1873	664	225	4	566
Stucco ornament	A. D. Godard	139, 781	June 10, 1873	323	100	3	650
Stud and button	F. E. Brown	144, 598	Nov. 18, 1873	375	126	4	532
Stud for fastening neck-tie	J. A. Hard	135, 803	Feb. 11, 1873	390	125	3	170
Stud, Lacing	D. Heaton	137, 305	Apr. 1, 1873	23	7	3	359
Stud, &c., Safety	A. Kent	136, 166	Feb. 25, 1873	727	234	3	222
Stud, Shirt	O. S. Thayer	138, 299	Apr. 29, 1873	967	304	3	477
Stump-extractor	E. Bayliss	134, 507	Jan. 7, 1873	4	2	3	8
Stump-extractor	E. Colyar	137, 420	Apr. 1, 1873	124	41	3	367
Stump-extractor	W. Duffner	143, 129	Sept. 23, 1873	709	243	4	332
Stump-extractor	I. Flanders	141, 341	July 29, 1873	943	307	4	120
Stump-extractor	T. Herbig	141, 140	July 22, 1873	734	243	4	96
Stump-extractor	C. Mörchen and P. Doerfer	135, 658	Feb. 11, 1873	256	81	3	160
Stump-extractor	F. Plant	145, 966	Dec. 30, 1873	862	280	4	701
Submarine foundation	E. Manico	141, 283	July 29, 1873	883	289	4	116
Sugar and salt dryer	D. Lee	139, 400	May 27, 1873	865	277	3	598
Sugar and salt dryer	D. Lee	139, 401	May 27, 1873	865	277	3	598
Sugar and sirup, Apparatus for refining	S. H. Gilman	143, 754	Oct. 21, 1873	350	117	4	427
Sugar, Apparatus for manufacture of	S. Dod	135, 529	Feb. 4, 1873	123	39	3	137
Sugar-cane coverer	F. Roy	141, 464	Aug. 5, 1873	49	15	4	139
Sugar-cane, Process and apparatus for extracting juices of	G. Wilkinson, A. L. Possoz, J. P. Lafargue, and A. E. Dutreih.	137, 746	Apr. 8, 1873	430	133	3	403
Sugar-cane stubble from decay, Process of preserving	W. Green	143, 622	Oct. 14, 1873	209		4	466
Sugar-dryer	A. Mackey	137, 459	Apr. 1, 1873	161	51	3	370
Sugar- evaporator	H. C. and T. W. Stevens	137, 576	Apr. 8, 1873	278	85	3	391
Sugar from molasses, &c., Cleansing	A. H. Tait	145, 460	Dec. 9, 1873	374		4	628
Sugar from molasses, Extracting	J. B. Thoms	144, 369	Nov. 4, 1873	163		4	492
Sugar, Granulating	J. A. Morrell	142, 498	Sept. 2, 1873	160		4	255
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	134, 588	Jan. 7, 1873	83	26	3	13
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	140, 464	July 1, 1873	102	35	4	17
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	141, 201	July 29, 1873	803	263	4	109
Sugar manufacture	H. M. Aschenbrenner	146, 040	Dec. 30, 1873	922	299	4	706
Sugar, Manufacture of	J. A. Morrell	141, 067	July 22, 1873	667		4	91
Sugar, Manufacture of	A. F. W. Partz	139, 078	May 20, 1873	560		3	566
Sugar, Manufacture of loaf	E. Langen	134, 682	Jan. 7, 1873	174	57	3	20
Sugar, molasses, and saccharine juices, Purifying	J. M. O. Tamin	141, 831	Aug. 12, 1873	385		4	174
Sugar stirrer, Maple	F. B. Graves	140, 361	July 1, 1873	23	8	4	10
Sugar with sulphurous acid in the vacuum-pan, Treating	A. H. Seyferth	135, 014	Jan. 21, 1873	487	157	3	74
Sulky	L. H. Jennison	144, 983	Nov. 25, 1873	706	238	4	570
Summer-furnace	W. P. Springer	136, 783	Mar. 11, 1873	388	128	3	285
Superheater	D. Renshaw	143, 846	Oct. 21, 1873	430	143	4	433
Superheater for steam-boilers	J. Wolford and R. Conner	138, 723	May 6, 1873	236	72	3	516
Supporter:							
See Abdominal-supporter.							
Ankle-supporter.							
Book-supporter.							
Eaves-trough supporter.							
Floor-timber supporter.							
Hammock-supporter.							
Lamp-shade supporter.							
Neck-tie supporter.							
Piles-supporter.							
Rein-supporter.							
Scaffold-supporter.							
Shirt-bosom supporter.							
Stocking-supporter.							
Stove-supporter.							
Table-leaf supporter.							
Trunk-lid supporter.							
Umbrella-supporter.							
Uterine-supporter.							
Vest-supporter.							
Wash-tub supporter.							
Suppository-mold	P. I. Spenser	142, 524	Sept. 2, 1873	180	59	4	256
Suppository, Mold for making	L. R. Blackman	139, 858	June 17, 1873	394	123	3	664
Suspender-clasp	J. W. Smith	141, 087	July 22, 1873	686	230	4	92

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Suspenders	T. J. Flagg	144, 970	Nov. 25, 1873	695	235	4	569
Suspenders	B. J. Greeley	141, 926	Aug. 19, 1873	481	158	4	191
Suspenders	S. Hamm	144, 091	Oct. 28, 1873	662	218	4	462
Suspenders	T. J. Irving	140, 045	June 17, 1873	555	175	3	677
Suspenders	A. Shenfield	140, 659	July 8, 1873	279	94	4	42
Suspenders	J. W. Wattles	144, 042	Oct. 28, 1873	619	205	4	459
Suspension-ring	G. Doolittle	136, 977	Mar. 18, 1873	580	186	3	309
Swaging-machine	H. M. Crippen	138, 617	May 6, 1873	130	42	3	508
Swimming-bath	P. Bralley	136, 128	Feb. 25, 1873	693	224	3	219
Swing	J. F. Quigg	136, 181	Feb. 25, 1873	739	236	3	223
Swing	E. A. Tuttle	135, 738	Feb. 11, 1873	324	104	3	165
Swing, Child's	W. H. Alcorn	137, 121	Mar. 25, 1873	701	233	3	331
Swing, Parlor	B. Strassel	135, 018	Jan. 21, 1873	492	158	3	75
Swinging-gate	J. J. Gentry and J. F. Collett	143, 342	Sept. 30, 1873	900	306	4	364
Switch:							
<i>See</i> Fly-switch.							
Railway-switch.							
Self-acting switch.							
Self-operating switch.							
Sword-blade, Machine for rolling	J. C. Richardson	143, 094	Sept. 23, 1873	683	235	4	330
Sword-hanger	S. McKeever	140, 151	June 24, 1873	670	210	3	694
Sword-scabard, Casting ornament for	V. Price	139, 023	May 20, 1873	507	159	3	562
Syringe and pump	J. Speak	144, 802	Nov. 18, 1873	545	185	4	545
Syringe, Fountain	H. D. Lockwood	138, 417	Apr. 29, 1873	1, 064	335	3	485
Syringe, Hypodermic	E. Cutter	144, 661	Nov. 18, 1873	429	145	4	536
Syringe, Hypodermic	J. Leiter	145, 217	Dec. 2, 1873	160	55	4	598
Syringes, Cannula-point for	E. B. Nimmo	144, 352	Nov. 4, 1873	150	50	4	490
T.							
Table:							
<i>See</i> Auxiliary table.							
Billiard-table.							
Buffet-table.							
Copying-press table.							
Dining-table.							
Drawing-table.							
Extension-table.							
Folding-table.							
Game-table.							
Ironing-table.							
Office-table.							
Saw-table.							
Sawing-machine table.							
Self-waiting table.							
Sewing-machine table.							
Turn-table.							
Table	W. Jests	136, 837	Mar. 18, 1873	445	148	3	299
Table	J. C. Miller and E. S. Armstrong	135, 655	Feb. 11, 1873	254	80	3	160
Table	H. W. Pearsall	138, 431	Apr. 29, 1873	1, 079	341	3	486
Table	J. H. Wattles	138, 718	May 6, 1873	226	70	3	516
Table and secret writing-desk, Combined	C. Kade	144, 769	Nov. 18, 1873	519	176	4	543
Table-knife	W. H. Andrew	145, 080	Dec. 2, 1873	41	12	4	589
Table-leaf support	E. L. Abbott and S. T. Gibson	138, 309	Apr. 29, 1873	975	306	3	478
Table-leaf support	H. Imhof	137, 925	Apr. 15, 1873	568	185	3	429
Table-leaf support	W. Jests	136, 836	Mar. 18, 1873	445	147	3	299
Table-leaf support	A. C. Johnson	137, 210	Mar. 25, 1873	785	259	3	337
Table-leaf support	A. Marchand	137, 087	Mar. 18, 1873	672	223	3	329
Table-leaf support	J. K. Moffett	142, 260	Aug. 26, 1873	786	259	4	226
Table-leaf support	G. Payzant	138, 182	Apr. 22, 1873	832	264	3	458
Table-leaf support	E. W. Perrin	141, 887	Aug. 19, 1873	450	147	4	189
Table-leaf support	G. C. Thomas	138, 769	May 13, 1873	280	87	3	530
Table-leaf support	C. H. Wheeler	140, 102	June 17, 1873	607	191	3	681
Table, stool, and stand, Combined	J. A. Markle	140, 228	June 24, 1873	784	249	3	704
Tablet, Coating for writing	A. Schindler	134, 566	Jan. 7, 1873	60	.....	3	12
Tablet platform or mat, Non-conducting	H. L. Palmer	141, 812	Aug. 12, 1873	369	121	4	173
Tablet, Writing	C. N. Brown	144, 950	Nov. 25, 1873	679	230	4	567
Tablet, Writing	A. Schindler	139, 266	May 27, 1873	746	.....	3	589
Tack-puller	C. W. Blakelee	145, 837	Dec. 23, 1873	721	237	4	690
Tacks, Machine for separating and delivering	C. W. Glidden	135, 329	Jan. 28, 1873	780	252	3	110
Tacks, nails, and screws, to prevent corrosion and to color them, Coating	G. Starks	144, 712	Nov. 18, 1873	470	159	4	539
Tacks, nails, &c., Metal coating	C. D. Hunt	135, 339	Jan. 28, 1873	791	.....	3	111
Tackle-block, Chain	S. D. Backus	144, 727	Nov. 18, 1873	482	163	4	540
Tackle-block, Hook and eye for	J. Holroyd	136, 833	Mar. 18, 1873	443	147	3	299
Tag	T. P. Marston	134, 757	Jan. 14, 1873	247	80	3	40
Tag-fastener	J. M. Goodridge	143, 621	Oct. 14, 1873	208	70	4	406
Tag-fastener	T. P. Marston	134, 756	Jan. 14, 1873	246	80	3	40
Tag-fastening	J. S. Loughery	134, 755	Jan. 14, 1873	245	80	3	40
Tag-holder	E. C. Stillman and E. F. Burrows	137, 257	Mar. 25, 1873	825	271	3	340
Tag-hook	T. P. Marston and N. M. Phillips	143, 364	Sept. 30, 1873	921	312	4	365
Tag-machine	C. M. O'Brien	139, 259	May 27, 1873	737	233	3	588
Tag-machine	J. H. Silvers	139, 270	May 27, 1873	750	238	3	589
Tailor's pressing-machine	A. C. Sawyer	137, 100	Mar. 25, 1873	682	226	3	329
Tallow, lard, &c., Process for purifying and bleaching	J. R. Brown	145, 840	Dec. 23, 1873	725	.....	4	680
Tallow obtained in rendering oil, Purifying and deodorizing	B. F. Shaw	135, 373	Jan. 28, 1873	821	.....	3	113
Tallow or lard, Apparatus for drying and cooling	A. Smith	142, 744	Sept. 9, 1873	376	126	4	284
Tampico and bristles, Apparatus for combing and mixing	G. Willett	142, 427	Sept. 2, 1873	92	30	4	250
Tan-bark, Apparatus for expressing liquid from spent	L. Breval	135, 317	Jan. 28, 1873	767	248	3	109
Tan-dryer	N. Porter	145, 010	Nov. 25, 1873	729	246	4	572
Tan, Machine for desiccating	C. H. Mosley	135, 999	Feb. 18, 1873	564	186	3	188
Tan-vat	C. H. Manning	135, 231	Jan. 28, 1873	694	223	3	103

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Tan-vat	C. H. Manning	138, 906	May 13, 1873	397	125	3	540
Tank and liquid measure, Combined	J. H. Corliss	145, 725	Dec. 23, 1873	629	206	4	672
Tannin-extracts, &c., Apparatus for making	T. W. Johnson and A. W. Goodell	134, 675	Jan. 7, 1873	167	55	3	20
Tanning	J. Carter and A. C. Keith	136, 488	Mar. 4, 1873	118		3	255
Tanning-apparatus	C. Herveux	139, 892	June 17, 1873	428	133	3	666
Tanning-compound	J. B. Hite	140, 040	June 17, 1873	552		3	677
Tanning-compound	W. Thilmann	143, 105	Sept. 23, 1873	692		4	331
Tanning-hides	A. Fleischhauer	135, 214	Jan. 28, 1873	677		3	102
Tanning, Process for	J. Davis and J. Armstrong	138, 138	Apr. 22, 1873	789		3	436
Tap and die	A. E. Barthel	139, 651	June 10, 1873	195	64	3	641
Tap and faucet, Barrel	G. B. Taylor	145, 695	Dec. 16, 1873	591	194	4	657
Tap, plug, and faucet connection	J. F. Kaue	144, 680	Nov. 18, 1873	444	149	4	537
Tape-cutting machine	J. S. Jewett	140, 274	June 24, 1873	772	244	3	703
Taper-tubes, Machine for making	T. J. and J. T. Jones	141, 932	Aug. 19, 1873	486	160	4	192
Tapered bars, Machine for rolling round	C. F. Brown	142, 372	Sept. 2, 1873	46	16	4	246
Tapping gas and water fittings, Machine for	A. D. Laws	143, 168	Sept. 23, 1873	736	{ 253 254 }	4	334
Tapping gas and water fittings, Machine for	C. C. Walworth	144, 374	Nov. 4, 1873	167	56	4	492
Tapping pipe-fittings, Machine for	J. L. Pope	139, 476	June 3, 1873	29	9	3	611
Tapping pipe-fittings, Machine for	E. Rogers	136, 621	Mar. 11, 1873	253	85, 86	3	275
Tapping water-mains, Apparatus for	W. Young	136, 950	Mar. 18, 1873	538	178	3	307
Tar, Apparatus for burning gas	A. Smith	142, 357	Sept. 2, 1873	31	11, 12	4	245
Tassel	G. E. Jenkins	140, 372	July 1, 1873	31	10	4	10
Tassel for canes and umbrellas	W. Harnach	140, 825	July 15, 1873	432	147	4	63
Tassel-top	H. C. Lees	144, 115	Oct. 28, 1873	680	225	4	464
Tattooing-shuttle and crochet-needle, Combined	E. P. Kellogg	146, 077	Dec. 30, 1873	956	309	4	709
Tea-kettle	N. Plympton	144, 698	Nov. 18, 1873	459	156	4	538
Tea-kettle	C. D. Woodruff	136, 576	Mar. 4, 1873	201	67	3	261
Teaching geography, Apparatus for	J. Schedler	143, 934	Oct. 21, 1873	500	169	4	439
Teaching in schools, Apparatus for	M. McVicar	141, 369	July 29, 1873	969	315	4	122
Teeth and gums, Depurator for the	J. D. Wingate	135, 612	Feb. 4, 1873	211	65	3	143
Teeth, Artificial	W. C. Tracy	143, 476	Oct. 7, 1873	65	23	4	386
Teeth, Artificial crown for	J. B. Beers	144, 182	Nov. 4, 1873	5	2	4	479
Teeth, Device for retaining fillings in	E. Osmund	145, 418	Oct. 7, 1873	22	8	4	382
Teeth, Filling for decayed	C. E. Blake	145, 982	Dec. 30, 1873	876		4	703
Teeth, Method of fastening artificial	G. F. C. Reese	144, 699	Nov. 18, 1873	460	156	4	538
Telegraph and circuit therefor, Printing and dial	G. Little	139, 690	June 10, 1873	230	74	3	644
Telegraph-apparatus	H. D. Rogers	142, 486	Sept. 2, 1873	148	49	4	254
Telegraph-cable, Hydrostatic and electric	F. Tommasi	143, 597	Oct. 14, 1873	183	62, 63	4	404
Telegraph, Chemical	T. A. Edison	141, 774	Aug. 12, 1873	332	109	4	170
Telegraph-circuit, Automatic	T. A. Edison	141, 773	Aug. 12, 1873	331	109	4	170
Telegraph-circuit, Automatic	T. A. Edison	141, 776	Aug. 12, 1873	334	110	4	170
Telegraph-circuit, Automatic or chemical	T. A. Edison	141, 772	Aug. 12, 1873	331	108	4	170
Telegraph, Circuit-closer and circuit for multiplex or interval	M. Gally	143, 340	Sept. 30, 1873	891	305	4	363
Telegraph, Circuit for chemical	T. A. Edison	135, 531	Feb. 4, 1873	125	40	3	137
Telegraph, Circuit for printing	T. A. Edison	140, 489	July 1, 1873	124	43	4	18
Telegraph-circuit, Printing	L. T. Lindsey	143, 700	Oct. 14, 1873	290	93	4	411
Telegraph cut-out	W. G. Linn	145, 064	Dec. 2, 1873	23	8	4	587
Telegraph cut-out and switch	R. Henning	138, 889	May 13, 1873	385	120	3	539
Telegraph, District and fire-alarm	J. H. Guest	143, 344	Sept. 30, 1873	901	{ 306 307 }	4	364
Telegraph, District and fire-alarm	J. H. Guest	144, 535	Nov. 11, 1873	313	{ 105 106 }	4	515
Telegraph, Duplex	J. B. Stearns	136, 873	Mar. 18, 1873	472	{ 156 157 }	3	302
Telegraph, Duplex	J. B. Stearns	136, 874	Mar. 18, 1873	473	157	3	302
Telegraph, Duplex	J. C. Wilson	136, 400	Mar. 4, 1873	42	15	3	249
Telegraph, Electro-magnetic	G. D'Infrville	139, 302	May 27, 1873	778	247	3	591
Telegraph, &c., Electro-magnetic motor for printing	L. T. Lindsey	136, 329	Feb. 25, 1873	863	278	3	253
Telegraph, Fire-alarm	R. Carter	140, 011	June 17, 1873	322	166	3	674
Telegraph-instrument, Automatic	T. A. Edison	134, 867	Jan. 14, 1873	345	110	3	48
Telegraph-instrument, Duplex	J. B. Stearns	136, 274	Feb. 25, 1873	818	264	3	229
Telegraph-instrument, Printing	T. A. Edison	134, 866	Jan. 14, 1873	344	109	3	48
Telegraph-key	C. H. Billings and G. W. Stockly	144, 730	Nov. 18, 1873	484	164	4	541
Telegraph key and sounder, Mechanical	D. L. Parkhurst	143, 298	Sept. 30, 1873	857	293	4	360
Telegraph-key, Duplex	J. B. Stearns	136, 875	Mar. 18, 1873	475	157	3	302
Telegraph-key, Self-closing	W. Hochhausen	144, 274	Nov. 4, 1873	88	29	4	485
Telegraph-line, Subterranean	E. H. Austin	138, 115	Apr. 22, 1873	771	246	3	453
Telegraph, Multiplex or interval	M. Gally	143, 341	Sept. 30, 1873	894	{ 305 306 }	4	363
Telegraph, Perforator for automatic	T. A. Edison	141, 775	Aug. 12, 1873	333	109	4	170
Telegraph, Perforator for automatic	G. Little	142, 485	Sept. 2, 1873	147	48	4	254
Telegraph, Pneumatic	A. Jaynor	140, 923	July 15, 1873	521	175	4	70
Telegraph-pole	J. L. Chapman	142, 082	Aug. 26, 1873	637	209	4	213
Telegraph-pole	H. Dodge	140, 255	June 24, 1873	755	238	3	701
Telegraph-pole	C. F. Howes	135, 429	Feb. 4, 1873	35	10	3	130
Telegraph-pole	T. J. McCarver, J. Athey, and B. Jennings	139, 593	June 3, 1873	129	43	3	619
Telegraph, Printing	G. L. Anders	144, 045	Oct. 28, 1873	621	{ 205 206 }	4	459
Telegraph, Printing	T. A. Edison	138, 869	May 13, 1873	367	114	3	537
Telegraph, Printing	T. A. Edison	138, 870	May 13, 1873	368	114	3	538
Telegraph, Printing	T. A. Edison	139, 128	May 20, 1873	605	189	3	570
Telegraph, Printing	T. A. Edison	139, 129	May 20, 1873	606	190	3	570
Telegraph, Printing	T. A. Edison	140, 487	July 1, 1873	121	41, 42	4	18
Telegraph, Printing	T. A. Edison	140, 488	July 1, 1873	122	42	4	18
Telegraph, Printing	M. Gally	136, 369	Mar. 4, 1873	14	5, 6	3	246
Telegraph, Printing	A. A. Knudson	140, 143	June 24, 1873	662	208	3	694
Telegraph, Printing	L. T. Lindsey	143, 702	Oct. 14, 1873	283	93, 94	4	411
Telegraph, Printing	G. M. Phelps	141, 076	July 22, 1873	676	{ 226 227 }	4	92
Telegraph, Printing	G. M. Phelps	144, 285	Nov. 4, 1873	94	31, 32	4	486

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Telegraph, Printing	C. J. Wiley	137, 117	Mar. 25, 1873	697	{ 231 232	{ 3	331
Telegraph, Railway	J. G. Smith	141, 604	Aug. 5, 1873	168	54	4	149
Telegraph receiving-register	M. F. Weesmann	142, 925	Sept. 16, 1873	453	153	4	301
Telegraph-register	W. H. Sawyer	145, 128	Dec. 2, 1873	83	27	4	592
Telegraph regulator, Printing	L. T. Lindsey	143, 701	Oct. 14, 1873	282	93	4	411
Telegraph relay and sounder	J. B. Stearns	136, 876	Mar. 18, 1873	475	158	3	302
Telegraph-relay, Self-adjusting	J. H. Stombs	144, 157	Oct. 28, 1873	713	238	4	467
Telegraph-repeater	L. T. Lindsey	136, 251	Feb. 25, 1873	795	258	3	227
Telegraph, Repeater for duplex	J. B. Stearns	134, 776	Jan. 14, 1873	263	86	3	41
Telegraph-sounder	M. W. Goodyear	140, 266	June 24, 1873	764	241	3	702
Telegraph-sounder	H. Van Hoevenburgh	141, 966	Aug. 19, 1873	511	168	4	194
Telegraph switch-board	W. D. Sargent	142, 817	Sept. 16, 1873	446	151	4	300
Telegraph-transmitter	D. Hermann	145, 567	Dec. 16, 1873	484	158	4	648
Telegraph, Transmitter and receiver for automatic	G. Little	142, 484	Sept. 2, 1873	145	47, 48	4	253
Telegraph, Transmitter for printing	L. T. Lindsey	136, 250	Feb. 25, 1873	793	257	3	227
Telegraph transmitting-key	M. F. Weesmann	142, 826	Sept. 16, 1873	454	153	4	301
Telegraph-wire, Protection for underground	E. D. Pritchard	144, 135	Oct. 28, 1873	695	231	4	465
Telegraphic apparatus for automatic signaling	W. Unger and H. E. Towle	144, 643	Nov. 18, 1873	414	{ 139 140	{ 4	535
Telegraphs, Unison-stop for printing	C. J. Wiley	144, 812	Nov. 18, 1873	553	188	4	546
Tempering castings, &c., Furnace for	W. M. Watson	143, 548	Oct. 7, 1873	136	45	4	391
Tempering steel plates, &c., Apparatus for	H. Urban	141, 837	Aug. 12, 1873	389	127	4	174
Tender and car frame, Iron	J. W. Goff	137, 436	Apr. 1, 1873	140	46	3	368
Tenoning and boring machine	G. Witle	140, 754	July 8, 1873	366	124	4	49
Tenoning-machine	M. Buck	136, 211	Feb. 25, 1873	761	246	3	225
Tenoning-machine	J. Richards	144, 411	Nov. 11, 1873	209	70	4	507
Tenoning-machine	J. Richards and L. H. Berry	143, 532	Oct. 7, 1873	116	39	4	390
Tenoning-machine	W. M. Sack	143, 848	Oct. 21, 1873	434	144	4	434
Tenoning machine, Cog	S. W. Long	145, 992	Nov. 25, 1873	715	242	4	571
Tent	J. B. Smith	143, 037	Sept. 23, 1873	636	218	4	326
Tent	E. M. Turner	137, 579	Apr. 8, 1873	280	56	3	391
Tent-frame	W. W. Whitcomb	138, 774	May 13, 1873	284	88	3	531
Tent-ventilator pipe-hole plate	R. and W. Brien	144, 054	Oct. 28, 1873	631	208	4	460
Terret and martingale ring	J. Geraghty	141, 503	Aug. 5, 1873	83	26	4	142
Testing-plug	J. Allin	144, 881	Nov. 25, 1873	625	212	4	563
Textile fabric, Machine for piling	A. Warth	137, 041	Mar. 18, 1873	618	{ 204 205	{ 3	313
Textile fabric, Machine for piling	A. Warth	137, 518	Apr. 1, 1873	219	67	3	374
Thermoscope	G. F. Barker and A. M. Mayer	142, 190	Aug. 26, 1873	727	.....	4	221
Thermostat, Electrical	J. H. Guest	139, 953	June 17, 1873	477	150	3	670
Thill-coupling	J. C. Barrett	144, 497	Nov. 11, 1873	280	95	4	513
Thill-coupling	W. R. Bowman	145, 390	Dec. 9, 1873	315	106	4	623
Thill-coupling	W. Cable	137, 176	Mar. 25, 1873	749	248	3	335
Thill-coupling	G. R. Davis	142, 211	Aug. 26, 1873	746	245	4	222
Thill-coupling	S. J. Dibble	134, 981	Jan. 21, 1873	454	145	3	72
Thill-coupling	G. M. Dunlap	145, 635	Dec. 16, 1873	540	177	4	653
Thill-coupling	G. W. Hobart	138, 087	Apr. 22, 1873	750	237	3	452
Thill-coupling	C. F. Kidder	140, 833	July 15, 1873	438	149	4	63
Thill-coupling	H. B. Kinney	143, 162	Sept. 23, 1873	731	252	4	334
Thill-coupling	J. Low	136, 078	Feb. 18, 1873	633	208	3	203
Thill-coupling	P. L. Maltbie	141, 655	Aug. 12, 1873	231	72	4	162
Thill-coupling	H. Manwaring	145, 516	Dec. 16, 1873	441	144	4	645
Thill-coupling	J. Martin	137, 143	Mar. 25, 1873	719	238	3	332
Thill-coupling	J. H. Parkhurst	139, 022	May 20, 1873	506	159	3	562
Thill-coupling	A. J. Patterson	140, 382	July 1, 1873	40	13	4	11
Thill-coupling	J. M. Pusey	143, 929	Oct. 21, 1873	496	188	4	439
Thill-coupling	B. R. Rapp	142, 274	Aug. 26, 1873	797	263	4	227
Thill-coupling	W. C. Shepherd and E. P. Curtiss	138, 702	May 6, 1873	207	65	3	514
Thill-coupling	J. C. Thompson	143, 596	Oct. 14, 1873	182	62	4	404
Thill-coupling	S. G. Wise	142, 830	Sept. 16, 1873	458	155	4	301
Thill-coupling attachment	H. J. Stubbs	142, 960	Sept. 16, 1873	567	192	4	311
Thill-coupling clamp	M. Taylor	141, 901	Aug. 19, 1873	461	150	4	189
Thill-holder	J. P. Hiseley	140, 705	July 8, 1873	324	110	4	46
Thill, Vehicle	A. Muhleisen	144, 558	Nov. 11, 1873	334	113	4	517
Thimble	W. P. Slensby	138, 445	Apr. 29, 1873	1, 092	345	3	487
Thrasher, Rewinning-attachment for	J. B. Padon	136, 175	Feb. 25, 1873	735	237	3	223
Thrashing and hulling machine, Clover	I. T. Barton	138, 366	Apr. 29, 1873	1, 021	{ 321 322	{ 3	482
Thrashing and hulling machine, Clover	J. Bradley and J. Nicholas	138, 556	May 6, 1873	80	26	3	504
Thrashing-machine	I. T. Barton	139, 355	May 27, 1873	816	261	3	595
Thrashing-machine	L. C. Bickings	139, 857	June 17, 1873	393	123	3	663
Thrashing-machine	M. G. Carleton	139, 866	June 17, 1873	403	126	3	664
Thrashing-machine	J. Crowley	141, 428	Aug. 5, 1873	17	4	4	136
Thrashing-machine	J. Ellis, N. Hoffman, and J. Lee	140, 491	July 1, 1873	125	43	4	18
Thrashing-machine	P. Geiser	141, 783	Aug. 12, 1873	342	113	4	171
Thrashing-machine	A. G. Hagerström	142, 462	Sept. 2, 1873	125	41	4	252
Thrashing-machine	C. S. Hall	136, 238	Feb. 25, 1873	782	253	3	226
Thrashing-machine	A. Johnston	134, 891	Jan. 14, 1873	365	116	3	49
Thrashing-machine	D. O. B. Ladd	134, 901	Jan. 14, 1873	375	119	3	50
Thrashing-machine	D. Lippy and J. S. Blymer	137, 695	Apr. 8, 1873	380	{ 117 118	{ 3	399
Thrashing-machine	R. H. Martindale	141, 153	July 22, 1873	747	246	4	97
Thrashing-machine	C. M. Powers	137, 863	Apr. 15, 1873	537	167	3	425
Thrashing-machine	J. Smith	144, 874	Nov. 25, 1873	621	211	4	562
Thrashing-machine	J. B. Suitt	142, 961	Sept. 16, 1873	568	192	4	311
Thrashing-machine	F. R. and W. O. Sutton	140, 440	July 1, 1873	81	28	4	15
Thrashing-machine	W. Verill	141, 526	Aug. 5, 1873	100	31	4	143
Thrashing-machine	H. Wehler	139, 218	May 20, 1873	687	216	3	577
Thrashing-machine	A. Wemple	137, 809	Apr. 15, 1873	492	154	3	421
Thrashing-machine	J. M. Wilders	144, 721	Nov. 18, 1873	476	161	4	540
Thrashing-machine, Band-cutter and feeder for	J. Sullivan and J. Minks	140, 658	July 8, 1873	283	96	4	43
Thrashing-machine, Band-cutter platform for	J. A. Walsh	135, 678	Feb. 11, 1873	276	87	3	161
Thrashing-machine, Concave for	L. C. Bickings	145, 044	Dec. 2, 1873	2	1	4	586
Thrashing-machine dust-conveying attachment	J. Bierbower	139, 289	May 27, 1873	768	243	3	590

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Thrashing-machine sacking-attachment.....	W. Masterton.....	139,073	May 20, 1873	555	174	3	566
Thrashing-machine separator.....	G. W. Howe.....	134,671	Jan. 7, 1873	163	54	3	19
Thrashing-machine separator.....	H. H. Kurtz.....	135,821	Feb. 11, 1873	405	131	3	171
Thrashing-machine separator.....	S. R. Perkins.....	143,588	Oct. 14, 1873	177	60	4	403
Thrashing-machine, Straw-conveyor for.....	C. D. Decker.....	141,858	Aug. 19, 1873	415	135	4	186
Thrashing-machine straw-stacking attachment.....	W. Carr.....	138,612	May 6, 1873	124	41	3	508
Thrashing-power, Traveling.....	R. W. Farris.....	142,621	Sept. 9, 1873	272	89	4	276
Thread-cutter.....	M. J. Pitrat.....	141,235	July 29, 1873	839	274	4	112
Thread dressing and winding machine.....	J. Short.....	139,521	June 3, 1873	65	22	3	614
Thread-ewener.....	J. B. Meldrum.....	140,215	June 24, 1873	723	227	3	699
Thread-making machine, Double-tapered.....	G. V. Sheffield.....	137,033	Mar. 18, 1873	610	202	3	313
Ticket-book, Railway-fare.....	T. A. Jobb and L. Bruah.....	137,209	Mar. 25, 1873	783	258	3	337
Ticket-box for railway-car.....	G. C. Thomas.....	145,030	Nov. 25, 1873	750	253	4	573
Ticket-box for railway-car.....	G. C. Thomas.....	146,108	Dec. 30, 1873	987	319	4	712
Ticket-case.....	L. J. Blades.....	145,388	Dec. 9, 1873	314	105	4	623
Ticket-case.....	J. Stokes, jr.....	144,420	Nov. 11, 1873	221	73	4	508
Ticket, Duplex.....	T. A. Jobb.....	137,081	Mar. 18, 1873	668	221	3	328
Ticket, Duplex-railway.....	T. A. Jobb.....	137,208	Mar. 25, 1873	782	258	3	337
Ticket-holder, Railway.....	J. C. Maloy.....	143,517	Oct. 7, 1873	99	35	4	389
Ticket printing and registering apparatus.....	J. Dyer.....	141,336	July 29, 1873	931	{ 303 304 305 }	4	120
Tidy-pin.....	G. Doolittle.....	144,325	Nov. 4, 1873	127	42	4	489
Tie: <i>See</i> Bag-tie. Bale-tie. Neck-tie. Railway-tie.							
Tile, Drain.....	J. Leffler.....	145,990	Nov. 25, 1873	713	241	4	570
Tile, Fire-proof illuminating.....	T. Hyatt.....	145,182	Dec. 2, 1873	135	44	4	596
Tile-machine.....	C. J. Morrill.....	142,576	Sept. 9, 1873	236	77	4	273
Till-alarm.....	J. F. Baldwin.....	139,530	June 3, 1873	73	25	3	615
Till-alarm.....	J. F. Baldwin.....	139,939	June 17, 1873	467	146	3	689
Till-alarm.....	J. F. Baldwin.....	145,777	Dec. 23, 1873	676	221	4	676
Till-alarm.....	G. L. Geiger.....	142,012	Aug. 19, 1873	551	182	4	197
Till-alarm.....	W. Mallick.....	145,514	Dec. 16, 1873	439	143	4	644
Till-alarm.....	E. O. Wood.....	145,824	Dec. 23, 1873	711	234	4	679
Tilting-chair.....	J. Enger.....	144,603	Nov. 18, 1873	378	127	4	532
Tilting-chair.....	F. A. Parker.....	137,091	Mar. 25, 1873	675	224	3	329
Tilting-chair.....	E. N. Tuttle.....	138,544	May 6, 1873	67	23	3	503
Tilting-chair.....	G. C. Winchester.....	138,461	Apr. 29, 1873	1,106	349	3	488
Tilting-gate.....	J. Bartholf.....	141,027	July 22, 1873	633	213	4	88
Tilting-machine.....	G. J. Smale.....	135,250	Jan. 28, 1873	714	228	3	105
Timber and loading vessels therewith, Means of raising floating.....	A. Bulman.....	143,873	Oct. 21, 1873	453	152	4	435
Time-check, Watchman's.....	T. Hahn.....	138,084	Apr. 22, 1873	748	236	3	451
Tin can, Air-tight.....	J. W. Wright.....	136,949	Mar. 18, 1873	538	178	3	307
Tin cans, Machine for severing.....	H. T. Vaders.....	145,260	Dec. 2, 1873	199	69	4	601
Tin cans, Sheet for forming the body of square or rectangular.....	J. Bowers.....	134,726	Jan. 14, 1873	224	72	3	38
Tin from waste tin-scrap, Recovering.....	H. Pantou.....	137,712	Apr. 8, 1873	396	123	3	401
Tin-scrap and obtaining useful products, Treating.....	H. Pantou.....	135,578	Feb. 4, 1873	173	55	3	141
Tinned sheet-iron, Restoring.....	W. E. Brockway.....	141,109	July 22, 1873	706	.....	4	94
Tinner's clippings, Treating.....	F. G. Morton.....	136,532	Mar. 4, 1873	162	.....	3	258
Tip-chair.....	B. A. Carlan.....	134,850	Jan. 14, 1873	330	105	3	46
Tipping-chair.....	H. K. White.....	139,639	June 3, 1873	171	56	3	623
Tire-bender.....	J. Tomlinson.....	135,498	Feb. 4, 1873	95	30	3	135
Tire-bending machine.....	F. E. Coleman.....	138,231	Apr. 29, 1873	897	283	3	472
Tire-heater.....	F. Strattner.....	138,952	May 13, 1873	434	136	3	543
Tire-heater.....	R. F. Thompson.....	143,041	Sept. 23, 1873	641	220	4	327
Tire-heating furnace.....	J. G. Rogers.....	143,465	Oct. 7, 1873	57	20	4	385
Tire-tightener.....	W. Bellairs and W. Ough.....	144,729	Nov. 18, 1873	483	164	4	540
Tire-tightener.....	M. E. Jacobs.....	142,633	Sept. 9, 1873	281	92	4	276
Tire-tightener.....	W. D. G. Quigley.....	137,957	Apr. 15, 1873	614	193	3	431
Tire-upsetting machine.....	D. L. Badley.....	141,687	Aug. 12, 1873	259	84	4	164
Tire-upsetting machine.....	R. Gibbs.....	142,455	Sept. 2, 1873	118	38	4	252
Tire-upsetting machine.....	C. J. Peterson.....	136,455	Mar. 4, 1873	86	30	3	252
Tire-upsetting machine.....	J. L. and A. H. Yeager.....	142,833	Sept. 16, 1873	460	156	4	301
Tobacco and match box, Combined.....	C. Remhof.....	135,468	Feb. 4, 1873	88	27	3	134
Tobacco, Apparatus for pressing and packing.....	J. K. Earickson and J. R. Harris.....	136,225	Feb. 25, 1873	771	249	3	226
Tobacco-box, Machine for recessing.....	I. M. Reanes.....	138,193	Apr. 22, 1873	843	266	3	459
Tobacco-case.....	J. W. Stone.....	140,093	June 17, 1873	600	189	3	680
Tobacco, Curing.....	G. D. Culp.....	135,468	Feb. 4, 1873	70	.....	3	133
Tobacco-cutter, Self-cleaning.....	W. J. Faul.....	140,693	July 8, 1873	314	106	4	45
Tobacco-cutting machine.....	N. H. Borgfeldt.....	138,606	May 6, 1873	119	39	3	507
Tobacco-cutting machine.....	F. S. Kinney.....	140,203	June 24, 1873	713	225	3	698
Tobacco-dryer.....	J. M. Smith.....	139,977	June 17, 1873	494	156	3	672
Tobacco-drying house.....	E. W. Ellaworth.....	144,194	Nov. 4, 1873	21	6	4	480
Tobacco-finisher.....	A. P. Southard.....	139,742	June 10, 1873	287	89	3	648
Tobacco, Flavoring, coating, and putting up.....	J. Kerr.....	137,084	Mar. 18, 1873	671	.....	3	328
Tobacco for packing, Shaping and arranging.....	J. K. Earickson and J. R. Harris.....	135,897	Feb. 18, 1873	481	155	3	191
Tobacco-hanger.....	D. C. Burr and J. A. Johnson.....	144,503	Nov. 11, 1873	285	97	4	513
Tobacco-hanger.....	E. Kempshall.....	139,718	June 10, 1873	263	82	3	646
Tobacco-hanging hook.....	H. N. Strong.....	141,899	Aug. 19, 1873	459	150	4	189
Tobacco-hiller.....	Z. D. Blakistone.....	136,897	Mar. 18, 1873	494	164	3	303
Tobacco-knife.....	I. S. Goldman.....	143,900	Oct. 21, 1873	474	159	4	437
Tobacco-leaves, Machine for cleaning and repairing.....	J. L. Jones.....	141,563	Aug. 5, 1873	134	42	4	146
Tobacco, Machine for manufacturing plug.....	J. L. Jones.....	141,562	Aug. 5, 1873	133	42	4	146
Tobacco, Manufacture of plug and bunch.....	I. Eppinger.....	136,312	Feb. 25, 1873	848	274	3	931
Tobacco-package.....	E. L. Feigner.....	136,984	Mar. 18, 1873	566	189	3	309
Tobacco-package.....	G. Robinson.....	145,451	Dec. 9, 1873	366	122	4	627
Tobacco packing and preserving box.....	L. Wertheimer.....	139,747	June 10, 1873	292	90	3	648
Tobacco packing, wrapping, and labeling machine.....	J. H. Frowbridge.....	143,545	Oct. 7, 1873	127	43, 44	4	391
Tobacco-pipe, Compound for use in.....	W. E. Turner.....	134,713	Jan. 7, 1873	199	65	3	22

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Tobacco-plant cutter.....	J. N. Cady.....	137, 760	Apr. 15, 1873	451	140	3	418
Tobacco, Plug and bunch.....	I. Eppinger.....	140, 020	June 17, 1873	532	168	3	675
Tobacco-pouch.....	D. Read.....	136, 457	Mar. 4, 1873	88	30	3	253
Tobacco-press.....	D. La Du.....	135, 648	Feb. 11, 1873	249	78	3	159
Tobacco-press.....	F. J. Witovec.....	138, 549	May 6, 1873	73	24	3	504
Tobacco-press, Box-clamp for.....	T. I. Robertson.....	144, 142	Oct. 28, 1873	702	233	4	466
Tobacco, Process for treating.....	J. A. Stafford and H. C. Fowler.....	136, 872	Mar. 18, 1873	471	.....	3	301
Tobacco-ridger.....	J. R. Whittmore.....	142, 753	Sept. 9, 1873	385	129	4	285
Tobacco-rolling machine.....	D. W. De Forest.....	139, 375	May 27, 1873	830	266	3	596
Tobacco shearing and booking machine.....	I. W. Bisbing and J. S. McCune.....	137, 170	Mar. 25, 1873	743	247	3	334
Tobacco-stripping machine.....	J. R. Tunncliff and J. L. Thomson.....	145, 699	Dec. 16, 1873	596	195	4	658
Tobacco-topper.....	J. S. Ackley and D. S. Ranney.....	135, 305	Jan. 28, 1873	756	244	3	108
Toe-nails, Clasp for preventing ingrowing of.....	E. E. Stedman.....	137, 106	Mar. 25, 1873	688	229	3	330
Toilet-cabinet, Lady's.....	J. C. Vetter.....	140, 324	June 24, 1873	819	{ 259 260 }	3	707
Toilet-comb.....	I. S. and J. W. Hyatt.....	135, 918	Feb. 18, 1873	497	162	3	192
Toilet-rack.....	O. H. Cooke and F. Kenfield.....	143, 501	Oct. 7, 1873	88	30	4	387
Toilet-stand.....	D. Sherwood.....	138, 538	May 6, 1873	63	21	3	502
Tomatoes, Drying.....	M. P. Smith.....	137, 377	Apr. 1, 1873	48	.....	3	361
Tonga, Clothes.....	E. A. Foulke.....	144, 972	Nov. 25, 1873	697	235	4	569
Tonga, Culinary.....	A. Greenleaf.....	145, 564	Dec. 16, 1873	482	157	4	648
Tonga, Fire.....	C. Sweet.....	139, 832	June 10, 1873	366	113	3	654
Tonga, Flooring.....	E. J. Houston.....	135, 916	Feb. 18, 1873	496	161	3	192
Tonga for lifting fruit-cans.....	A. H. Johnson.....	134, 604	Jan. 7, 1873	101	32	3	15
Tonga, Gripping.....	W. J. Hallefaa.....	134, 798	Jan. 14, 1873	282	91	3	43
Tonga, Guttering.....	J. Schwartz.....	139, 198	May 20, 1873	672	210	3	575
Tonga, Hog.....	H. W. Hill.....	145, 105	Dec. 2, 1873	61	20	4	590
Tonga, Ice.....	W. T. Farre.....	136, 593	Mar. 11, 1873	231	78	3	273
Tonga, Ice.....	E. C. Johnson.....	142, 916	Sept. 16, 1873	526	179	4	307
Tonga, Oyster.....	I. Smith.....	135, 167	Jan. 21, 1873	612	199	3	84
Tonga, Pipe.....	J. R. Brown.....	142, 143	Aug. 26, 1873	691	227	4	218
Tonga, Pipe.....	J. R. Brown.....	144, 253	Nov. 4, 1873	72	23	4	484
Tonga, Pipe.....	J. R. Brown.....	145, 929	Dec. 30, 1873	827	269	4	699
Tonga, Pipe.....	A. H. Jarecki.....	138, 161	Apr. 22, 1873	809	257	3	456
Tonga, Pipe.....	F. H. Merrill.....	139, 174	May 20, 1873	650	203	3	573
Tonga, Pipe.....	J. H. Baker, A. Doney, and F. N. Owen.....	145, 830	Dec. 23, 1873	716	235	4	680
Tool, Combination.....	T. Williams.....	138, 548	May 6, 1873	73	24	3	593
Tool, Compound.....	J. Dillon.....	145, 992	Dec. 30, 1873	883	276	4	703
Tool, Compound.....	F. W. Farrar.....	142, 782	Sept. 16, 1873	420	142	4	298
Tool, Compound.....	E. Omensetter and J. F. Parker.....	138, 683	May 6, 1873	192	61	3	513
Tool-handle.....	W. B. Hill.....	142, 568	Sept. 9, 1873	229	75	4	272
Tool-handle.....	W. H. McCoy.....	138, 423	Apr. 29, 1873	1, 074	338	3	466
Tool-handle.....	S. F. Streeter.....	145, 252	Dec. 2, 1873	192	66	4	600
Tool-holder.....	L. L. Lamb.....	135, 715	Feb. 11, 1873	308	98	3	164
Tool-holder.....	I. F. Murch.....	136, 450	Mar. 4, 1873	83	28	3	252
Tool-receptacle.....	L. L. Lamb.....	141, 934	Aug. 19, 1873	488	161	4	192
Tools, Combined.....	W. Bartle.....	136, 693	Mar. 11, 1873	312	103	3	279
Tools, Process of hardening edge.....	L. W. Stuart.....	140, 390	July 1, 1873	46	.....	4	12
Tooth-plugger.....	T. L. Buckingham.....	142, 205	Aug. 26, 1873	741	244	4	222
Top, Spinning.....	J. Spencer.....	141, 089	July 22, 1873	687	231	4	92
Torch and fire-lighter, Combined.....	P. Ryan.....	135, 592	Feb. 4, 1873	189	59	3	142
Torch, Gas-lighting.....	C. H. Roberts.....	136, 006	Feb. 18, 1873	570	188	3	198
Torpedo.....	C. Nelson.....	136, 000	Feb. 18, 1873	565	186	3	198
Torpedo for oil-well.....	A. Hamar.....	137, 198	Mar. 25, 1873	772	255	3	336
Torpedo for oil-well.....	A. Hamar.....	137, 916	Apr. 15, 1873	582	183	3	429
Torpedo, Self-tamping.....	S. A. Briggs.....	138, 373	Apr. 29, 1873	1, 026	323	3	462
Torpedo, Self-tamping.....	M. Gotham.....	137, 196	Mar. 25, 1873	771	254	3	336
Torsion-spring, Vehicle.....	R. Dudley.....	137, 899	Apr. 15, 1873	569	179	3	428
Towel and clothes rack.....	L. M. Fitch.....	137, 904	Apr. 15, 1873	573	180	3	428
Towel, Medicated.....	L. Stewart.....	136, 466	Mar. 4, 1873	98	.....	3	253
Towel-rack.....	J. Rearden.....	137, 960	Apr. 15, 1873	617	194	3	432
Towel-rack.....	C. Schermerhorn.....	145, 367	Dec. 9, 1873	294	99	4	621
Towel-rack and boot-jack combined.....	C. Darnstaedt.....	139, 551	June 3, 1873	92	31	3	616
Toy.....	J. J. Arnaud.....	141, 414	Aug. 5, 1873	3	1	4	135
Toy.....	C. Ball.....	138, 365	Apr. 29, 1873	1, 020	321	3	481
Toy.....	A. R. Batchelder.....	139, 533	June 3, 1873	76	26	3	615
Toy.....	L. Bryan.....	140, 402	July 1, 1873	54	19	4	12
Toy.....	M. Grebner.....	139, 783	June 10, 1873	324	101	3	651
Toy.....	F. Hubbard and E. B. Severance.....	138, 401	Apr. 29, 1873	1, 049	330	3	484
Toy.....	H. T. Lee.....	140, 206	June 24, 1873	715	225	3	698
Toy.....	R. G. Measinger.....	141, 009	July 22, 1873	617	208	4	87
Toy.....	T. Morley.....	138, 038	Apr. 22, 1873	708	224	3	448
Toy.....	J. Schwennesen.....	140, 649	July 8, 1873	277	94	4	42
Toy.....	W. R. Withers.....	137, 119	Mar. 25, 1873	700	232	3	331
Toy, Automatic.....	H. L. Brower.....	140, 883	July 15, 1873	479	162	4	66
Toy, Automatic.....	A. W. Browne.....	135, 770	Feb. 11, 1873	353	113	3	167
Toy, Automatic.....	A. H. Dean.....	144, 892	Nov. 25, 1873	632	215	4	563
Toy, Automatic swimmer.....	I. F. Eaton.....	140, 259	June 24, 1873	758	239	3	702
Toy, Automaton.....	R. J. Clay.....	140, 765	July 15, 1873	379	130	4	58
Toy-block.....	H. Fairbanks.....	135, 417	Feb. 4, 1873	23	7	3	129
Toy-blocks for object-teaching.....	N. Muller.....	143, 835	Oct. 21, 1873	422	140	4	433
Toy building-block.....	A. Oberndorf, jr.....	144, 124	Oct. 28, 1873	687	227	4	465
Toy-catapult.....	W. S. How.....	140, 922	July 15, 1873	519	{ 174 175 }	4	70
Toy-dancer, Automatic.....	H. L. Brower.....	143, 121	Sept. 23, 1873	704	241	4	332
Toy-dancer, Automatic.....	W. A. P. La Grove.....	143, 022	Sept. 23, 1873	673	232	4	329
Toy-device for making soap-bubbles.....	S. B. Bliss.....	143, 432	Oct. 7, 1873	32	11	4	383
Toy-gun.....	A. James.....	137, 080	Mar. 18, 1873	667	221	3	328
Toy-gun.....	W. Mills and D. J. Wolfe.....	145, 745	Dec. 23, 1873	648	212	4	674
Toy-gun.....	R. Y. Murphy.....	143, 457	Oct. 7, 1873	50	18	4	385
Toy-gymnaast.....	F. A. Bancker.....	144, 651	Nov. 18, 1873	423	142	4	535
Toy, Gyroscopic.....	A. C. Würtelo.....	139, 988	June 17, 1873	502	159	3	672
Toy-horn.....	W. A. Harwood.....	144, 026	Oct. 28, 1873	607	201	4	458

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Toy-house	J. B. Smith	138,208	Apr. 22, 1873	854	270	3	460
Toy money-box	R. Frisbie	140,358	July 1, 1873	21	7	4	10
Toy money-box	J. Hall	145,734	Dec. 23, 1873	639	209	4	673
Toy money-box	C. C. Johnson	144,106	Oct. 28, 1873	674	223	4	463
Toy money-box	H. W. Prouty	141,516	Aug. 5, 1873	93	29	4	142
Toy money-box	T. A. Taylor	140,798	July 15, 1873	406	138	4	61
Toy-perambulator	J. S. Krinks	137,693	Apr. 8, 1873	378	117	3	399
Toy-pistol	O. W. Horr	139,391	May 27, 1873	852	273	3	598
Toy-pistol	H. M. Quackenbush	145,238	Dec. 2, 1873	179	62	4	599
Toy-pistol or gun	G. S. Hastings	145,798	Dec. 23, 1873	692	227	4	678
Toy-propeller	G. W. Jones	144,767	Nov. 18, 1873	517	175	4	543
Toy putty-blower	N. Joseph	145,109	Dec. 2, 1873	63	21	4	590
Toy-puzzle	B. F. Ellis	136,645	Mar. 11, 1873	274	92	3	276
Toy-velocipede	W. Sellers	135,851	Feb. 11, 1873	428	139	3	173
Toy-whistle	J. Waters	143,044	Sept. 23, 1873	644	221	4	327
Trace-carrier	R. H. Warriner	135,951	Feb. 18, 1873	524	171	3	194
Trace-detacher	W. H. Stimely	138,706	May 6, 1873	211	67	3	514
Trace, Eyelet for harness	N. Hiatt	144,096	Oct. 28, 1873	665	219	4	463
Trace-fastening	F. M. Snively	139,432	May 27, 1873	691	287	3	600
Trace, Harness	R. Williams	145,708	Dec. 16, 1873	605	197	4	658
Traces, Eyelet for harness	S. Walters	136,796	Mar. 11, 1873	398	132	3	296
Track-cleaner	A. J. Gove	134,660	Jan. 7, 1873	154	51	3	19
Track-cleaner	E. Abbiati	144,724	Nov. 18, 1873	479	163	4	540
Track-cleaner	F. Bue	145,090	Dec. 2, 1873	49	15	4	599
Track-cleaner	J. H. Miller	138,913	May 13, 1873	403	127	3	540
Track-lifter	G. J. Kinzel	140,713	July 8, 1873	330	112	4	46
Traction-engine	D. H. Ball	139,997	June 17, 1873	510	162	3	673
Traction-engine	N. M. Mendenhall	144,467	Nov. 11, 1873	255	86	4	511
Traction-engine	L. Perkins	143,028	Sept. 23, 1873	629	214 215	4	326
Traction or portable engine	D. W. Kellogg	135,128	Jan. 21, 1873	581	189	3	82
Traction-wheel	W. E. Bartlett	138,469	May 6, 1873	4	2	3	498
Traction-wheel	J. G. Gallet	139,711	June 10, 1873	255	89	3	645
Traction-wheel	O. Hyde	134,404	Apr. 29, 1873	1,051	391	3	484
Traction-wheel	C. H. Perkins	138,578	May 6, 1873	99	32	3	506
Traction-wheel	H. T. Stith	138,707	May 6, 1873	212	67	3	514
Traction-wheel	J. V. Strain	138,677	Mar. 11, 1873	301	100	3	278
Tram-way, Plate for	S. D. Tullman	146,033	Dec. 30, 1873	917	297	4	706
Transom lifter and lock	J. F. Wollensak	136,801	Mar. 11, 1873	403	133	3	287
Transplanter	J. E. Stanton and E. C. Pedrick	134,775	Jan. 14, 1873	262	86	3	41
Transplanter, Tobacco	C. E. Bates	140,806	July 15, 1873	414	140	4	61
Trap:							
<i>See</i> Animal-trap.							
Animal and insect trap.							
Animal cage-trap.							
Ant-trap.							
Bed-bug trap.							
Fish-trap.							
Fly-trap.							
Hog-trap.							
Insect-trap.							
Mole-trap.							
Pigeon-trap.							
Pipe-trap.							
Rat-trap.							
Sewer-trap.							
Sewer-gas trap.							
Sewer inlet-trap.							
Sink-trap.							
Steam-trap.							
Steam-pipe trap.							
Stench-trap.							
Waste-trap.							
Water-trap.							
Traveling-bag	R. Schmitt	135,596	Feb. 4, 1873	192	60	3	142
Traveling-bag frame, Manufacture of	J. B. and C. F. Blakslee	137,339	Apr. 1, 1873	58	17	3	361
Traveling-bags, Manufacture of	J. W. Lieb	144,340	Nov. 4, 1873	139	46	4	490
Tray, Fruit-drying	G. W. Stevens	137,502	Apr. 1, 1873	206	63	3	374
Tray or show board	D. H. Klotz	134,896	Jan. 14, 1873	371	118	3	50
Treadle	J. B. Belinger	136,810	Mar. 18, 1873	424	140	3	298
Treadle	W. Felzer	144,525	Nov. 11, 1873	304	102	4	514
Treadle	L. Heins	143,902	Oct. 21, 1873	476	160	4	437
Treadle	G. B. Kirkham	136,603	Mar. 11, 1873	237	80	3	273
Treadle	J. H. Osborn	137,090	Mar. 18, 1873	674	224	3	329
Treadle	J. Tisdale, J. Putnam, and H. N. Allen	143,543	Oct. 7, 1873	125	42	4	391
Treadle-mechanism	B. B. Chandler	142,770	Sept. 16, 1873	409	138	4	297
Treadle-movement	J. Evans	139,305	May 27, 1873	782	248	3	592
Tree-protector	C. Ayers	135,685	Feb. 11, 1873	285	89	3	162
Tree-protector	G. H. Hume	141,716	Aug. 12, 1873	281	92	4	166
Tree-protector	J. Neff	145,585	Dec. 16, 1873	498	164	4	650
Trenches, Extensible brace for supporting	S. G. McKiernan	145,116	Dec. 2, 1873	71	22	4	591
Trenches, Extensible brace for supporting	W. Reilly	145,126	Dec. 2, 1873	82	27	4	592
Trestle	M. M. Lucky	141,228	July 29, 1873	832	272	4	111
Trimmer:							
<i>See</i> Cigar-trimmer.							
Edge-trimmer.							
Hedge-trimmer.							
Lamp-wick trimmer.							
Road-trimmer.							
Trimming	O. M. Chamberlain	137,344	Apr. 1, 1873	62	19	3	362
Trimming	W. Murray	137,857	Apr. 15, 1873	533	166	3	425
Trimming	W. Murray	137,858	Apr. 15, 1873	534	166	3	425
Trimming	W. Murray	144,031	Oct. 28, 1873	611	202	4	458
Trimming	W. Murray	144,032	Oct. 28, 1873	611	202	4	458

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Trimming	W. Murray	144, 033	Oct. 28, 1873	612	202	4	458
Trimming	J. Thomas	140, 174	June 24, 1873	690	217	3	696
Trimming	W. Walker	144, 807	Nov. 18, 1873	550	187	4	546
Trolling-spoon	W. Harper and W. Smith	143, 146	Sept. 23, 1873	721	249	4	333
Trough:							
<i>See</i> Eaves-trough.							
Grindstone-trough.							
Horse-trough.							
Wagon-extension trough.							
Trowel	S. F. Streeter	136, 878	Mar. 18, 1873	478	158	3	302
Truck	J. Chisholm and J. C. Mayer	135, 905	Jan. 28, 1873	667	215	3	101
Truck	H. Pratt and T. T. Munhall	145, 967	Dec. 30, 1873	863	280	4	702
Truck	M. L. Seuderling	135, 247	Jan. 28, 1873	713	228	3	105
Truck, Barrel	V. Bell	135, 309	Jan. 28, 1873	759	245	3	109
Truck, Changeable-gage car	W. W. Whitaker	142, 751	Sept. 9, 1873	383	126	4	284
Truck, Changeable-gage railway	J. McCauley	137, 308	Apr. 1, 1873	26	8	3	359
Truck, Dumping	F. H. Abeel	141, 098	July 22, 1873	696	234	4	93
Truck for carrying bricks	R. A. Smith	143, 853	Oct. 21, 1873	439	146	4	434
Truck for carrying safes, &c	F. Luehmann and C. Roehl	141, 653	Aug. 12, 1873	228	72	4	161
Truck for moving buildings	T. J. Reamy	134, 930	Jan. 14, 1873	399	127	3	52
Truck for moving buildings	W. E. Walker	134, 950	Jan. 14, 1873	417	133	3	53
Truck for transporting railway-rails, car-axles, &c	C. A. Ball	142, 759	Sept. 16, 1873	401	135	4	296
Truck, Hand	N. Adams	145, 266	Dec. 9, 1873	213	73	4	615
Truck, Hand	J. J. Collingbourne	135, 889	Feb. 18, 1873	476	153	3	191
Truck, Hand	L. Gilson	134, 537	Jan. 7, 1873	31	10	3	10
Truck, Hand	H. S. La Tourette	137, 086	Mar. 18, 1873	672	223	3	329
Truck, Piano	C. A. French	142, 386	Sept. 2, 1873	60	20	4	247
Truck, Railway	J. W. Bower	135, 702	Feb. 11, 1873	345	111	3	167
Truck, Railway-car	J. Darling	144, 389	Nov. 11, 1873	192	66	4	506
Truck, Railway-car	G. Dixon	141, 859	Aug. 19, 1873	416	135	4	186
Truck, Railway-car	P. G. Gardiner	134, 743	Jan. 14, 1873	236	76	3	39
Truck, Railway-car	M. H. Kollock	136, 248	Feb. 25, 1873	791	256	3	227
Truck, Railway-car	W. Youmans	135, 614	Feb. 4, 1873	212	66	3	144
Truck, Railway-car safety	B. P. Lamason	135, 716	Feb. 11, 1873	308	98	3	164
Truck, Safety-attachment for car	G. C. Offen	145, 122	Dec. 2, 1873	77	24	4	591
Truck, Sewer-cleaning	W. S. McHarg and A. B. Hill	140, 059	June 17, 1873	568	179	3	678
Trucks, Supplementary wheel for car	S. Spielman	138, 949	May 13, 1873	431	135	3	543
Trunk	M. H. Bliss	138, 000	Apr. 22, 1873	669	212	3	445
Trunk	G. B. Jenkinson	139, 158	May 20, 1873	637	199	3	572
Trunk	H. L. Lowman	145, 435	Dec. 9, 1873	355	118	4	626
Trunk and hat-box, Hand	Q. A. Scott	140, 548	July 1, 1873	175	60	4	92
Trunk and strap fastener	J. Fairman	139, 460	June 3, 1873	16	5	3	610
Trunk and wardrobe combined	J. A. Payne	139, 420	May 27, 1873	881	283	3	600
Trunk-catch	H. C. Faber	139, 306	May 27, 1873	782	248	3	592
Trunk, Extension	G. Engelsman	144, 022	Oct. 28, 1873	604	200	4	458
Trunk-fastener	J. Arnold	140, 338	July 1, 1873	2	1	4	8
Trunk-lid support	A. V. Romadka	141, 591	Aug. 5, 1873	154	50	4	148
Trunk-lid supporter	J. Stott	139, 435	May 27, 1873	893	288	3	601
Trunk-lock	T. L. Rivers	140, 308	June 24, 1873	801	254	3	705
Trunk-lock or catch	A. V. Romadka	145, 817	Dec. 23, 1873	706	232	4	679
Trunk, &c., Strap-fastening for	W. Grinstead	142, 565	Sept. 9, 1873	227	74	4	272
Truss	C. H. Eggleston	135, 638	Feb. 11, 1873	240	75	3	158
Truss	G. W. Gregory	138, 640	May 6, 1873	152	49	3	510
Truss	J. F. Groves	142, 337	Sept. 2, 1873	14	5	4	243
Truss	E. W. Higbee	141, 220	July 29, 1873	826	270	4	111
Truss	D. Pomeroy	137, 380	Apr. 1, 1873	96	31	3	364
Truss	L. and W. Pomeroy	139, 917	June 17, 1873	451	140	3	668
Truss	A. T. C. Schoevers	140, 168	June 24, 1873	684	215	3	695
Truss	J. A. Sherman	139, 926	June 17, 1873	458	143	3	669
Truss, Brace	H. H. Roedel	145, 014	Nov. 25, 1873	734	248	4	572
Truss-pad	N. Jones	136, 735	Mar. 11, 1873	347	115	3	282
Truss, Pad for pile	J. L. Rowe	144, 145	Oct. 28, 1873	704	234	4	466
Truss-spring	J. W. Riggs	136, 387	Mar. 4, 1873	31	12	3	248
Tub:							
<i>See</i> Bath-tub.							
Butter-tub.							
Garbage-tub.							
Wash-tub.							
Tube:							
<i>See</i> Metal-tube.							
Metallic-tube.							
Paper-tube.							
Smoking-tube.							
Soda-water draft-tube.							
Speaking-tube.							
Taper-tube.							
Well-tube.							
Tube-cutter	E. Manuel	135, 484	Feb. 4, 1873	84	26	3	134
Tube, Die for forming	J. Kintz	136, 654	Mar. 11, 1873	280	94	3	277
Tube expander	C. W. Deane	139, 374	May 27, 1873	830	266	3	586
Tube-socket bending-machine	W. L. Newsham	137, 792	Apr. 15, 1873	477	149	3	420
Tubes, &c., Machine for chucking and revolving	J. B. Root	141, 593	Aug. 5, 1873	156	50	4	148
Tubing, Machine for bending	W. T. Farre	144, 449	Nov. 11, 1873	240	81	4	509
Tuck-creaser	S. P. Balcock	134, 966	Jan. 21, 1873	441	141	3	71
Tuck-creaser	W. Carpenter	135, 078	Jan. 21, 1873	540	175	3	79
Tuck-marker	F. L. Telford	141, 095	July 22, 1873	693	233	4	93
Tug-fastening	J. Turley	135, 299	Jan. 28, 1873	752	242	3	108
Tug-strap	M. Cadwell	134, 975	Jan. 21, 1873	450	144	3	72
Tuning-key, Piano	A. H. Affleck	140, 450	July 1, 1873	88	31	4	15
Tunnel and sewer, Construction of	G. Knoll	144, 112	Oct. 28, 1873	678	224	4	464
Tunnel, &c., Metallic arch for	J. Groves	140, 498	July 1, 1873	132	45	4	19
Turbine-wheel	D. B. Flint	138, 239	Apr. 29, 1873	903	285	3	472
Turbine-wheel, Metallic case for	A. Myers	137, 471	Apr. 1, 1873	173	55	3	371

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Turn-table.....	A. P. Boller.....	137,887	Apr. 15, 1873	555	174	3	496
Turn-table.....	W. H. Burch.....	139,941	June 17, 1873	469	147	3	669
Turn-table.....	J. Enright.....	135,101	Jan. 21, 1873	556	181	3	80
Turn-table.....	C. Macdonald and C. O. H. Fritzsche.....	139,512	June 3, 1873	59	19, 20	3	613
Turn-table.....	W. Wharton, jr.....	135,304	Jan. 28, 1873	755	244	3	108
Turning-tool.....	J. W. Ellis.....	143,893	Oct. 21, 1873	468	157	4	436
Turpentine from sawdust, Production of.....	S. L. Cole.....	145,151	Dec. 2, 1873	104	.....	4	594
Turpentine-tool.....	J. G. Cobb.....	139,369	May 27, 1873	826	265	3	566
Tuyere.....	G. Harsch.....	138,248	Apr. 29, 1873	915	289	3	473
Tuyere for Bessemer-converter, Apparatus for making.....	A. I. Haws and J. A. Vaughan.....	134,885	Jan. 14, 1873	360	115	3	49
Tuyere, Manufacture of Bessemer-steel converter.....	J. E. Atwood.....	144,796	Nov. 18, 1873	481	.....	4	540
Tuyeres, Compound for.....	J. E. Atwood.....	138,781	May 13, 1873	291	.....	3	531
Twine-cutter.....	F. J. Seymour.....	139,427	May 27, 1873	888	286	3	600
Twine-holder.....	D. Webber.....	143,268	Sept. 30, 1873	830	285	4	358
Twist-drills, Machine for milling.....	S. W. Card.....	141,760	Aug. 12, 1873	319	104	4	169
Twisting and doubling machine, Stop-mechanism for.....	J. A. H. Carroll.....	139,768	June 10, 1873	312	96	3	649
Twisting-machine, Stopping-mechanism for.....	A. J. Milstead.....	141,158	July 22, 1873	752	{ 247 } 248	4	97
Type.....	W. Shaw.....	140,436	July 1, 1873	78	27	4	14
Type.....	E. R. Whitney.....	139,640	June 3, 1873	172	57	3	683
Type-casting apparatus.....	A. E. Converse.....	136,815	Mar. 18, 1873	428	142	3	298
Type-casting machine.....	J. M. Conner.....	144,066	Oct. 28, 1873	641	211	4	461
Type-casting machine.....	J. A. T. Overend.....	136,091	Feb. 18, 1873	643	211	3	203
Type-composing machine.....	C. Kastenbein.....	140,279	June 24, 1873	777	{ 246 } 247	3	703
Type-distributing machine.....	M. Gally.....	138,241	Apr. 29, 1873	905	285	3	473
Type-distributing machine.....	C. Kastenbein.....	140,278	June 24, 1873	775	{ 245 } 246	3	703
Type for type-setting machine, Apparatus for arranging.....	D. B. Ray.....	142,652	Sept. 9, 1873	297	97, 98	4	278
Type, Manufacture of printing.....	J. Silversmith.....	144,571	Nov. 11, 1873	345	{ 116 } 117	4	517
Type, Printing.....	D. W. Bruce.....	139,365	May 27, 1873	824	{ 263 } 264	3	595
Type-setting machine.....	W. H. Baldwin.....	136,018	Feb. 16, 1873	581	191	3	199
Type-setting machine.....	C. T. Moore.....	137,466	Apr. 1, 1873	168	53, 54	3	371
Type-setting machine.....	S. H. Orwig.....	138,922	May 13, 1873	409	129	3	541
Type-writing machine.....	J. Galloway.....	144,450	Nov. 11, 1873	241	81, 82	4	509
Type-writing machine.....	J. R. Pember.....	139,914	June 17, 1873	447	139	3	668
U.							
Umbrella.....	J. B. Blair.....	138,729	May 13, 1873	245	77	3	527
Umbrella.....	J. H. Dugan and G. Moncrief.....	144,021	Oct. 28, 1873	603	200	4	458
Umbrella.....	G. G. Griswold.....	145,733	Dec. 23, 1873	638	208	4	673
Umbrella.....	C. C. Lusby.....	141,151	July 22, 1873	744	246	4	97
Umbrella.....	J. McAuliffe.....	141,941	Aug. 19, 1873	492	163	4	192
Umbrella.....	H. L. Power.....	144,865	Nov. 25, 1873	614	209	4	562
Umbrella.....	G. W. Pressey.....	145,310	Dec. 9, 1873	250	83	4	618
Umbrella.....	L. Sawyer.....	145,904	Dec. 23, 1873	786	257	4	685
Umbrella.....	C. B. Spencer.....	144,876	Nov. 25, 1873	622	211	4	562
Umbrella and cane combined.....	T. R. L. Chevers.....	139,295	May 27, 1873	772	245	3	591
Umbrella-cover.....	D. W. Odiorne.....	143,297	Sept. 30, 1873	856	293	4	360
Umbrella-handle.....	A. Oberndorf, jr.....	137,233	Mar. 25, 1873	802	264	3	339
Umbrella, Manufacture of runner and top-notch for.....	T. Cox and W. Holland.....	135,321	Jan. 28, 1873	770	249	3	110
Umbrella-notches, Manufacture of.....	A. and I. Herzberg.....	140,920	July 15, 1873	517	174	4	69
Umbrella-ribs, Machine for affixing middle-bits to.....	A. Wilson.....	143,210	Sept. 23, 1873	774	267	4	338
Umbrella-ribs, steel strips, &c., Apparatus for tempering.....	A. Wilson.....	136,197	Feb. 25, 1873	751	242	3	224
Umbrella-runner.....	S. Wales.....	135,677	Feb. 11, 1873	275	87	3	161
Umbrella-runners, Machine for cutting nicks in.....	O. M. Smith.....	137,256	Mar. 25, 1873	823	{ 270 } 271	3	340
Umbrella-stretcher, Manufacture of.....	J. Shepard.....	139,088	May 20, 1873	567	178	3	567
Umbrella-support.....	G. S. Cooper.....	138,861	May 13, 1873	562	112	3	537
Umbrella-supporter.....	W. A. Drown, jr.....	145,408	Dec. 9, 1873	332	111	4	624
Umbrella-tip retainer.....	C. C. Lusby and W. W. Winter.....	139,405	May 27, 1873	869	278	3	599
Umbrella, Walking-cane.....	E. Wright.....	138,726	May 6, 1873	232	72	3	516
Union coupling.....	W. B. Snow.....	139,203	May 20, 1873	676	212	3	576
Universal coupling.....	H. S. Leland.....	138,031	Apr. 22, 1873	701	222	3	448
Universal jointer.....	J. H. Raynard, B. W. and W. P. Hatch.....	138,284	Apr. 29, 1873	949	299	3	476
Universal joint.....	J. Troxel.....	137,578	Apr. 8, 1873	280	86	3	391
Universal joint-coupling.....	H. B. Whitehead.....	135,054	Jan. 21, 1873	524	169	3	77
Urinal.....	J. C. Garney.....	145,344	Dec. 9, 1873	278	93	4	620
Urinal for medical purposes, Bed.....	J. R. Knight and J. P. Coburn.....	137,214	Mar. 25, 1873	787	260	3	337
Uterine supporter.....	A. C. Byam.....	144,615	Oct. 14, 1873	202	68	4	406
Uterine supporter.....	H. N. Caner.....	137,531	Apr. 8, 1873	238	73	3	388
Uterine supporter.....	G. Dirksen.....	136,046	Feb. 18, 1873	603	198	3	201
V.							
Vacuum-pan.....	A. P. Brown.....	138,375	Apr. 29, 1873	1,028	324	3	482
Vacuum-pan for manufacturing sugar, &c.....	J. B. Root.....	144,358	Nov. 4, 1873	156	51	4	491
Valises, &c., Device for connecting frames of.....	C. Votti.....	144,878	Nov. 25, 1873	623	211	4	562
Valve.....	G. R. Crane.....	145,789	Dec. 23, 1873	685	224	4	677
Valve.....	B. Fitts.....	146,057	Dec. 30, 1873	942	303	4	708
Valve.....	A. Marriott.....	145,996	Nov. 25, 1873	719	243	4	571
Valve.....	C. F. Murdock.....	144,692	Nov. 18, 1873	454	154	4	538
Valve.....	J. A. Nichols.....	145,964	Dec. 30, 1873	861	279	4	701
Valve-actuating mechanism for engines.....	F. Chase.....	144,831	Nov. 25, 1873	581	{ 198 } 199	4	559
Valve, Alarm safety.....	F. Steele.....	143,858	Oct. 21, 1873	442	147	4	434
Valve and cut-off, Rotary.....	W. S. Bartle.....	141,982	Aug. 19, 1873	523	173	4	195

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Valve and cut-off, Rotary	J. W. Strange	139, 033	May 20, 1873	513	162	3	563
Valve and trap, Combined globe	H. J. McMahon	136, 746	Mar. 11, 1873	357	118	3	283
Valve and variable cut-off, Rotary	R. T. P. Allen	137, 163	Mar. 25, 1873	735	244	3	334
Valve, Automatic regulating	G. L. Kitson	139, 163	May 20, 1873	641	200	3	573
Valve, Automatic regulating	G. L. Kitson	142, 027	Aug. 19, 1873	556	187	4	198
Valve, Balanced	N. H. Bundy	137, 654	Apr. 8, 1873	341	105	3	396
Valve, Balanced	F. P. Cady	138, 992	May 20, 1873	479	152	3	560
Valve, Balanced	H. Fitzsimmons	136, 985	Mar. 18, 1873	568	189	3	309
Valve, Balanced	A. N. Hadley	138, 397	Apr. 29, 1873	1, 045	329	3	483
Valve, Balanced	J. H. Stombs	143, 193	Sept. 23, 1873	759	262	4	336
Valve, Balanced	C. P. Welch and R. J. Orr	145, 961	Dec. 2, 1873	200	69	4	601
Valve, Balanced slide	T. Beesley	134, 838	Jan. 14, 1873	320	102	3	46
Valve, Balanced slide	J. Evered	144, 268	Nov. 4, 1873	84	27	4	485
Valve, Balanced slide	A. O. Frick	138, 325	Apr. 29, 1873	989	311	3	479
Valve, Balanced slide	O. H. Gronberg	144, 090	Oct. 28, 1873	661	218	4	462
Valve, Balanced slide	C. H. Hutchinson	144, 458	Nov. 11, 1873	248	84	4	510
Valve, Balanced slide	S. Reid	141, 728	Aug. 12, 1873	290	95	4	166
Valve, Ball	W. Mendham	143, 294	Sept. 30, 1873	854	292	4	360
Valve, Cam for operating steam-engine	E. Sprague	134, 944	Jan. 14, 1873	411	132	3	53
Valve-case, Fastening for safety	G. B. Sisson	140, 223	June 24, 1873	799	229	3	699
Valve, Check	J. C. Hoadley	134, 548	Jan. 7, 1873	41	13	3	10
Valve, Check	J. H. Naylor	141, 454	Aug. 5, 1873	39	13	4	138
Valve, cock, &c., Stop	H. C. Montgomery	136, 851	Mar. 18, 1873	457	151	3	306
Valve, Combined stop and check	A. A. Dame	139, 878	June 17, 1873	415	124	3	665
Valve, Combined stop and check	O. E. McMurray	135, 352	Jan. 28, 1873	801	259	3	112
Valve, Compensating spring-balance for safety	V. F. Lasso	142, 481	Sept. 2, 1873	142	47	4	353
Valve-device for fluid-brake	G. Westinghouse, jr.	141, 685	Aug. 12, 1873	257	83	4	164
Valve-device for steam and air brake	G. Westinghouse, jr.	138, 827	May 13, 1873	330	102	3	535
Valve, Duplex safety	T. Harang	135, 220	Jan. 28, 1873	682	220	3	103
Valve for air-brake cylinder	N. Thomas	137, 037	Mar. 18, 1873	614	203	3	313
Valve for artesian wells, &c.	J. Fleming	141, 708	Aug. 12, 1873	274	89	4	165
Valve for bored or driven wells, Adjustable	M. T. and M. C. Chapman	136, 412	Mar. 4, 1873	52	18	3	249
Valve for direct-acting engines	H. A. Jamieson	144, 545	Nov. 11, 1873	324	109	4	516
Valve for fire-engines, Circulating	C. A. Hagne	140, 194	June 24, 1873	707	222	3	697
Valve for fire-engines, Relief	A. Mayer	143, 920	Oct. 21, 1873	489	165	4	438
Valve for hydraulic cranes, Balanced	J. A. Vaughn	143, 266	Sept. 30, 1873	829	284	4	358
Valve for locomotive and other engines, Throttle	H. Watkeys	139, 694	June 10, 1873	242	75, 76	3	644
Valve for locomotives, Relief	G. W. Richardson	136, 618	Mar. 11, 1873	250	84	3	274
Valve for stand-pipes, Balanced	J. N. Poage	141, 815	Aug. 12, 1873	371	122	4	173
Valve for steam and vacuum pumps	A. J. Simmons	141, 599	Aug. 5, 1873	163	52	4	148
Valve for steam-boilers, Safety	H. W. Shepard	145, 534	Dec. 16, 1873	459	150	4	646
Valve for steam-engines	A. Carr	143, 807	Oct. 21, 1873	398	132	4	430
Valve for steam-engines	H. I. Hoyt	142, 788	Sept. 16, 1873	425	143	4	298
Valve for steam-engines, Balanced	W. Glen	141, 218	July 29, 1873	824	269	4	111
Valve for steam-engines, Balanced	A. Henry	138, 804	May 13, 1873	310	96	3	533
Valve for steam-engines, Balanced	N. P. Stevens	145, 764	Dec. 23, 1873	666	217	4	675
Valve for steam-engines, Balanced-slide	J. F. Wallace	143, 043	Sept. 23, 1873	643	220	4	327
Valve for steam-engines, Piston	A. Baumann	139, 357	May 27, 1873	817	261	3	595
Valve for steam-engines, Rotary	G. Westinghouse, jr.	138, 828	May 13, 1873	332	102	3	535
Valve for steam-engines, Slide	N. Johnson	139, 793	June 10, 1873	332	103	3	651
Valve for steam-engines, Slide	W. Love	144, 463	Nov. 11, 1873	253	85	4	510
Valve for steam fire-engines, Relief	W. Jeffers	144, 765	Nov. 18, 1873	515	175	4	543
Valve for steam-pipes	J. W. Hodges	146, 073	Dec. 30, 1873	953	308	4	709
Valve for the waste-pipes of sinks	J. Chilcott	143, 883	Oct. 21, 1873	462	155	4	436
Valve for water and gas mains, &c., Stop	C. W. Isbell	142, 700	Sept. 9, 1873	337	113	4	241
Valve for water-pipes	D. G. Phipps	144, 356	Nov. 4, 1873	154	51	4	491
Valve, Gas-regulator	J. C. Sarsheld	136, 007	Feb. 18, 1873	570	188	3	198
Valve-gear and connection for steam and other engines	R. M. Fryer	135, 795	Feb. 11, 1873	378	122	3	169
Valve-gear, Engine	R. M. Fryer	135, 796	Feb. 11, 1873	379	122	3	169
Valve-gear for direct-acting steam-engine	J. Tesseyman and E. I. Howard	139, 439	May 27, 1873	896	289	3	601
Valve-gear, Steam-engine	J. W. Hackworth	135, 036	Jan. 21, 1873	508	164	3	76
Valve-gear, Steam-engine	C. Rogers	140, 309	June 24, 1873	803	254	3	705
Valve-gear, Steam-engine	J. Wheelock	144, 174	Oct. 28, 1873	730	244	4	468
Valve, Globe	A. P. Brown	140, 006	June 17, 1-73	517	164	3	674
Valve, Governor	H. B. Weaver	143, 045	Sept. 23, 1873	645	221	4	327
Valve-guide	R. J. Gould	142, 458	Sept. 2, 1873	121	39	4	252
Valve, Hydraulic	T. Critchlow	136, 489	Mar. 4, 1873	119	39	3	235
Valve, Liquid-sealed	L. Winterbauer	139, 347	May 27, 1873	810	259	3	584
Valve-lubricator	J. Cochrane	136, 136	Feb. 25, 1873	704	247	3	220
Valve-mechanism, Slide	E. E. Gilbert	143, 819	Oct. 21, 1873	406	135	4	431
Valve-movement for reciprocating-engines	H. C. Sergeant	143, 261	Sept. 30, 1873	825	283	4	358
Valves of steam-engines, Device for operating	W. J. Stevens	142, 292	Aug. 26, 1873	811	268	4	228
Valve or cut-off for cupola and other furnaces	W. H. Ward	139, 693	June 10, 1873	240	75	3	644
Valve, Pipe-organ	W. Schulke	145, 453	Dec. 9, 1873	367	122	4	627
Valve, Piston	G. H. Gibbs	139, 463	June 3, 1873	18	6	3	610
Valve, Pressure-regulating	W. Craig and H. L. Brevoort	142, 773	Sept. 16, 1873	412	139	4	297
Valve, Pump	W. Barnes	141, 309	July 29, 1873	905	297	4	118
Valve, Pump	R. J. Gould and M. E. Campfield	144, 844	Nov. 25, 1873	594	202	4	560
Valve, Pump	W. Painter	141, 587	Aug. 5, 1873	150	48	4	147
Valve, Register	J. W. Starr	141, 521	Aug. 5, 1875	97	30	4	143
Valve, Safety	W. Churchill	140, 115	June 24, 1873	638	201	3	692
Valve, Safety	H. Davies	135, 698	Feb. 11, 1873	294	93	3	163
Valve, Safety	E. C. Fernald	137, 540	Apr. 8, 1873	245	75	3	388
Valve, Safety	J. Hoffman	143, 825	Oct. 21, 1873	410	137	4	432
Valve, Safety	J. Jordan and A. Paul	145, 876	Dec. 23, 1873	758	247	3	683
Valve, Safety	G. J. Rains	136, 934	Mar. 18, 1873	529	175	3	306
Valve, Safety	G. Swenson	139, 209	May 20, 1873	680	214	3	576
Valve, Screw	P. Corrigan	141, 697	Aug. 12, 1873	266	86	4	164
Valve, Slide	J. L. Brown	138, 376	Apr. 29, 1873	1, 029	324	3	482
Valve, Slide	A. S. Nelson	144, 282	Nov. 4, 1873	93	31	4	485
Valve, Slide	W. Stephens	144, 285	Nov. 4, 1873	102	34	4	486
Valve, Steam	H. P. Jones	142, 702	Sept. 9, 1873	338	113	4	281
Valve, Steam and other	E. F. Spaulding	139, 339	May 27, 1873	803	256	3	594
Valve, Steam-engine governor	E. Ware	139, 096	May 20, 1873	573	180	3	567

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Valve, Steam-engine piston	G. M. Weinman	137,986	Apr. 15, 1873	639	201	3	433
Valve, Steam-engine reversing	P. W. Mellen	137,229	Mar. 25, 1873	799	202	3	338
Valve, Steam fire-engine automatic-relief	A. Mayer	135,437	Feb. 4, 1873	41	12	3	131
Valve-stem, Steam-tight joint of	G. R. Babbitt	135,876	Feb. 18, 1873	465	149	3	190
Valve, Stop	G. W. Eddy	140,407	July 1, 1873	57	20	4	13
Valve, Stop	G. W. Eddy	141,041	July 22, 1873	644	217	4	89
Valve, Water-supply	P. Harvey	140,918	July 15, 1873	515	173	4	69
Valve, Water-tank outlet	J. Armstrong and D. Cheney	141,747	Aug. 12, 1873	306	100	4	168
Valve, Wooden-pump clack	A. Breed	137,126	Mar. 25, 1873	705	234	3	331
Vapor-bath	J. Büler	142,767	Sept. 16, 1873	406	137	4	297
Vapor-engine	J. F. Haskins	137,200	Mar. 25, 1873	775	256	3	336
Vapor-engine	J. F. Haskins	136,241	Feb. 25, 1873	785	254	3	227
Vapor-engine	W. Wells	145,466	Dec. 9, 1873	379	125	4	628
Vapor-generator	W. Wells	139,445	May 27, 1873	900	290	3	601
Vapor-generator	W. Wells	144,581	Nov. 11, 1873	353	119	4	518
Varnish or bronze coating for articles of plaster, iron, wood, &c.	C. Rotter	139,333	May 27, 1873	799	.....	3	593
Varnish or polish for wood, metals, &c.	J. F. Chevalier	144,955	Nov. 25, 1873	682	.....	4	568
Varnishes, Refining	F. Kersting	144,910	Nov. 25, 1873	645	.....	4	564
Vat: See Cheese-vat. Indigo-blue vat. Tan-vat.							
Vault-cover	J. C. French	139,241	May 27, 1873	792	228	3	587
Vault-cover	T. Hyatt	136,510	Mar. 4, 1873	150	48	3	257
Vault-cover	T. Sharts	138,204	Apr. 22, 1873	851	269	3	460
Vault-cover	W. R. Williams	139,938	June 17, 1873	466	146	3	669
Vault-cover, Elevating	T. Hyatt	145,207	Dec. 2, 1873	151	51	4	597
Vault-cover, Illuminating	T. Hyatt	140,709	July 2, 1873	396	111	4	46
Vault-cover, Illuminating	T. Hyatt	145,187	Dec. 2, 1873	132	45	4	596
Vault-cover, Illuminating	T. Hyatt	145,188	Dec. 2, 1873	139	46	4	596
Vault-cover, Illuminating	T. Hyatt	145,189	Dec. 2, 1873	139	46	4	596
Vault-cover, Illuminating	T. Hyatt	145,190	Dec. 2, 1873	140	46	4	596
Vault-cover, Illuminating	T. Hyatt	145,191	Dec. 2, 1873	141	46	4	596
Vault-cover, Illuminating	T. Hyatt	145,192	Dec. 2, 1873	141	47	4	596
Vault-cover, Illuminating	T. Hyatt	145,193	Dec. 2, 1873	142	47	4	597
Vault-cover, Illuminating	T. Hyatt	145,194	Dec. 2, 1873	143	47	4	597
Vault-cover, Illuminating	T. Hyatt	145,195	Dec. 2, 1873	143	47	4	597
Vault-cover, Illuminating	T. Hyatt	145,196	Dec. 2, 1873	144	48	4	597
Vault-cover, Illuminating	T. Hyatt	145,197	Dec. 2, 1873	145	48	4	597
Vault-cover, Illuminating	T. Hyatt	145,198	Dec. 2, 1873	145	48	4	597
Vault-cover, Illuminating	T. Hyatt	145,199	Dec. 2, 1873	146	48, 49	4	597
Vault-cover, Illuminating	T. Hyatt	145,200	Dec. 2, 1873	147	49	4	597
Vault-cover, Illuminating	T. Hyatt	145,201	Dec. 2, 1873	147	49, 50	4	597
Vault-cover, Illuminating	T. Hyatt	145,202	Dec. 2, 1873	148	50	4	597
Vault-cover, Illuminating	J. K. Ingalls	146,074	Dec. 30, 1873	953	308	4	709
Vault-cover, Non-condensing illuminating	T. Hyatt	145,203	Dec. 2, 1873	148	50	4	597
Vault-cover, Non-condensing illuminating	T. Hyatt	145,204	Dec. 2, 1873	149	50	4	597
Vault-cover, Non-condensing illuminating	T. Hyatt	145,205	Dec. 2, 1873	149	51	4	597
Vault-cover, Non-condensing illuminating	T. Hyatt	145,206	Dec. 2, 1873	150	51	4	597
Vault, Fire-proof	G. W. Pittman	139,916	June 17, 1873	450	140	3	668
Vault, Fire-proof	J. W. Warner	134,575	Jan. 7, 1873	70	22	3	12
Vault-light	T. Hyatt	135,120	Jan. 21, 1873	571	186	3	81
Vault-light	J. Wood	138,724	May 6, 1873	231	72	3	516
Vault, Metallic	A. L. Stimson	143,309	Sept. 30, 1873	865	296, 297	4	361
Vault-plate, Flexible illuminating	T. Hyatt	145,208	Dec. 2, 1873	152	52	4	597
Vault, Safe	M. McCall and R. O. Wood	139,907	June 17, 1873	442	138	3	667
Vegetable-cutter	J. Kraun	144,773	Nov. 18, 1873	522	177	4	544
Vegetable-cutter	G. W. Parker	142,580	Sept. 9, 1873	239	78	4	273
Vegetable-cutter	J. R. Wharry	144,645	Nov. 18, 1873	419	140	4	535
Vegetable-cutter, Rotary	N. Schleser	140,221	June 24, 1873	727	229	3	699
Vehicle	G. Coffe and W. M. Bernard	137,657	Apr. 8, 1873	345	107	3	396
Vehicle	C. Gormann and J. B. Thiel	145,413	Dec. 9, 1873	336	113	4	625
Vehicle	M. V. Nichols	144,473	Nov. 11, 1873	260	88	4	511
Vehicle	B. Parmiter and W. Bradley	145,965	Dec. 30, 1873	862	280	4	701
Vehicle	E. D. Weller	141,905	Aug. 19, 1873	465	152	4	190
Vehicle, Adjustable stay-spring for	A. A. Horne	142,105	Aug. 26, 1873	659	216	4	215
Vehicle-axle	T. F. Coleman	143,435	Oct. 7, 1873	34	12	4	383
Vehicle-axle	H. Frederick	145,165	Dec. 2, 1873	117	38	4	594
Vehicle-axle	L. Martin	144,278	Nov. 4, 1873	91	30	4	485
Vehicle-axle and axle-box	F. Hunsinger	138,890	May 13, 1873	386	121	3	539
Vehicle-axle and sleeve	W. H. Sparks	141,018	July 22, 1873	627	211	4	87
Vehicle, Axle and thimble-skein for	A. Kessberger	142,344	Sept. 2, 1873	19	7	4	244
Vehicle-axle, Sand-band for	J. B. Winchell and H. W. Rugg	144,244	Nov. 4, 1873	67	21	4	483
Vehicle bolster-spring	H. Bock	136,360	Mar. 4, 1873	6	2	3	246
Vehicle-coupling	C. H. Cratar	143,404	Oct. 7, 1873	6	2	4	381
Vehicle-door, Mode of opening and closing	S. Smith	141,733	Aug. 12, 1873	293	96	4	167
Vehicle, Holdback for	H. M. Burdick and M. R. Flanders	146,042	Dec. 30, 1873	924	299	4	707
Vehicle-hound	A. Mühlhausen	140,066	June 17, 1873	577	182	3	679
Vehicle-pole	A. Schmidt	141,957	Aug. 19, 1873	504	166	4	193
Vehicle recording-apparatus	A. Guebbard and A. P. Tronchon	137,676	Apr. 8, 1873	363	112	3	398
Vehicle running-gear	I. O. Maddows	136,331	Feb. 25, 1873	866	279	3	233
Vehicle running-gear	L. R. Rosebrook	141,463	Aug. 5, 1873	49	15	4	139
Vehicle-seat	A. B. Sheaffer	138,537	May 6, 1873	62	21	3	502
Vehicle-seat	U. C. Snyder	144,709	Nov. 18, 1873	467	158	4	539
Vehicle shifting top	M. B. Keller	144,107	Oct. 28, 1873	675	223	4	463
Vehicle, Shifting top for	H. K. Porter	144,790	Nov. 18, 1873	535	182	4	545
Vehicle side-bar	F. I. Flowers	142,011	Aug. 19, 1873	550	182	4	197
Vehicle-spring	H. Bowles	142,325	Sept. 2, 1873	4	2	4	242
Vehicle-spring	E. Cliff	134,853	Jan. 14, 1873	332	106	3	47
Vehicle-spring	F. K. John	134,673	Jan. 7, 1873	165	55	3	20
Vehicle-spring	G. W. Lewis	143,085	Sept. 23, 1873	676	232	4	329
Vehicle-spring	J. Mayer	139,801	June 10, 1873	340	105	3	652

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Vehicle-spring	J. M. Miller	134, 916	Jan. 14, 1873	388	123	3	51
Vehicle-spring	P. Penn	139, 809	June 10, 1873	347	107	3	652
Vehicle-spring	C. W. Saladee	146, 100	Dec. 30, 1873	978	316	4	711
Vehicle-spring	T. R. Timby	136, 284	Feb. 25, 1873	827	267	3	230
Vehicle-spring brace	C. V. N. Snyder	145, 916	Dec. 23, 1873	796	261	4	685
Vehicle-spring coupling	H. P. Dolson	142, 901	Sept. 16, 1873	514	175	4	306
Vehicles, Spring for the seats of	C. Duecker	145, 994	Dec. 30, 1873	884	267	4	703
Vehicle-wheel	C. Anderegg	141, 099	July 22, 1873	697	234	4	13
Vehicle-wheel	D. Argerbright	135, 060	Jan. 21, 1873	539	171	3	78
Vehicle-wheel	A. L. Blackman	135, 623	Feb. 11, 1873	227	71	3	157
Vehicle-wheel	D. Brown	145, 783	Dec. 23, 1873	680	222	4	677
Vehicle-wheel	J. Q. Bryer	141, 111	July 22, 1873	708	236	4	94
Vehicle-wheel	A. Bucholz	145, 393	Dec. 9, 1873	317	107	4	623
Vehicle-wheel	J. P. Chandler and W. V. Tainter	143, 328	Sept. 30, 1873	892	301	4	362
Vehicle-wheel	G. J. Cross	139, 661	June 10, 1873	203	66	3	641
Vehicle-wheel	D. Dimmick	143, 813	Oct. 21, 1873	402	134	4	431
Vehicle-wheel	J. L. Dom	136, 425	Mar. 4, 1873	60	21	3	250
Vehicle-wheel	J. F. and W. Downing	135, 701	Feb. 11, 1873	296	94	3	163
Vehicle-wheel	D. B. French	145, 391	Dec. 9, 1873	331	78	4	616
Vehicle-wheel	J. C. Garretson	143, 233	Sept. 30, 1873	800	276	4	356
Vehicle-wheel	J. H. Glover	143, 830	Oct. 21, 1873	407	136	4	431
Vehicle-wheel	H. A. Gore	142, 098	Aug. 26, 1873	652	214	4	215
Vehicle-wheel	G. Hageman	139, 144	May 20, 1873	621	194	3	571
Vehicle-wheel	P. C. Hairston	143, 282	Sept. 30, 1873	841	289	4	359
Vehicle-wheel	S. B. Hindman	136, 376	Mar. 4, 1873	24	8	3	247
Vehicle-wheel	P. C. House	141, 715	Aug. 12, 1873	280	91	4	166
Vehicle-wheel	J. C. Hurley	135, 119	Jan. 21, 1873	570	186	3	81
Vehicle-wheel	P. Jones	137, 063	Mar. 18, 1873	670	222	3	328
Vehicle-wheel	R. R. Jones	143, 077	Sept. 23, 1873	669	230	4	329
Vehicle-wheel	R. R. Jones	143, 078	Sept. 23, 1873	670	230	4	329
Vehicle-wheel	H. Kellogg	134, 894	Jan. 14, 1873	369	117	3	50
Vehicle-wheel	H. B. Leckenby	135, 434	Feb. 4, 1873	39	12	3	130
Vehicle-wheel	M. Linck	145, 219	Dec. 2, 1873	162	56	4	598
Vehicle-wheel	O. Look	141, 652	Aug. 12, 1873	228	72	4	161
Vehicle-wheel	M. McNalley	136, 928	Mar. 18, 1873	520	172	3	305
Vehicle-wheel	S. J. Miller and L. Wright	137, 017	Mar. 18, 1873	598	198	3	312
Vehicle-wheel	J. O'Connor	143, 776	Oct. 21, 1873	369	123	4	428
Vehicle-wheel	N. Palmer	135, 244	Jan. 22, 1873	709	227	3	105
Vehicle-wheel	L. G. Peel	143, 378	Sept. 30, 1873	931	315	4	366
Vehicle-wheel	H. Pitcher	136, 669	Mar. 11, 1873	295	98	3	278
Vehicle-wheel	T. W. Porter	143, 029	Sept. 23, 1873	631	215	4	326
Vehicle-wheel	J. J. Ralya	136, 761	Mar. 11, 1873	368	122	3	284
Vehicle-wheel	G. W. Smith	140, 552	July 1, 1873	180	61	4	23
Vehicle-wheel	O. D. Spalding	137, 629	Apr. 8, 1873	319	99	3	394
Vehicle-wheel	C. W. Spayd	142, 876	Sept. 16, 1873	494	168	4	304
Vehicle-wheel	S. T. F. Sterick	139, 830	June 10, 1873	364	113	3	654
Vehicle-wheel	S. Vreeland	136, 567	Mar. 4, 1873	193	64	3	261
Vehicle-wheel	M. B. White	143, 481	Oct. 7, 1873	68	24	4	396
Vehicle-wheel	H. Williams	141, 411	July 29, 1873	1, 009	328	4	125
Vehicle-wheel	J. B. Withey	142, 831	Sept. 16, 1873	458	155	4	301
Vehicle-wheel	J. Woodburn	139, 697	June 10, 1873	244	77	3	644
Vehicle-wheel	J. F. Wright and B. B. Jones	138, 220	Apr. 22, 1873	865	274	3	461
Vehicle-wheel skain and box	N. L. Holmes	142, 233	Aug. 26, 1873	766	251	4	224
Vehicle-wheels, Thimble-skain for	J. Lahman	141, 568	Aug. 5, 1873	137	44	4	146
Velocipede	G. Dismar	138, 486	May 6, 1873	17	6	3	499
Velocipede	W. Gaffey	137, 431	Apr. 1, 1873	136	44	3	368
Velocipede	J. E. Hoffmire	134, 989	Jan. 21, 1873	462	148	3	72
Velocipede	J. F. McClure	144, 351	Nov. 11, 1873	329	111	4	516
Velocipede	L. T. McGilvray	140, 280	June 24, 1873	786	249	3	704
Velvet, &c., Apparatus for renovating	M. J. and J. T. Dewey	142, 068	Aug. 26, 1873	643	211	4	214
Veneer-cutter	J. N. Seib	137, 489	Apr. 1, 1873	193	59	3	373
Veneer-cutter	J. N. Seib	141, 596	Aug. 5, 1873	159	51	4	146
Veneer-cutting machine	J. W. Leslie and G. R. Smith	138, 901	May 13, 1873	394	124	3	540
Veneer-cutting machine	J. N. Seib	145, 246	Dec. 2, 1873	185	64	4	600
Veneer-cutting machine	J. A. Squires	142, 591	Sept. 9, 1873	249	82	4	274
Veneer-cutting machine	W. H. Williams	144, 938	Nov. 25, 1873	668	227	4	567
Veneer-keg	G. W. Swan	141, 963	Aug. 19, 1873	509	168	4	193
Veneers, Method of perfecting	A. H. Allen	138, 357	Apr. 29, 1873	1, 014	319	3	481
Vent	O. S. Camp	135, 320	Jan. 22, 1873	769	249	3	110
Vent-gimlet	H. S. Rummel	141, 465	Aug. 5, 1873	51	16	4	138
Ventilator:							
<i>See</i> Building-ventilator.							
Car-ventilator.							
Sash-ventilator.							
Tent-ventilator.							
Window-ventilator.							
Ventilator	G. R. Barker	135, 507	Feb. 4, 1873	103	33	3	135
Ventilator	J. Ballou	142, 140	Aug. 26, 1873	688	226	4	217
Vertical-engine frame	G. B. Sisson	141, 467	Aug. 5, 1873	52	16	4	139
Vessel, Apparatus for relieving grounded	W. R. Rightor	142, 732	Sept. 9, 1873	365	123	4	248
Vessel, Armor-clad	L. Goddu	136, 055	Feb. 18, 1873	611	201	3	201
Vessel, Camel for raising sunken	H. H. Siebe, W. A. Gorman, and T. Christy, jr.	141, 083	July 22, 1873	682	229	4	92
Vessel, Combination of center and bilge keel for	S. P. Willeby	139, 222	May 20, 1873	691	217	3	577
Vessel, Construction of	H. Hirsch	145, 347	Dec. 9, 1873	280	94	4	620
Vessel, Construction of	W. F. Morgan	138, 178	Apr. 22, 1873	825	262	3	458
Vessel, Construction of steam	T. and W. L. Winans	144, 243	Nov. 4, 1873	66	21	4	483
Vessel, Covered	W. Bates	143, 116	Sept. 23, 1873	701	240	4	331
Vessel, Device for raising sunken	L. W. Briggs	143, 056	Sept. 23, 1873	655	224	4	328
Vessel for paint, oil, varnish, &c	R. Mansure, jr.	140, 148	June 24, 1873	667	209	3	694
Vessel, Manufacture of sheet-metal	J. G. L. Boettcher	137, 886	Apr. 15, 1873	555	174	3	426
Vessel, Means for buoying and stopping holes in	J. W. Cooper	136, 817	Mar. 18, 1873	430	142	3	298
Vessels, Means of forcing ashes from	J. Palmer	143, 461	Oct. 7, 1873	53	19	4	385
Vessels, Oscillating cabin for	B. Weiskor	140, 978	July 15, 1873	576	194	4	74

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Vessel, Ponton for raising sunken.	J. Rice	142, 275	Aug. 26, 1873	798	{ 263 264	{ 4 4	227
Vessel, Propelling	J. O'Neill	144, 474	Nov. 11, 1873	261	88	4	511
Vessel, Raising sunken	R. W. Hallett	136, 832	Mar. 18, 1873	442	146	3	299
Vessel, Removable ceiling for.	W. F. Morgan	142, 262	Aug. 26, 1873	787	260	4	226
Vessel, Sheet-metal	H. W. Shepard	135, 855	Feb. 11, 1873	431	140	3	173
Vest, Ladies' under	O. P. Flynt	143, 002	Sept. 23, 1873	607	206	4	324
Vest, Sportsman's cartridge-holding.	J. H. Black	144, 594	Nov. 18, 1873	372	125	4	531
Vest-supporter	B. F. Martin and E. Mapes	141, 007	July 22, 1873	615	208	4	87
Veterinary operations, Device for holding hogs in.	A. M. Scott and T. Wilson	134, 707	Jan. 7, 1873	196	63	3	22
Vinegar and ageing spirits, Apparatus for making	W. M. Skelton	140, 653	July 8, 1873	280	95	4	42
Violin	J. Belknap	143, 117	Sept. 23, 1873	701	240	4	331
Vise	D. S. Coe	140, 404	July 1, 1873	55	20	4	13
Vise	D. Green	137, 302	Apr. 1, 1873	21	6	3	359
Vise	T. Hall	140, 269	June 24, 1873	766	242	3	702
Vise	J. Hunt	142, 470	Sept. 2, 1873	134	44	4	253
Vise	I. Roberts	134, 932	Jan. 14, 1873	401	128	3	52
Vise, Adjustable bench	J. B. Wardwell	144, 934	Nov. 25, 1873	665	226	4	566
Vise, Saw-filing	C. S. Bonney	135, 883	Feb. 18, 1873	471	152	3	190
Volute spring	P. G. Gardiner	144, 201	Nov. 4, 1873	26	8	4	480
Voting-apparatus, Legislative.	J. A. Griswell	142, 002	Aug. 19, 1873	542	179	4	196
Vulcanizable compounds of rubber, &c., Apparatus for mixing.	T. J. Mayall	144, 998	Nov. 25, 1873	721	243	4	571
Vulcanized-rubber compound.	W. A. Torrey	137, 509	Apr. 1, 1873	213	52	3	374
Vulcanizing rubber-belting, &c.	T. J. Mayall	140, 519	July 1, 1873	151	52	4	21
Vulcanizing rubber-coated articles.	A. Allbright	137, 872	Apr. 15, 1873	543	169	3	425
W.							
Wad-winding machine.	A. C. Hobbs	137, 773	Apr. 15, 1873	462	144	3	419
Wadding, and machine for its manufacture.	A. Chambers	140, 184	June 24, 1873	699	220	3	696
Waffle-baker	S. S. Fitch	143, 564	Oct. 14, 1873	157	53	4	402
Wagon	T. W. Porter	143, 030	Sept. 23, 1873	632	215	4	326
Wagon	F. Post	143, 185	Sept. 23, 1873	750	259	4	336
Wagon and sleigh, Binder for loaded	J. Paff	139, 969	June 17, 1873	489	154	3	671
Wagon, Apparatus for hoisting and dumping loaded.	W. J. Brown	136, 698	Mar. 11, 1873	315	104	3	280
Wagon, Apparatus for unloading corn from.	T. Barron	145, 779	Dec. 23, 1873	677	221	4	676
Wagon-axle, Machine for turning.	G. A. Bolser	142, 368	Sept. 2, 1873	41	15	4	245
Wagon-axle skein-clip	J. M. Orput	144, 695	Nov. 18, 1873	457	155	4	538
Wagon-bed lifter	D. Rood	141, 669	Aug. 12, 1873	244	77	4	163
Wagon-body	B. Burr	142, 989	Sept. 23, 1873	595	{ 202 203	{ 4 4	323
Wagon-body	N. B. Cooper	135, 779	Feb. 11, 1873	359	116	3	168
Wagon-body	H. Lavies and H. Stiefvater	138, 506	May 6, 1873	31	11	3	500
Wagon-body	H. A. Luttgens	134, 996	Jan. 21, 1873	469	151	3	73
Wagon body and seat	P. S. Rich	136, 268	Feb. 25, 1873	814	263	3	220
Wagon body and seat, Device for securing corners of.	E. Andrews	141, 306	July 29, 1873	903	296	4	118
Wagon bolster-plate	T. and J. Pickard	138, 816	May 13, 1873	321	99	3	534
Wagon-box corner-fastening.	J. W. Crandall	143, 333	Sept. 30, 1873	886	303	4	363
Wagon-box to bolster, Device for holding.	H. L. Anderson	142, 978	Sept. 23, 1873	587	199	4	322
Wagon-brake	W. P. Buckner	143, 747	Oct. 21, 1873	346	115	4	426
Wagon-brake	B. W. Coe	144, 443	Nov. 11, 1873	237	80	4	509
Wagon-brake	J. F. Durbin	143, 337	Sept. 30, 1873	389	304	4	363
Wagon-brake	E. N. Jack	144, 849	Nov. 25, 1873	600	204	4	560
Wagon-brake	W. F. Osborn	142, 579	Sept. 9, 1873	238	78	4	273
Wagon-brake	R. Roberts	135, 491	Feb. 4, 1873	89	28	3	134
Wagon-brake	W. B. Stanley	137, 633	Apr. 8, 1873	322	100	3	395
Wagon-coupling	U. Wynn	135, 742	Feb. 11, 1873	328	105	3	165
Wagon, Dumping	J. H. Adriaans	138, 111	Apr. 22, 1873	768	244	3	453
Wagon, Dumping	B. Bodley	135, 195	Jan. 28, 1873	656	211	3	101
Wagon, Dumping	W. Fields	144, 608	Nov. 18, 1873	383	129	4	532
Wagon, Dumping	R. Greer and W. J. Thomason	143, 570	Oct. 14, 1873	163	54	4	402
Wagon, Dumping	O. Gunnuldsen	138, 395	Apr. 29, 1873	1,044	329	3	483
Wagon, Dumping	D. E. Haines	138, 246	Apr. 29, 1873	914	288	3	473
Wagon, Dumping	J. Highfield	140, 703	July 8, 1873	322	109	4	46
Wagon, Dumping	D. D. Smith	142, 049	Aug. 19, 1873	594	195	4	200
Wagon end-gate	J. C. Baird and M. Miller	144, 429	Nov. 11, 1873	228	76	4	508
Wagon end-gate	T. A. and J. L. Brown	143, 960	Oct. 28, 1873	546	181	4	453
Wagon end-gate	J. D. Carey	139, 766	June 10, 1873	310	96	3	640
Wagon end-gate	F. Grundy	142, 566	Sept. 9, 1873	228	74	4	272
Wagon end-gate	S. F. Robertson	139, 974	June 17, 1873	492	155	3	671
Wagon end-gate	R. Smille and C. H. Brooks	141, 602	Aug. 5, 1873	166	53	4	148
Wagon extension-trough.	A. Icke	137, 371	Apr. 1, 1873	83	27	3	364
Wagon for hauling stone or heavy bodies	J. E. Truesdell	136, 287	Feb. 25, 1873	830	268	3	230
Wagon, Hand	S. D. Scott	142, 285	Aug. 26, 1873	806	266	4	227
Wagon-jack	M. Buck	145, 046	Dec. 2, 1873	4	1	4	586
Wagon-jack	A. G. Cooley	143, 886	Oct. 21, 1873	465	156	4	436
Wagon-jack	N. Crandall	141, 700	Aug. 12, 1873	267	87	4	165
Wagon-loader	J. Johnson	137, 138	Mar. 25, 1873	715	237	3	332
Wagon loading and unloading apparatus.	B. Cockly	143, 222	Sept. 30, 1873	791	273	4	355
Wagon, Market	J. Tamkins, sr	142, 058	Aug. 19, 1873	600	197	4	200
Wagon, Road	C. W. Saladee	137, 324	Apr. 1, 1873	43	13	3	360
Wagon, Road	C. W. Saladee	137, 963	Apr. 15, 1873	620	196	3	432
Wagon running-gear	A. Lewis	139, 588	June 3, 1873	125	42	3	619
Wagon running-gear	I. O. Meddows	140, 154	June 24, 1873	672	211	3	694
Wagon running-gear	G. Phillips	143, 249	Sept. 30, 1873	814	279	4	357
Wagon-seat	T. J. Alexander	144, 492	Nov. 11, 1873	277	94	4	512
Wagon-seat	J. G. and J. S. Armstrong	136, 123	Feb. 25, 1873	689	223	3	219
Wagon-seat	A. J. Cogan	136, 814	Mar. 18, 1873	428	141	3	298
Wagon-seat	E. C. Cole	137, 419	Apr. 1, 1873	124	41	3	367
Wagon-seat	M. Sikes	143, 086	Sept. 23, 1873	676	233	4	339
Wagon-seat	J. W. Plattenburg	138, 693	May 6, 1873	200	63	3	513
Wagon-seat	I. Powers	143, 715	Oct. 14, 1873	297	97	4	412
Wagon-seat	J. U. Shultz	139, 027	May 20, 1873	509	160	3	562
Wagon-seat	J. Winecuff	138, 598	May 6, 1873	114	37	3	507

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Wagon-seat fastener	G. Ruston	141,292	July 29, 1873	890	292	4	117
Wagon, Self-loading	T. Handy	140,271	June 24, 1873	769	243	3	703
Wagon-spring	D. A. Boyle	143,744	Oct. 21, 1873	343	114	4	426
Wagon-spring	W. H. Brace	140,110	June 24, 1873	635	199	3	691
Wagon-spring	G. A. Brice	143,958	Oct. 28, 1873	545	181	4	453
Wagon-standard	J. L. Hudson	138,402	Apr. 29, 1873	1,050	331	3	484
Wagon-standard	J. H. Knisley and J. C. Ferguson	138,807	May 13, 1873	312	97	3	533
Wagon-standard	C. W. Saladee	145,594	Dec. 16, 1873	505	166	4	650
Wagons, Trestle-platform for unloading from	J. K. Wilson	137,584	Apr. 8, 1873	284	88	3	391
Walk-edger	I. V. Brower and J. C. Higgins	144,252	Nov. 4, 1873	72	23	4	484
Wall for buildings	T. Hyatt	142,474	Sept. 2, 1873	137	45	4	253
Wall, Gage for erecting plank	T. W. H. Moseley	140,943	July 15, 1873	543	182	4	72
Wall, Hose port-hole for partition	H. Woodman	136,687	Mar. 11, 1873	307	102	3	279
Wall or window washer	E. N. Brindley	137,340	Apr. 1, 1873	59	18	3	361
Wall-paper, Composition for water-proofing	C. Van Herwerden	141,525	Aug. 5, 1873	105	4	4	143
Wall-paper, Process of preparing	A. W. Paull	140,533	July 1, 1873	163	21	4	21
Wall-paper, Process of removing	C. F. Ware	137,396	Apr. 1, 1873	105	3	3	365
Wall, Plaster	M. F. Lyons	138,170	Apr. 22, 1873	817	260	3	457
Wall-protector and towel-rack, Combined	J. F. Hummel	140,506	July 1, 1873	140	48	4	20
Wall, Water-proof	H. Mattfeld	134,911	Jan. 14, 1873	384	122	3	51
Walls and ceilings, Coating and ornamenting	C. H. Crittenden	141,330	July 29, 1873	927	119	4	119
Wardrobe, bedstead, chair, and table, Combined	W. Getchell	142,387	Sept. 2, 1873	61	20	4	247
Wardrobe, Portable	J. N. Fowler	140,130	June 24, 1873	651	295	3	693
Warp-threads, Rod for drawing in	M. S. Jordan	144,620	Nov. 18, 1873	395	132	4	533
Warping-machine	J. B. Bancroft	135,619	Feb. 11, 1873	223	70	3	157
Warping-machine, Stop-mechanism for	G. S. Follansbee and T. C. Entwistle	137,605	Apr. 8, 1873	301	93	3	393
Wash-basin waste-trap	H. H. Craigie	135,206	Jan. 28, 1873	669	215	3	101
Wash-bench	A. G. Emery	143,562	Oct. 14, 1873	156	52	4	402
Wash-bench for wringing-machines	J. B. Sweetland	136,788	Mar. 11, 1873	392	129	3	286
Wash-board	G. Elsey	138,140	Apr. 22, 1873	790	252	3	455
Wash-board	J. B. Fisher	136,828	Mar. 18, 1873	439	145	3	299
Wash-board	J. T. and F. T. McNally	134,607	Jan. 7, 1873	103	33	3	15
Wash-board and roller, Brush	I. Hussey	142,853	Sept. 16, 1873	475	162	4	303
Wash-board and rubber	C. Krebs	137,847	Apr. 15, 1873	524	164	3	424
Wash-boiler	J. Adams	139,349	May 27, 1873	811	259	3	594
Wash-boiler	S. W. Bartholomew	140,238	June 24, 1873	740	234	3	700
Wash-boiler	J. H. Batcheelder and S. J. Sargent	138,603	May 6, 1873	117	39	3	507
Wash-boiler	M. M. Beard	136,125	Feb. 25, 1873	690	223	3	219
Wash-boiler	A. Becker	140,398	July 1, 1873	51	18	4	12
Wash-boiler	M. J. Clapper	140,470	July 1, 1873	109	37	4	17
Wash-boiler	S. Covey and O. A. Slafter	138,738	May 13, 1873	254	79	3	528
Wash-boiler	J. Cramer	138,739	May 13, 1873	255	79	3	528
Wash-boiler	O. E. Culver and L. E. Moseley	145,558	Dec. 16, 1873	477	156	4	648
Wash-boiler	J. W. Deming	139,301	May 27, 1873	777	246	3	591
Wash-boiler	C. H. Dunbrack	137,663	Apr. 8, 1873	351	108	3	397
Wash-boiler	W. Exner	137,902	Apr. 15, 1873	572	179	3	428
Wash-boiler	W. G. Gibson	138,632	May 6, 1873	146	47	3	509
Wash-boiler	O. F. Glidden	137,545	Apr. 8, 1873	250	76	3	389
Wash-boiler	W. H. Hammond	144,761	Nov. 18, 1873	512	174	4	543
Wash-boiler	R. J. Harrison	144,336	Nov. 4, 1873	135	45	4	489
Wash-boiler	P. Krumscheid	137,612	Apr. 8, 1873	306	95	3	393
Wash-boiler	R. Langenbach	138,167	Apr. 22, 1873	814	259	3	457
Wash-boiler	R. Lawyer	135,349	Jan. 28, 1873	799	258	3	112
Wash-boiler	R. Lawyer	144,774	Nov. 18, 1873	523	177	4	544
Wash-boiler	E. H. McDonald	140,936	July 15, 1873	537	179	4	71
Wash-boiler	J. R. Pendell	138,576	May 6, 1873	98	31	3	505
Wash-boiler	W. Reinemer	144,795	Nov. 18, 1873	530	183	4	545
Wash-boiler	J. Reing	138,285	Apr. 29, 1873	253	300	3	476
Wash-boiler	H. Ross	146,022	Dec. 30, 1873	910	295	4	705
Wash-boiler	F. J. Schirmayer	138,586	May 6, 1873	105	34	3	506
Wash-boiler	E. Schofield	142,518	Sept. 2, 1873	175	58	4	256
Wash-boiler	A. Sluthour	135,374	Jan. 28, 1873	823	265	3	114
Wash-boiler	W. J. Thomas	140,444	July 1, 1873	85	29	4	15
Wash-boiler	J. C. Tilton	136,283	Feb. 25, 1873	826	267	3	230
Wash-boiler	J. C. Tilton	145,767	Dec. 23, 1873	668	218	4	676
Wash-boiler	L. W. Truesdell and F. Curtis	143,796	Oct. 21, 1873	386	128	4	430
Wash-boiler	W. W. Turletot	145,318	Dec. 9, 1873	258	86	4	613
Wash-boiler attachment	H. Bickel	135,069	Jan. 21, 1873	535	173	3	78
Wash-boiler attachment	C. P. Chapman	141,322	July 29, 1873	919	300	4	119
Wash-boiler attachment	E. Davis	141,429	Aug. 5, 1873	18	5	4	136
Wash-boiler attachment	W. W. Glanville	144,531	Nov. 11, 1873	310	104	4	515
Wash-boiler attachment	R. B. Hart	135,708	Feb. 11, 1873	303	96	3	163
Wash-boiler attachment	S. B. Hartman	134,800	Jan. 14, 1873	283	92	3	43
Wash-boiler attachment	R. Jeffers and D. C. Bockoven	135,225	Jan. 28, 1873	688	221	3	103
Wash-boiler attachment	M. Martin	135,569	Feb. 4, 1873	162	52	3	140
Wash-boiler attachment	R. A. McCauley	134,999	Jan. 21, 1873	472	151	3	73
Wash-boiler attachment	C. D. Reinking	136,385	Mar. 4, 1873	30	11	3	248
Wash-boiler attachment	W. E. Rice and J. Barnes	139,918	June 17, 1873	452	140	3	668
Wash-boiler attachment	I. C. Schramm	140,546	July 1, 1873	174	59	4	22
Wash-boiler attachment	T. Shuman	137,492	Apr. 1, 1873	197	60	3	373
Wash-boiler attachment	N. C. Warner	136,686	Mar. 11, 1873	307	101	3	279
Wash-boiler attachment	H. W. Williams	138,974	May 13, 1873	451	142	3	545
Wash-pounder	L. S. Enos	140,261	June 24, 1873	760	240	3	702
Wash-stand	A. H. Lorton	134,903	Jan. 14, 1873	376	130	3	50
Wash-tub holder	A. M. Olds	127,473	Apr. 1, 1873	175	56	3	371
Wash-tub, Stationary	B. Morahan	139,684	June 10, 1873	225	72	3	643
Wash-tub, Stationary	B. Morahan	139,685	June 10, 1873	225	72	3	643
Wash-tub support	E. F. Shaw	139,925	June 17, 1873	457	143	3	669
Wash-tub support	G. F. Shaw	143,469	Oct. 7, 1873	59	21	4	385
Washer:							
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Washer-cutter.....	H. E. Whipple.....	143, 738	Oct. 14, 1873	318	106	4	414
Washers, Die for punching.....	R. Humphrey.....	141, 655	July 22, 1873	654	290	4	90
Washing-fluid.....	N. W. Lane.....	141, 364	July 29, 1873	965		4	122
Washing-implement.....	C. R. Gramm.....	138, 495	May 6, 1873	23	8	3	499
Washing-machine.....	J. E. Anderson.....	139, 992	June 17, 1873	505	160	3	673
Washing-machine.....	J. Ballard.....	137, 046	Mar. 25, 1873	633	209	3	326
Washing-machine.....	L. Beaulieu.....	139, 107	May 20, 1873	583	183	3	568
Washing-machine.....	J. Bennett.....	143, 869	Oct. 21, 1873	450	150	4	435
Washing-machine.....	S. Berry.....	135, 261	Jan. 28, 1873	722	231	3	105
Washing-machine.....	E. S. Bliss.....	139, 940	June 17, 1873	468	147	3	669
Washing-machine.....	B. W. Bowen.....	141, 850	Aug. 19, 1873	409	133	4	186
Washing-machine.....	W. P. Brooks.....	135, 318	Jan. 28, 1873	762	248	3	109
Washing-machine.....	W. P. Brooks and J. D. Hartzell.....	138, 374	Apr. 29, 1873	1, 027	324	3	482
Washing-machine.....	I. F. Brown.....	141, 200	July 29, 1873	803	262	4	109
Washing-machine.....	S. Budlong.....	142, 676	Sept. 9, 1873	318	106	4	279
Washing-machine.....	J. C. Burgner.....	138, 128	Apr. 22, 1873	780	249	3	454
Washing-machine.....	A. H. Calkins.....	138, 733	May 13, 1873	250	78	3	577
Washing-machine.....	A. H. Calkins.....	138, 734	May 13, 1873	251	78	3	568
Washing-machine.....	A. M. Campbell.....	143, 060	Sept. 23, 1873	658	225	4	329
Washing-machine.....	H. H. Case.....	137, 177	Mar. 25, 1873	750	248	3	335
Washing-machine.....	T. Clucas, jr.....	136, 135	Feb. 25, 1873	703	227	3	920
Washing-machine.....	G. J. Colby.....	138, 379	Apr. 29, 1873	1, 031	325	3	482
Washing-machine.....	C. Cole.....	136, 070	Mar. 18, 1873	555	184	3	308
Washing-machine.....	T. Colvin and R. M. Patchen.....	143, 123	Sept. 23, 1873	705	242	4	332
Washing-machine.....	J. W. Conroy.....	140, 812	July 15, 1873	423	143	4	62
Washing-machine.....	G. G. Curtis.....	143, 749	Oct. 21, 1873	347	116	4	496
Washing-machine.....	P. G. Dahmer.....	139, 497	June 3, 1873	49	15	3	613
Washing-machine.....	G. R. Davis.....	136, 219	Feb. 25, 1873	767	248	3	225
Washing-machine.....	L. H. Davis.....	143, 225	Sept. 30, 1873	793	273	4	355
Washing-machine.....	H. Dextor.....	138, 319	Apr. 29, 1873	985	309	3	478
Washing-machine.....	E. Dickerman.....	138, 235	Apr. 29, 1873	900	284	3	472
Washing-machine.....	P. C. Dillon.....	136, 908	Mar. 18, 1873	503	166	3	304
Washing-machine.....	D. B. Dorsey.....	141, 924	Aug. 19, 1873	479	158	4	191
Washing-machine.....	P. A. Downer.....	137, 661	Apr. 8, 1873	350	108	3	397
Washing-machine.....	B. Edgar.....	135, 211	Jan. 28, 1873	673	217	3	112
Washing-machine.....	O. B. Evans.....	136, 825	Mar. 18, 1873	437	145	3	299
Washing-machine.....	G. W. Fagaine.....	138, 387	Apr. 29, 1873	1, 037	327	3	483
Washing-machine.....	A. Filkins.....	139, 135	May 20, 1873	612	191	3	570
Washing-machine.....	J. B. Fisher.....	136, 909	Mar. 18, 1873	504	167	3	304
Washing-machine.....	W. K. Flietstra.....	140, 620	July 8, 1873	254	86	4	40
Washing-machine.....	W. H. Freed.....	136, 050	Feb. 18, 1873	607	200	3	201
Washing-machine.....	J. Glines.....	141, 044	July 22, 1873	647	218	4	89
Washing-machine.....	A. Gregg.....	139, 889	June 17, 1873	425	132	3	666
Washing-machine.....	H. C. Grover.....	141, 136	July 22, 1873	730	242	4	96
Washing-machine.....	J. W. Hannah.....	139, 576	June 3, 1873	113	38	3	618
Washing-machine.....	J. D. Hartzell.....	138, 802	May 13, 1873	309	95	3	533
Washing-machine.....	S. Hawkins.....	140, 037	June 17, 1873	550	173	3	677
Washing-machine.....	M. L. Hawks.....	140, 625	July 8, 1873	258	87	4	41
Washing-machine.....	M. L. Hawks.....	145, 799	Dec. 23, 1873	693	227	4	678
Washing-machine.....	D. W. Helfrich.....	138, 330	Apr. 29, 1873	993	312	3	979
Washing-machine.....	F. W. Henson.....	135, 805	Feb. 11, 1873	392	126	3	170
Washing-machine.....	P. Hibbs.....	146, 071	Dec. 30, 1873	951	307	4	709
Washing-machine.....	J. H. Hill.....	142, 850	Sept. 16, 1873	474	161	4	303
Washing-machine.....	E. M. Hodgson.....	139, 313	May 27, 1873	787	250	3	592
Washing-machine.....	L. Holderman.....	145, 946	Dec. 16, 1873	846	275	4	700
Washing-machine.....	J. Hoover.....	139, 790	June 10, 1873	330	102	3	651
Washing-machine.....	E. Hoyt.....	135, 808	Feb. 11, 1873	393	127	3	170
Washing-machine.....	F. Hulet.....	137, 206	Mar. 25, 1873	779	257	3	337
Washing-machine.....	A. W. Jennings.....	139, 159	May 20, 1873	638	199	3	579
Washing-machine.....	T. F. Kiff.....	142, 242	Aug. 26, 1873	773	254	4	224
Washing-machine.....	J. H. Kooser.....	141, 567	Aug. 5, 1873	137	43	4	146
Washing-machine.....	J. H. Kruse.....	137, 218	Mar. 25, 1873	790	261	3	338
Washing-machine.....	M. N. Lovell.....	139, 511	June 3, 1873	59	19	3	613
Washing-machine.....	H. H. Marcar and S. Mebaffey.....	142, 255	Aug. 26, 1873	782	258	4	225
Washing-machine.....	S. Martin.....	140, 380	July 1, 1873	38	12, 13	4	11
Washing-machine.....	W. E. Millegan.....	136, 929	Mar. 18, 1873	521	172	3	305
Washing-machine.....	H. Meyers.....	136, 855	Mar. 18, 1873	460	152	3	301
Washing-machine.....	D. B. Meyers.....	143, 177	Sept. 23, 1873	743	256	4	335
Washing-machine.....	G. S. Newsom.....	143, 371	Sept. 30, 1873	926	314	4	366
Washing-machine.....	F. M. Nixon and E. N. Babcock.....	143, 709	Oct. 14, 1873	292	96	3	412
Washing-machine.....	E. Norton.....	134, 816	Jan. 14, 1873	299	96	3	44
Washing-machine.....	A. O'Dell.....	137, 234	Mar. 25, 1873	803	265	3	339
Washing-machine.....	A. M. Olde.....	134, 609	Jan. 7, 1873	104	34	3	15
Washing-machine.....	D. J. Owen and J. G. Brydges.....	136, 335	Feb. 25, 1873	870	280	3	233
Washing-machine.....	S. N. Page.....	146, 091	Dec. 30, 1873	970	313	4	710
Washing-machine.....	W. Parker.....	142, 268	Aug. 26, 1873	792	261	4	226
Washing-machine.....	N. J. Parsons.....	143, 779	Oct. 21, 1873	373	123	4	429
Washing-machine.....	D. B. Pond.....	138, 928	May 13, 1873	415	130	3	542
Washing-machine.....	E. Potts.....	134, 769	Jan. 14, 1873	257	84	3	41
Washing-machine.....	F. B. Preston.....	140, 641	July 8, 1873	271	92	4	42
Washing-machine.....	N. F. Reed.....	139, 736	June 10, 1873	282	87	3	647
Washing-machine.....	L. Reed.....	139, 815	June 10, 1873	352	109	3	653

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Washing-machine	W. M. Rowland	140, 435	July 1, 1873	77	27	4	14
Washing-machine	G. Seymour	137, 151	Mar. 25, 1873	724	241	3	333
Washing-machine	J. Sheffer	140, 651	July 8, 1873	279	94	4	42
Washing-machine	C. W. Sherer	142, 742	Sept. 9, 1873	375	126	4	284
Washing-machine	S. Short	145, 911	Dec. 23, 1873	791	259	4	685
Washing-machine	E. Smith	137, 494	Apr. 1, 1873	198	61	3	373
Washing-machine	J. Q. A. Smith	142, 523	Sept. 2, 1873	179	59	4	256
Washing-machine	M. W. Staples	142, 958	Sept. 16, 1873	565	191	4	310
Washing-machine	M. W. Staples	144, 365	Nov. 4, 1873	161	53	4	491
Washing-machine	J. C. Stewart	144, 237	Nov. 4, 1873	61	19	4	483
Washing-machine	J. Strahl	135, 859	Feb. 11, 1873	433	141	3	173
Washing-machine	L. H. Strobbridge	140, 558	July 1, 1873	185	63	4	23
Washing-machine	H. Stuckman	136, 787	Mar. 11, 1873	391	129	3	286
Washing-machine	J. Taber	138, 296	Apr. 29, 1873	965	303	3	475
Washing-machine	J. W. Taylor	141, 402	July 29, 1873	1, 001	325	4	125
Washing-machine	S. J. Taylor	139, 342	May 27, 1873	805	257	3	594
Washing-machine	J. Trickett	144, 805	Nov. 18, 1873	549	186	4	546
Washing-machine	J. W. Tull and J. W. Weston	145, 602	Dec. 16, 1873	512	168	4	651
Washing-machine	A. Van Allen	138, 597	May 6, 1873	113	37	3	507
Washing-machine	G. W. Wageouer	139, 093	May 20, 1873	572	179	3	567
Washing-machine	G. S. Walker	142, 535	Sept. 2, 1873	191	62	4	257
Washing-machine	W. R. Walton	141, 022	July 22, 1873	629	212	4	88
Washing-machine	C. Watson	136, 474	Mar. 4, 1873	106	35	3	254
Washing-machine	P. B. Watson	138, 969	May 13, 1873	447	140	3	544
Washing-machine	V. White	138, 970	May 13, 1873	448	141	3	544
Washing-machine	F. M. Wilderman	143, 209	Sept. 23, 1873	773	266	4	338
Washing-machine	J. Wilbur	135, 955	Feb. 18, 1873	526	172	3	194
Washing-machine	N. O. Wilcox	138, 110	Apr. 22, 1873	768	244	3	453
Washing-machine	B. A. Williams	137, 161	Mar. 25, 1873	734	244	3	334
Washing-machine	A. M. Wilson	142, 313	Aug. 26, 1873	827	271	4	229
Washing-machine	G. L. Witsell	140, 753	July 8, 1873	365	123	4	49
Washing-machine	W. S. Young	139, 100	May 20, 1873	576	181	3	568
Washing printed or bleached goods, Apparatus for	B. G. Brooks	135, 518	Feb. 4, 1873	110	35	3	136
Waste-trap	W. A. Shaw and C. C. Tracy	139, 739	June 10, 1873	284	88	3	648
Watch	A. Frankfeld	144, 270	Nov. 4, 1873	85	28	4	485
Watch and other time-pieces of aluminium-compound, Manufacture of spring for	F. A. Lange	139, 678	June 10, 1873	219	.....	3	643
Watch-balance, Attaching hair-spring to	J. Shaw	135, 248	Jan. 28, 1873	714	228	3	105
Watch-barrel	F. A. Giles	145, 939	Dec. 16, 1873	838	273	4	700
Watch, Calendar	D. J. Mozart	141, 161	July 22, 1873	756	249	4	98
Watch-case	J. C. Dueber	139, 779	June 10, 1873	321	100	3	650
Watch-case caps and backs, Die for making	S. C. Lewis	140, 424	July 1, 1873	68	24	4	14
Watch-case center, Manufacture of	J. C. Dueber	141, 861	Aug. 19, 1873	418	136	4	186
Watch-case latch	J. C. Dueber	142, 684	Sept. 9, 1873	324	108	4	280
Watch-case spring	U. A. Juoet	143, 923	Oct. 28, 1873	568	188	4	455
Watch-case spring	J. Laurent and J. Menegay	135, 348	Jan. 28, 1873	798	258	3	112
Watch-case, Spring-joint for	J. Gordon	141, 045	July 22, 1873	647	218	4	89
Watch-chain	P. Frontier and A. Bellemere	145, 642	Dec. 16, 1873	548	180	4	654
Watch-chain and bracelet, Manufacture of	W. C. Edge	143, 503	Oct. 7, 1873	89	30	4	388
Watch-chain catch	L. C. Thiery	136, 190	Feb. 25, 1873	747	241	3	223
Watch-escapement	D. J. Mozart	140, 944	July 15, 1873	544	183	4	72
Watch-gear cutting-machine	A. Durini	144, 266	Nov. 4, 1873	82	27	4	485
Watch, Hair-spring stud for	J. P. Adams	140, 231	June 24, 1873	735	232	3	700
Watch, Hand-setting	F. A. Jones	140, 581	July 8, 1873	218	73	4	37
Watch-key	F. E. Allen and S. G. Hall	138, 779	May 13, 1873	290	89	3	531
Watch-key	F. E. Allen and S. G. Hall	143, 653	Oct. 14, 1873	233	78	4	408
Watch-key and screw-driver combined	G. P. Reed and H. P. Day	138, 528	May 6, 1873	55	19	3	502
Watch, Mainspring attachment for	S. S. Morrill	137, 468	Apr. 1, 1873	171	54	3	371
Watch, Mainspring safety-attachment for	R. Gove	137, 437	Apr. 1, 1873	142	46	3	368
Watch regulator	N. Staffin	140, 090	June 17, 1873	597	188	3	690
Watch, Reversible center-pinion for	O. Gates	144, 897	Nov. 25, 1873	635	216	4	564
Watch, Reversible pinion for	G. Hunt	142, 789	Sept. 16, 1873	426	144	4	298
Watch, Reversible pinion for	F. Pickert	138, 187	Apr. 22, 1873	838	265	3	459
Watch, Self-winding	D. J. Mozart	141, 373	July 29, 1873	972	316	4	123
Watch, Stem winding and setting	C. A. Montandon	135, 241	Jan. 28, 1873	706	226	3	104
Watch, Stem winding and setting	U. Nardin	145, 070	Dec. 2, 1873	28	9	4	587
Watch, Stem winding and setting	E. J. Pacaud	144, 859	Nov. 25, 1873	610	207	4	561
Watch, Stem winding and setting	G. P. Reed	139, 735	June 10, 1873	279	87	3	647
Watch, Winding and setting	C. E. Jacot	135, 559	Feb. 4, 1873	153	49	3	139
Watch, Winding click	S. C. Smith	138, 350	Apr. 29, 1873	1, 008	317	3	481
Watches, Double stop movement for	A. Frankfeld	143, 619	Oct. 14, 1873	207	70	4	406
Watches, Manufacture of push-top for	J. C. Dueber	141, 125	July 22, 1873	718	239	4	95
Watchmakers' chain-clamp	C. E. Eward	143, 131	Sept. 23, 1873	710	244	4	332
Watchmakers' staking-tool	J. Stark	143, 857	Oct. 21, 1873	441	147	4	434
Water and beer cooler	C. Hubing	136, 600	Mar. 11, 1873	235	80	3	273
Water and gas pipe, Machine for introducing	J. Fritz and W. C. Pooley	139, 566	June 3, 1873	105	35	3	617
Water and gas pipe, Mode of connecting cement	G. C. Nichols	137, 562	Apr. 8, 1873	264	81	3	330
Water by direct condensation of air, Apparatus for forcing	J. M. Brooke	139, 538	June 3, 1873	79	27	3	615
Water chemically and mechanically, System of purifying	G. Demally	143, 676	Oct. 14, 1873	254	85	4	410
Water-closet	J. Albee	136, 199	Feb. 25, 1873	753	243	3	224
Water-closet	J. G. Jennings	137, 082	Mar. 18, 1873	669	222	3	328
Water-closet	J. F. Neilson	145, 586	Dec. 16, 1873	499	164	4	650
Water-closet	P. C. Rowe	138, 287	Apr. 29, 1873	954	300	3	476
Water-closet	J. H. Stevens	140, 797	July 15, 1873	406	138	4	61
Water-closet and urinal, Ventilating	R. D. O. Smith	136, 105	Feb. 18, 1873	657	215	3	204
Water-closet bowl, Ventilating	J. V. Mathivet	138, 267	Apr. 29, 1873	933	295	3	475
Water-closet for vessels	W. Bishop	141, 482	Aug. 5, 1873	64	20	4	140
Water-closet, Portable	T. Barrett	139, 531	June 3, 1873	74	25	3	615
Water-cooler	I. Brach	142, 986	Sept. 23, 1873	593	202	4	323
Water-cooler	J. E. Cammeyer	143, 058	Sept. 23, 1873	657	225	4	328
Water-cooler	W. S. Kimball	140, 712	July 8, 1873	329	112	4	46

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Water-cooler	W. F. Rutter	146, 099	Dec. 30, 1873	978	316	4	711
Water-cooler	T. Smith	142, 178	Aug. 26, 1873	718	237	4	290
Water-cooler and filter combined	W. J. English	142, 620	Sept. 9, 1873	272	89	4	276
Water-cooler and show-case combined	P. J. Hanour	140, 777	July 15, 1873	388	133	4	59
Water-cooler, False bottom for	J. F. Wood	144, 587	Nov. 11, 1873	358	121	4	519
Water-cooler, Refrigerator	T. Smith	137, 867	Apr. 15, 1873	540	168	3	425
Water-elevator	J. A. Ayres	137, 754	Apr. 15, 1873	442	137	3	417
Water-elevator	A. Balding	134, 835	Jan. 14, 1873	318	101	3	45
Water-elevator	T. Bell	138, 312	Apr. 29, 1873	978	307	3	478
Water-elevator	S. Bennett	140, 808	July 15, 1873	415	141	4	61
Water-elevator	J. B. Erwin	141, 212	July 29, 1873	819	267	4	110
Water-elevator	J. B. Erwin and G. H. Shoulters	136, 368	Mar. 4, 1873	13	5	3	246
Water-elevator	T. Fowlds, jr.	135, 104	Jan. 21, 1873	560	182	3	80
Water-elevator	D. J. McMillen	146, 086	Dec. 30, 1873	964	311	4	710
Water-elevator and injector, Steam	A. W. Craun	135, 091	Jan. 21, 1873	548	179	3	79
Water-elevator, Pneumatic	J. M. Blanchard and W. E. Prall	140, 879	July 15, 1873	474	161	4	66
Water-elevator, Steam	A. D. Brock	135, 765	Feb. 11, 1873	349	112	3	167
Water-elevator, Steam and vacuum	J. C. Wightman	141, 249	July 29, 1873	855	279	4	113
Water from mines, Purifying	H. Burgess	144, 737	Nov. 18, 1873	490	164	4	541
Water-gage alarm and register, Electrical	C. Heisler	144, 540	Nov. 11, 1873	319	108	4	515
Water-gage and feed-indicator for steam-boilers	A. S. Goodrich	138, 882	May 13, 1873	380	119	3	539
Water-gage, Boiler	C. G. and B. M. Martin	144, 686	Nov. 18, 1873	449	152	4	538
Water-heater	T. M. Carroll	144, 060	Oct. 28, 1873	637	209	4	466
Water-heater	J. Kendell, jr.	135, 921	Feb. 18, 1873	500	162	3	132
Water-heater	L. S. Mead	142, 035	Aug. 19, 1873	577	190	4	199
Water-heater	A. Spence	145, 457	Dec. 9, 1873	371	123	4	627
Water-heater for heating buildings	A. Marriott	135, 135	Jan. 21, 1873	587	191	3	82
Water-indicator, Steam-boiler	A. P. Pitkin	138, 524	May 6, 1873	52	17	3	502
Water-main, Attachment-stop for	W. Young	137, 399	Apr. 1, 1873	106	34	3	365
Water-main, Stop-gate in	D. C. Cregier	141, 426	Aug. 5, 1873	15	4	4	136
Water-meter	E. E. P. Clausolles	136, 363	Mar. 4, 1873	8	3, 4	3	246
Water-meter	T. T. Prosser	142, 650	Sept. 9, 1873	294	97	4	977
Water-meter	A. M. Rouse	138, 697	May 6, 1873	203	64	3	514
Water-meter	A. M. Rouse	140, 731	July 8, 1873	343	116	4	48
Water-meter, Automatic	F. D. Bellido	144, 498	Nov. 11, 1873	281	95	4	513
Water-meter, Manufacture of rubber diaphragms for	D. B. Spooner	145, 762	Dec. 23, 1873	664	217	4	675
Water-pipes, Hydraulic cushion for	W. Rickets	144, 141	Oct. 28, 1873	701	233	4	466
Water-proof furze fabric	S. H. Atkins	136, 636	Mar. 11, 1873	267	89	3	276
Water-proof gum from flax-seed, &c., Preparing	D. M. Lamb	140, 283	June 24, 1873	780	279	3	704
Water-proof gum, Production of	D. M. Lamb	140, 281	June 24, 1873	779	278	3	703
Water-proof gum, Production of	D. M. Lamb	140, 282	June 24, 1873	780	279	3	704
Water-proof material	X. Karcheski	137, 451	Apr. 1, 1873	153	53	3	369
Water-proof, Process of rendering fibrous and textile material	X. Karcheski	137, 452	Apr. 1, 1873	154	54	3	369
Water-proofing compound for canvas and other fabrics	P. H. Morgan	139, 017	May 20, 1873	502	154	3	562
Water-raising apparatus	L. Chase	143, 882	Oct. 21, 1873	461	155	4	436
Water-regulator	J. P. Bolin	136, 024	Feb. 18, 1873	586	193	3	199
Water-regulator and alarm for boiler	R. Sailey	139, 194	May 20, 1873	668	209	3	575
Water-regulator for boilers	C. J. Weld	141, 302	July 29, 1873	901	285	4	117
Water-tank, Hotel	J. H. Corey	144, 634	Nov. 25, 1873	584	199	4	559
Water-tank, Railway stock-car	J. B. Calkins	136, 132	Feb. 25, 1873	699	226	3	220
Water-traps, Device for forming	W. A. Butler	143, 665	Oct. 14, 1873	244	82	4	409
Water-traps, Device for forming	W. A. Butler	144, 057	Oct. 28, 1873	633	209	4	460
Water-traps, Making	R. Cunningham	139, 946	June 17, 1873	472	148	3	670
Water-traps, Manufacture of	W. A. Butler	143, 326	Sept. 30, 1873	880	301	4	362
Water-traps, Mold for casting	W. A. Butler	143, 327	Sept. 30, 1873	881	301	4	362
Water-wheel	J. A. Bell and A. D. Cole	138, 979	May 20, 1873	468	147	3	559
Water-wheel	T. J. Alcott	139, 699	June 10, 1873	246	77, 78	3	645
Water-wheel	B. J. Barber	144, 944	Nov. 25, 1873	674	228	4	567
Water-wheel	O. J. Bollinger	140, 401	July 1, 1873	54	19	4	12
Water-wheel	J. T. Case	134, 731	Jan. 14, 1873	228	73	3	39
Water-wheel	M. Chandler	145, 987	Dec. 30, 1873	880	285	4	703
Water-wheel	N. J. Colman	135, 891	Feb. 18, 1873	477	154	3	191
Water-wheel	G. Cox	134, 520	Jan. 7, 1873	17	6	3	9
Water-wheel	G. Curtis	144, 261	Nov. 4, 1873	78	25	4	484
Water-wheel	W. C. Edwards	138, 621	May 6, 1873	133	44	3	508
Water-wheel	E. Hackett	142, 228	Aug. 26, 1873	760	250	4	223
Water-wheel	J. B. Hamilton	146, 068	Dec. 30, 1873	949	306	4	709
Water-wheel	M. H. Heylman	145, 346	Dec. 9, 1873	280	93	4	620
Water-wheel	J. F. Kirkhart and J. Ramsay	143, 984	Oct. 28, 1873	568	189	4	455
Water-wheel	J. Kunkle	145, 740	Dec. 23, 1873	643	210	4	674
Water-wheel	J. Nolan	137, 146	Mar. 25, 1873	720	239	3	333
Water-wheel	E. Overton	142, 862	Sept. 16, 1873	483	165	4	303
Water-wheel	E. R. Percy	141, 074	July 22, 1873	674	226	4	91
Water-wheel	A. B. Reniff	138, 933	May 13, 1873	419	131	3	542
Water-wheel	N. C. Roberts	140, 544	July 1, 1873	171	58	4	22
Water-wheel	I. S. Roland	140, 593	July 8, 1873	230	77	4	34
Water-wheel	B. Ruof	137, 242	Mar. 25, 1873	811	267	3	339
Water-wheel	B. Stetson	141, 826	Aug. 12, 1873	380	124	4	173
Water-wheel	J. Tancy	143, 040	Sept. 21, 1873	641	220	4	326
Water-wheel	S. T. Teachout	139, 344	May 27, 1873	807	258	3	594
Water-wheel	H. B. Weaver	137, 580	Apr. 8, 1873	281	87	3	391
Water-wheel	A. N. Wolf	141, 616	Aug. 5, 1873	180	57	4	150
Water-wheel, Adjustable chute for turbine	J. A. Bell	138, 978	May 20, 1873	467	147	3	559
Water-wheel, Bucket-turbine	S. L. Denney	135, 412	Feb. 4, 1873	17	5	3	129
Water-wheel gate	J. M. Burghardt	137, 822	Apr. 15, 1873	502	157	3	422
Water-wheel, Turbine	J. N. & L. M. Asbury	136, 298	Feb. 25, 1873	839	271	3	231
Water-wheel, Turbine	E. P. H. Capron	141, 759	Aug. 12, 1873	318	104	4	169
Water-wheel, Turbine	W. H. Elmer	137, 666	Apr. 8, 1873	354	109	3	397

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Water-wheel, Turbine	J. C. Green	137, 836	Apr. 15, 1873	516	161	3	423
Water-wheel, Turbine	W. P. Hale	135, 707	Feb. 11, 1873	303	96	3	163
Water-wheel, Turbine	J. Harris	136, 379	Mar. 4, 1873	20	7	3	247
Water-wheel, Turbine	A. A. Herriman	142, 628	Sept. 9, 1873	277	91	4	276
Water-wheel, Turbine	T. H. Risdon and W. W. Tyler	135, 367	Jan. 28, 1873	817	264	3	113
Water-wheel, Turbine	I. Sherck	144, 363	Nov. 4, 1873	159	53	4	491
Water-wheel, Turbine	S. M. Stevens	136, 784	Mar. 11, 1873	389	128	3	285
Water-wheel, Turbine	H. Van De Water	140, 602	July 8, 1873	239	81	4	39
Water-wheel, Turbine	J. E. Whiting	143, 312	Sept. 30, 1873	868	297	4	362
Water-wheel, Turbine	A. Wreath	135, 503	Feb. 4, 1873	100	31, 32	3	135
Water-wheel, Turbine	P. W. Yarell	135, 459	Feb. 4, 1873	63	20	3	132
Water-works, Stand-pipe for	G. W. Pearsons	143, 711	Oct. 14, 1873	294	96	4	412
Wave-power	C. Buckner	138, 474	May 6, 1873	8	3	3	498
Waxed ends, Apparatus for preparing	W. May	134, 998	Jan. 21, 1873	472	151	3	73
Way, Elevated	H. W. Farley	137, 667	Apr. 8, 1873	355	110	3	397
Way-meter for wheel vehicles	J. A. Robinson	145, 527	Dec. 16, 1873	452	148	4	646
Weather-guard	J. Pease	145, 750	Dec. 23, 1873	651	213	4	674
Weather-guard for doors	C. A. Wood	143, 543	Sept. 3, 1873	197	64	4	258
Weather-strip	J. and G. Bacon	138, 065	Apr. 22, 1873	733	232	3	450
Weather-strip	O. W. Booth	145, 616	Dec. 16, 1873	524	172	4	652
Weather-strip	J. W. Browne	143, 394	Sept. 30, 1873	878	300	4	362
Weather-strip	I. Case	135, 627	Feb. 11, 1873	231	73	3	158
Weather-strip	C. B. Rager	145, 239	Dec. 2, 1873	180	62	4	589
Weather-strip	F. Siering	141, 176	July 22, 1872	774	253	4	99
Weather-strip	O. A. Vorce	145, 890	Dec. 23, 1873	708	233	4	679
Weather-strip, Window	G. P. Potter	140, 640	July 8, 1873	271	92	4	42
Weather-threshold	J. W. Kramer	135, 139	Jan. 21, 1873	585	190	3	82
Weather-threshold	J. P. Stark	142, 139	Aug. 26, 1873	681	224	4	217
Weavers' harness, Machine for making	J. H. Crowell	144, 320	Nov. 4, 1873	123	41	4	488
Weavers' harness, Machine for making	J. H. Crowell	145, 282	Dec. 9, 1873	223	76	4	616
Webbing, Machine for cutting	W. H. Rice	139, 616	June 3, 1873	150	50	3	621
Weigher, Automatic grain	J. W. Hill	144, 541	Nov. 11, 1873	320	108	4	516
Weighing-attachment for wagons	J. W. Hill	140, 826	July 15, 1873	433	147	4	63
Weighing-scales, Bag-holder	H. T. Budge and N. W. Russell	138, 315	Apr. 29, 1873	980	309	3	478
Weights, Apparatus for lowering	T. Wrightson	143, 802	Oct. 21, 1873	394	130	4	430
Welding copper	E. Renand	145, 686	Dec. 16, 1873	584	197	4	657
Welding iron and steel	J. Popping	142, 939	Sept. 16, 1873	549	197	4	309
Welding machine, Tube	J. Saoler	135, 160	Jan. 21, 1873	606	197	3	84
Welding steel to cast iron, Process of	J. H. Smith	140, 087	June 17, 1873	596	197	3	680
Well	A. Curtis	139, 947	June 17, 1873	473	149	3	670
Well-boring, artesian	W. McPherson	138, 174	Apr. 22, 1873	822	261	3	457
Well-boring drill	T. Phillips and J. Golletz	144, 475	Nov. 11, 1873	262	88	4	511
Well-boring machine	J. A. King	135, 129	Jan. 21, 1873	583	189	3	82
Well-cleaning device	W. F. Brown	137, 529	Apr. 8, 1873	237	72	3	387
Well-curb	N. H. Lindley	137, 555	Apr. 8, 1873	258	79	3	389
Well-drill	G. Koch	144, 550	Nov. 11, 1873	328	110	4	516
Well drills, Mechanism for effecting rotary motion of oil.	G. A. Hinckley	134, 889	Jan. 14, 1873	363	116	3	49
Well drills, Mechanism for operating and feeding oil.	G. A. Hinckley	135, 988	Feb. 18, 1873	555	183	3	127
Well, Driven	J. Largo	135, 718	Feb. 11, 1873	310	98	3	164
Well, Driven	G. W. Storer	140, 963	July 15, 1873	563	188	4	73
Well, Driven	A. Wilson	140, 665	July 8, 1873	289	98	4	43
Well, Driven or bored	J. E. Morrison	139, 018	May 20, 1873	503	154	3	562
Well points, Machine for perforating drive.	C. L. Travis	141, 188	July 22, 1873	784	256	4	100
Well, Draw-point for driven	W. P. Smith	135, 016	Jan. 21, 1873	490	157	3	74
Well tubing, Oil	J. Moloney	142, 861	Sept. 16, 1873	482	164	4	303
Wells, Apparatus for lowering pipes in	S. P. Okerlund	141, 243	July 29, 1873	838	273	4	112
Wells, Apparatus for raising oil, &c., from	H. W. Faucett	140, 699	July 8, 1873	313	106	4	45
Wells, Cleaning oil	J. J. Looney	139, 010	May 20, 1873	497	165	3	561
Wells, Device for steaming oil	T. B. Crothers	139, 656	June 10, 1873	199	65	3	641
Wells, Drill for boring artesian	C. G. Cross	142, 992	Sept. 23, 1873	599	203	4	323
Wells, Extracting tubular casing from oil.	H. Harris	136, 992	Mar. 18, 1873	573	191	3	310
Wells, Hanger for walking beams for oil	M. Reulings and W. J. Innis	134, 807	Jan. 14, 1873	293	94	3	44
Wells, Oscillating gland for flowing oil	G. Fenton	143, 280	Sept. 30, 1873	840	289	4	359
Wells, Reamer for enlarging oil.	M. Gillespie	141, 344	July 29, 1873	846	307	4	121
Well-parer	V. Vrooman	141, 406	July 29, 1873	1005	326	4	125
Whalebone or rattan, Mechanism for splitting	J. Taggart	145, 539	Dec. 16, 1873	463	151	4	647
Whalebone-splitting machine	D. Warner	145, 770	Dec. 23, 1873	670	219	4	676
Wheat, Machine for separating cockle, &c., from	G. H. Rich	142, 119	Aug. 26, 1873	670	220	4	216
Wheel:							
See Buffing-wheel.							
Car-wheel.							
Car-brake wheel.							
Carriage-wheel.							
Current-wheel.							
Emery-wheel.							
Fifth-wheel.							
Fly-wheel.							
Harvester-wheel.							
Measuring-wheel.							
Paddle-wheel.							
Pulley-wheel.							
Traction-wheel.							
Turbine-wheel.							
Vehicle-wheel.							
Water-wheel.							
Wheelbarrow-wheel.							
Wind-wheel.							
Wheel-quartering machine	W. Sellers	139, 483	June 3, 1873	35	11	3	611
Wheel-turning machine	J. W. Hill	142, 912	Sept. 16, 1873	523	178	4	307
Wheels, &c., Machine for dressing	J. W. Cole	139, 774	June 10, 1873	317	98	3	650
Wheels, Machine for forming cutter for cutting teeth of	W. Sellers	136, 101	Feb. 18, 1873	652	213	3	204
Wheels, &c., Machine for shaping or dressing	J. W. Cole	139, 775	June 10, 1873	318	99	3	650

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Wheels to axles, Securing	R. J. Lessor and J. B. Shambo	141, 570	Aug. 5, 1873	139	44	4	146
Wheelbarrow-wheel	W. E. Jacobs	143, 511	Oct. 7, 1873	95	33	4	388
Wheelwright-machine	G. Sweet	140, 094	June 17, 1873	601	189	3	681
Whiffletree	H. Agar	145, 226	Dec. 23, 1873	713	234	4	679
Whiffletree	D. A. Johnson	140, 276	June 24, 1873	774	244	3	703
Whiffletree	C. B. McClymoud	134, 758	Jan. 14, 1873	247	81	3	40
Whiffletree	J. Parker	144, 786	Nov. 18, 1873	531	181	4	544
Whiffletree	D. S. Sloan	144, 873	Nov. 25, 1873	620	211	4	562
Whiffletree	A. J. Sprague	140, 170	June 24, 1873	686	215	3	695
Whiffletree	B. S. Wescott	140, 327	June 24, 1873	821	261	3	707
Whiffletree-attachment to vehicles	A. Soursin	137, 103	Mar. 25, 1873	685	227	3	330
Whiffletree-coupling	W. C. Shepherd	138, 701	May 6, 1873	207	65	3	514
Whiffletree, Harness	C. T. Beecher	145, 043	Dec. 2, 1873	1	1	4	586
Whiffletree-hook	M. Matson	141, 721	Aug. 12, 1873	284	93	4	166
Whiffletree snap-hook	C. W. Salaleo	138, 699	May 6, 1873	205	65	3	514
Whiffletrees, &c., Draft-hook for	J. T. Dodson	132, 619	May 6, 1873	131	43	3	508
Whip	F. P. Conso	143, 065	Sept. 23, 1873	662	227	4	328
Whip-handle cap, Manufacture of	G. A. Burr	138, 991	May 20, 1873	478	151	3	560
Whip-lash	H. J. Bush	137, 341	Apr. 1, 1873	59	18	3	361
Whip-rack	J. M. Mitchell	138, 676	May 6, 1873	187	59	3	512
Whip-socket	L. D. Benner	137, 880	Apr. 15, 1873	549	172	3	426
Whip-socket	J. W. Coe and D. Merritt	136, 417	Mar. 4, 1873	55	20	3	250
Whip-socket	J. W. H. Doubler	144, 072	Oct. 28, 1873	646	213	4	461
Whip-socket	J. W. H. Doubler	144, 073	Oct. 28, 1873	647	213	4	461
Whip-socket	J. Heberling	144, 093	Oct. 28, 1873	663	218	4	463
Whip-socket	G. H. Jewett	136, 732	Mar. 11, 1873	345	114	3	282
Whip-socket	C. Lang	142, 346	Sept. 2, 1873	21	7	4	244
Whip-socket	F. B. Munroe	143, 417	Oct. 7, 1873	21	8	4	382
Whip-socket	A. Searls	139, 026	May 20, 1873	508	160	3	562
Whip-socket	J. H. Young	139, 989	June 17, 1873	503	159	3	672
Whip-socket attachment	R. Dods	139, 498	June 3, 1873	49	15	3	613
Whip-socket fastener	W. W. Richardson	141, 052	Aug. 19, 1873	502	165	4	193
Whip-socket fastener	W. W. Richardson	141, 053	Aug. 19, 1873	502	165	4	193
Whip-socket fastening	L. Heywood	134, 802	Jan. 24, 1873	286	93	3	43
Whip-stock	L. Heywood	141, 280	July 29, 1873	881	289	4	116
Whistle, Steam	O. Kromer	142, 166	Aug. 26, 1873	708	231	4	219
Whistle, Steam	O. Kromer	142, 419	Sept. 2, 1873	85	28	4	249
White-lead to collect the dust, Manufacture of	M. Tolle	143, 143	Sept. 23, 1873	718	247	4	333
Wick-raiser	J. Strazzer	141, 673	Aug. 12, 1873	247	78	4	163
Winding-machine guide	D. C. Hill	134, 888	Jan. 14, 1873	362	115	3	49
Windlass	D. N. B. Coffin, jr.	134, 517	Jan. 7, 1873	15	5	3	8
Windlass	W. H. Harfield	145, 866	Dec. 23, 1873	749	244	4	682
Windlass	W. Newcomb	143, 933	Oct. 28, 1873	578	192	4	456
Windlass	O. Reeder	135, 099	Jan. 21, 1873	483	155	3	74
Windlass and capstan	D. N. B. Coffin, jr.	139, 872	June 17, 1873	408	127 128	3	665
Windlass, Hoisting-machine	J. Rushworth	136, 270	Feb. 25, 1873	816	263	3	229
Windlass, Ships'	G. H. Remington, B. D. Thayer, and J. P. Manton	144, 227	Nov. 4, 1873	52	16	4	482
Windmill	J. Q. and H. R. Adams	143, 111	Sept. 23, 1873	696	239	4	331
Windmill	E. A. Atwood and H. H. Bodwell	142, 885	Sept. 16, 1873	500	171	4	305
Windmill	H. H. Bodwell and E. A. Atwood	142, 198	Aug. 26, 1873	735	242	4	221
Windmill	A. T. Boon	142, 324	Sept. 2, 1873	3	1	4	242
Windmill	G. A. Carter	142, 436	Sept. 2, 1873	99	33	4	250
Windmill	M. T. and M. C. Chapman	145, 335	Dec. 9, 1873	271	91	4	619
Windmill	E. Crump	146, 049	Dec. 30, 1873	934	301	4	707
Windmill	J. P. Davis and A. Morgan	145, 158	Dec. 2, 1873	110	36	4	594
Windmill	J. Hoag	143, 076	Sept. 23, 1873	669	230	4	329
Windmill	T. R. and A. C. Jackson	139, 007	May 20, 1873	495	156	3	561
Windmill	W. Jones	142, 108	Aug. 26, 1873	661	217	4	215
Windmill	M. J. Kanffman	142, 479	Sept. 2, 1873	140	46	4	253
Windmill	J. Keeler and C. C. Harris	145, 877	Dec. 23, 1873	758	248	4	683
Windmill	O. B. Knapp	142, 400	Sept. 2, 1873	71	23	4	248
Windmill	O. B. Knapp	142, 636	Sept. 9, 1873	282	93	4	277
Windmill	C. P. Long and C. N. McEvers	137, 012	Mar. 18, 1873	593	197	3	311
Windmill	G. Mabie	140, 514	July 1, 1873	146	50	4	20
Windmill	W. H. Marsh and O. E. Miles	140, 931	July 15, 1873	529	177	4	70
Windmill	W. C. Nelson	142, 266	Aug. 26, 1873	791	261	4	226
Windmill	W. D. Nichols	137, 793	Apr. 15, 1873	477	150	3	420
Windmill	W. D. Nichols	139, 473	June 3, 1873	27	8	3	611
Windmill	J. B. Park	137, 565	Apr. 8, 1873	266	82	3	390
Windmill	W. Peck	138, 186	Apr. 22, 1873	837	265	3	458
Windmill	S. H. Radway	144, 137	Oct. 28, 1873	698	231	4	465
Windmill	E. Sanderson	145, 970	Dec. 30, 1873	867	281	4	702
Windmill	S. Shannon	140, 292	June 24, 1873	729	229	3	699
Windmill	G. Shaver	135, 680	Feb. 11, 1873	267	84	3	160
Windmill	E. S. Smith	137, 720	Apr. 8, 1873	412	127	3	402
Windmill	G. Stearns	143, 308	Sept. 30, 1873	865	296	4	361
Windmill	J. F. Stewart	140, 854	July 15, 1873	455	154	4	65
Windmill	S. F. Stowe	141, 627	Aug. 12, 1873	381	125	4	174
Windmill	G. A. Swartz	137, 111	Mar. 25, 1873	692	230	3	330
Windmill	C. A. Taylor	141, 094	July 22, 1873	692	232	4	93
Windmill	J. A. Wheeler	145, 541	Dec. 16, 1873	464	152	4	647
Windmill-regulator	D. C. Stover	145, 765	Dec. 23, 1873	666	217	4	675
Wind-wheel	P. Brand, J. Barrows, and A. Armstrong	145, 782	Dec. 23, 1873	679	222	4	677
Wind-wheel	D. Halladay	138, 648	May 6, 1873	157	51	3	510
Wind-wheel	C. W. Kline	145, 214	Dec. 2, 1873	157	54	4	598
Wind-wheel	G. Metcalf	142, 256	Aug. 26, 1873	783	258	4	225
Wind-wheel	A. Raymond	139, 189	May 20, 1873	664	208	3	574
Wind-wheel	N. and D. Sheplar	143, 100	Sept. 23, 1873	687	236	4	330
Wind-wheel power	I. Straub	138, 593	May 6, 1873	110	36	3	507
Window	G. M. Barth	144, 430	Nov. 11, 1873	229	76	4	508
Window	S. Darling	138, 009	Apr. 22, 1873	676	214	3	446
Window	J. Perkins	138, 579	May 6, 1873	100	32	3	506

Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Window-fastener	W. A. Hawthorn and E. E. Scott.	141,505	Aug. 5, 1873	85	26	4	142
Window-fastening, Storm	A. J. Lovejoy	144,684	Nov. 18, 1873	448	152	4	537
Window frame and sash	J. McNamee	137,943	Apr. 15, 1873	603	190	3	430
Window-guard	J. W. White	145,773	Dec. 23, 1873	673	219	4	676
Window, Implement for washing	T. J. Mayall	141,368	July 29, 1873	968	315	4	122
Window-platform, Portable	G. H. Peabody	137,714	Apr. 8, 1873	400	123	3	401
Window-screen	W. G. Anderson	145,547	Dec. 16, 1873	470	153	4	647
Window-screen	J. W. Boughton	140,674	July 8, 1873	297	99	4	44
Window-screen	L. W. Fifield	136,826	Mar. 18, 1873	437	145	3	299
Window-screen	W. H. Fletcher	139,138	May 20, 1873	614	192	3	571
Window-screen	C. W. Fowler	135,901	Feb. 18, 1873	484	156	3	191
Window-screen	D. C. Kellam	139,794	June 10, 1873	333	103	3	651
Window-screen	S. T. Lippincott	136,740	Mar. 11, 1873	352	116	3	283
Window-screen	J. F. Scherpe	142,735	Sept. 9, 1873	367	124	4	283
Window-screen	J. A. Thompson	140,967	July 15, 1873	566	189	4	73
Window-shade	E. E. Johnson	135,713	Feb. 11, 1873	306	97	3	164
Window-ventilator	I. Robinson	144,413	Nov. 11, 1873	211	71	4	507
Window weather-proof, Making	B. Smith	137,572	Apr. 8, 1873	274	84	3	390
Wine-cooler	F. M. Piper	139,915	June 17, 1873	449	139	3	668
Wine-cooler	J. R. Whipple	136,632	Mar. 11, 1873	264	89	3	275
Wine, Manufacture of	J. C. Baxter	139,757	June 10, 1873	301	93	3	649
Wine-press	E. Howland	144,456	Nov. 11, 1873	246	83	4	510
Wines, Manufacture of imitation medicated	V. Brosseau	145,928	Dec. 30, 1873	827	4		699
Winnower, Reciprocating	H. Keller	140,201	June 24, 1873	712	224	3	698
Winnower, Reciprocating	E. Lombard	144,116	Oct. 28, 1873	681	225	4	464
Winnower, Reciprocating	H. C. Wirtz and C. Gebhardt, jr.	145,077	Dec. 2, 1873	35	11	4	588
Winnower, Rotary	J. H. Adamson	145,980	Dec. 30, 1873	874	283	4	702
Wire	G. D. Dudley	145,285	Dec. 9, 1873	227	77	4	616
Wire and rope stretching tool	R. L. Taylor	138,298	Apr. 29, 1873	966	303	3	477
Wire-cloth, Apparatus for drying painted	C. H. Waters	138,060	Apr. 22, 1873	728	230	3	450
Wire-cloth painting-machine	J. H. De Witt	143,227	Sept. 30, 1873	785	274	4	355
Wire-fabric	W. C. Edge	142,450	Sept. 2, 1873	115	36	4	251
Wire-fabric, Woven	J. W. C. Peters	146,160	June 24, 1873	678	213	3	695
Wire, Flier for covering bonnet	E. H. Tyler	140,322	June 24, 1873	817	259	3	707
Wire-gage	H. Smith	140,554	July 1, 1873	181	61	4	23
Wire-loops, Machine for forming	C. M. Spencer	145,259	Dec. 2, 1873	190	65, 66	4	600
Wire, Machine for drawing	J. and E. Woods	144,940	Nov. 25, 1873	670	227	4	567
Wire, Machine for pointing	F. H. Aiken	143,486	Oct. 7, 1873	75	25	4	387
Wire, Nipper for twisting	J. W. Fry	145,794	Dec. 23, 1873	688	226	4	677
Wire-pointing machine	F. H. Aiken	141,977	Aug. 18, 1873	519	172	4	194
Wire, Rolling	W. Walton and J. T. Fallows	138,866	May 13, 1873	445	140	3	544
Wire stand or holder	G. D. Dudley	145,283	Dec. 9, 1873	226	76	4	616
Wire-stretcher	I. H. Congdon and J. E. House	146,046	Dec. 30, 1873	931	300	4	707
Wire turning and cutting machine	C. M. Spencer	137,630	Apr. 8, 1873	319	100	3	394
Wire-way	J. H. and J. W. Rogers	140,167	June 24, 1873	684	214	3	695
Wire-way, Elevated	C. E. W. Lunster	141,757	Aug. 12, 1873	316	103	4	169
Wire-way, Elevated	H. T. Lantis and N. Davis	142,857	Sept. 16, 1873	479	163	4	303
Wire-way, Saddle for	T. M. Martin	143,087	Sept. 23, 1873	677	233	4	329
Wood and iron, Composition for coating	E. F. Prentiss	142,117	Aug. 26, 1873	668	4		216
Wood, Bundling kindling	C. B. Whitmore	142,309	Aug. 26, 1873	824	273	4	229
Wood, Composition for filling the grain of	W. Harding	139,670	June 10, 1873	212	3		642
Wood, Compound for filling	C. E. Bradley	144,948	Nov. 25, 1873	678	4		567
Wood, Compound for filling	J. B. Dittenhaber	142,446	Sept. 2, 1873	112	4		251
Wood, Compound for painting and coating	H. F. Snow and J. H. Davis	143,472	Oct. 7, 1873	61	4		386
Wood-compressor	H. A. House	143,243	Sept. 30, 1873	809	278	4	356
Wood cutter, Kindling	N. Sonnichsen	140,225	June 24, 1873	730	230	3	699
Wood-fillings and paint-compounds	J. Miller	138,914	May 13, 1873	404	3		541
Wood-graining apparatus	C. Falke	143,444	Oct. 7, 1873	41	14	4	384
Wood, Graining or imitating	J. Johnston	135,039	Jan. 21, 1873	511	3		76
Wood-grinder	J. Bridge	144,313	Nov. 4, 1873	115	39	4	488
Wood-grinder	J. F. Daniels and J. H. Hubbard	141,206	July 29, 1873	810	265	4	110
Wood-joining	R. McChesney	144,626	Nov. 18, 1873	399	133 } 134 }	4	533
Wood-molding	L. Bushnell	144,438	Nov. 11, 1873	234	78	4	509
Wood-preserving apparatus	H. G. McGonegal	140,520	July 1, 1873	152	52	4	21
Wood, Process of softening and toughening blocks of	G. W. Swan	142,298	Aug. 26, 1873	817	4		228
Wood-splitting machine	D. Milliken	143,455	Oct. 7, 1873	49	17	4	385
Wood-splitting machine	R. Murray	142,116	Aug. 26, 1873	667	220	4	216
Wood to imitate slate, Coloring and preserving	J. O. Froshaug	145,859	Dec. 23, 1873	743	4		682
Wood, &c., to render it acid-proof, Compound for coating	R. Newell	140,530	July 1, 1873	161	4		21
Wooden pin, Machine for making	F. C. Johnson	138,658	May 6, 1873	168	54	3	511
Wool, &c., Apparatus for cleansing dyed	J. E. Ackroyd	143,603	Oct. 14, 1873	191	64	4	404
Wool-burring	T. Crossley	141,038	July 22, 1873	642	4		89
Wool on pellets, Cleaning	J. M. Brown	141,423	Aug. 5, 1873	12	4		136
Wool-pulling machinery	J. Watteau	141,972	Aug. 19, 1873	515	170 } 171 }	4	194
Work-bench, Joiners'	H. White	140,394	July 1, 1873	49	17	4	12
Work-box	W. Brace	138,372	Apr. 29, 1873	1,026	323	3	482
Work-box	E. Heath	138,886	May 13, 1873	383	120	3	539
Work-box	E. Hinckley	142,786	Sept. 16, 1873	424	143	4	298
Work-box	H. E. Wilcox	141,409	July 29, 1873	1,007	327	4	125
Work-holder	R. W. Perkins	138,691	May 6, 1873	198	62	3	513
Work-holding device	F. E. Hahn	146,064	Dec. 30, 1873	946	305	4	708
Work-stand	C. S. Caple	138,072	Apr. 22, 1873	738	234	3	451
Work-table, Attachment for ladies'	J. P. Wilson	143,212	Sept. 23, 1873	776	267	4	338
Worm destroyer, Cotton	J. Helm	139,062	May 20, 1873	542	171	3	565
Worm destroyer, Cotton	J. W. Johnson	145,571	Dec. 16, 1873	487	160	4	649
Worm destroyer, Cotton	J. W. Johnson	145,572	Dec. 16, 1873	487	160	4	649
Woven fabrics, Machinery for beetling	J. Patterson	141,725	Aug. 12, 1873	287	94	4	166
Wrecking-apparatus	B. McGroder and H. Tiedemann	142,712	Sept. 9, 1873	346	116 } 117 }	4	282
Wrecking-apparatus	M. Osborn	144,125	Oct. 28, 1873	688	228	4	465
Wrench							
<i>See</i> Hose-wrench.							
Pipe-wrench,							

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<i>See</i> Railway-track wrench.							
Ratchet-wrench.							
Screw-wrench.							
Wrench	S. Barry and F. Perkins	138, 468	May 6, 1873	4	1	3	498
Wrench	W. C. Bemis	145, 085	Dec. 2, 1873	44	14	4	589
Wrench	B. C. Bradley	140, 111	June 24, 1873	636	200	3	691
Wrench	M. Bubser	141, 259	July 29, 1873	863	282	4	114
Wrench	T. L. Buckley	144, 826	Nov. 25, 1873	577	197	4	558
Wrench	E. A. Cooper	135, 084	Jan. 21, 1873	544	177	3	79
Wrench	M. G. Crane	141, 767	Aug. 12, 1873	325	106	4	169
Wrench	W. J. Innis	142, 570	Sept. 9, 1873	231	75	4	272
Wrench	W. Johnson	141, 794	Aug. 12, 1873	355	117	4	172
Wrench	J. Lee	145, 953	Dec. 30, 1873	851	277	4	701
Wrench	P. E. McIntosh	137, 310	Apr. 1, 1873	29	9	3	359
Wrench	A. D. McMaster	143, 367	Sept. 30, 1873	922	313	4	365
Wrench	A. Partridge	141, 289	July 29, 1873	887	291	4	116
Wrench	N. L. Post	135, 842	Feb. 11, 1873	421	137	3	172
Wrench	L. B. Prindle	144, 134	Oct. 28, 1873	695	230	4	465
Wrench	H. F. Read	138, 932	May 13, 1873	418	131	3	542
Wrench	E. S. Scripture	144, 036	Oct. 28, 1873	614	203	4	458
Wrench	J. Smiley	135, 856	Feb. 11, 1873	431	140	3	173
Wrench	T. J. Smith and J. Lee	139, 622	June 3, 1873	153	51	3	621
Wrench	S. W. Wakefield	141, 477	Aug. 5, 1873	61	19	4	140
Wrench	J. B. Weeden	136, 797	Mar. 11, 1873	399	132	3	286
Wrench	S. J. Wright	145, 710	Dec. 16, 1873	607	198	4	658
Wrench and bolt cutter	P. Broadbooks	136, 964	Mar. 18, 1873	550	182	3	308
Wrench and grappling-tool, Combined	S. B. Dexter	137, 129	Mar. 25, 1873	707	235	3	332
Wrench-bars, Die for forging	L. Coes	144, 832	Nov. 25, 1873	583	199	4	559
Wrench-head die	L. Chapman	135, 406	Feb. 4, 1873	13	4	3	129
Wrench-heads, Die for forming	L. Chapman	137, 052	Mar. 25, 1873	638	211	3	326
Wrench-heads, Die for forming	L. Chapman	137, 053	Mar. 25, 1873	638	211	3	326
Wrench-heads, Manufacture of	L. Coes	142, 771	Sept. 16, 1873	410	138	4	297
Wringer:							
<i>See</i> Clothes-wringer.							
Mop-wringer.							
Y.							
Yarn-beam, Friction-mechanism for	H. Chilson	139, 236	May 27, 1873	719	226	3	587
Yarn, Machine for sizing	T. Abbott	134, 964	Jan. 21, 1873	439	141	3	71
Yeast-powder, Manufacture of crystalline acid phosphate of lime for	J. E. Lauer	140, 051	June 17, 1873	562		3	678
Yoke bow-pin, Ox	W. J. Ives	145, 422	Dec. 9, 1873	345	115	4	625
Yoke, Combined bow-fastener and guard for ox	E. N. Bacon	145, 381	Dec. 9, 1873	306	103	4	622
Yoke holder, Neck	G. R. Huntley	142, 852	Sept. 16, 1873	475	162	4	303
Yoke, Neck	P. Epley	139, 380	May 27, 1873	639	268	3	597
Yucca, Extract of	L. G. Fellner	134, 876	Jan. 14, 1873	352		3	48
Z.							
Zinc, Apparatus for condensing and collecting white	J. G. Trotter	145, 976	Dec. 30, 1873	871	282	4	702
Zinc-furnace	E. H. and F. G. Richter	145, 450	Dec. 9, 1873	365	122	4	627
Zinc, Furnace for the manufacture of oxide of	J. G. Lang	142, 571	Sept. 9, 1873	231	75	4	272
Zinc-granulating apparatus	E. H. Richter	145, 449	Dec. 9, 1873	365	121	4	627
Zinc-white, Manufacture of	N. Bartlett	139, 701	June 10, 1873	249	78	3	645

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Advertising-deak	C. W. Armstrong	6, 801	Aug. 12, 1873	4	159
Advertising-frame	M. M. Burnham and J. B. Oaks	6, 746	July 8, 1873	4	36
Advertising-frame	C. H. Shackford and M. V. Campbell	6, 955	Oct. 7, 1873	4	381
Aquarium-frame	G. E. Smith	6, 887	Sept. 16, 1873	4	296
Arbor, Grape	C. H. Crump	6, 962	Oct. 21, 1873	4	425
B.					
Badge	H. A. Oesterle	6, 589	Apr. 15, 1873	3	417
Badge	J. Seymour	7, 046	Dec. 9, 1873	4	615
Barbers' and dentists chair	R. W. and G. W. Archer	6, 648	May 13, 1873	3	527
Barbers' and dentists chair, Foot-rest for	R. W. and G. W. Archer	6, 647	May 13, 1873	3	527
Barber's chair, Foot-stool for	F. J. Coates	6, 725	June 24, 1873	3	691
Basket	S. I. Russell	6, 508	Mar. 18, 1873	3	297
Basket, Cake	G. Gill	6, 379-6, 380	Feb. 4, 1873	3	127
Bell, Call	C. S. and E. A. Barnard	6, 895	Sept. 30, 1873	4	354
Bell, Hand	E. S. Cone	6, 780	July 22, 1873	4	85
Bell-pull	J. B. Whitney	6, 557	Apr. 1, 1873	3	357
Bells, Ornamenting	O. F. Fogelstrand	6, 493	Mar. 18, 1873	3	297
Beer-mug	J. E. Miller	6, 506	Mar. 18, 1873	3	297
Beer-mug	J. Oesterling	6, 383	Feb. 4, 1873	3	127
Billard-table	N. Stoll	6, 550	Apr. 1, 1873	3	357
Boa	G. H. Prindle	6, 793-6, 794	Aug. 5, 1873	4	135
Bolt-threading machine, Frame of	S. W. Putnam, jr	6, 764	July 8, 1873	4	36
Boot-jack	O. F. Fogelstrand	6, 896	Sept. 30, 1873	7	354
Boot-jack	E. J. Steele	6, 535	Mar. 25, 1873	3	325
Boot, Rubber	L. L. Hyatt	6, 957	Oct. 14, 1873	4	401
Bottle	H. Sawyer	6, 489	Mar. 4, 1873	3	245
Bottle	N. Sleeper	6, 985	Nov. 4, 1873	4	478
Bottle, Glass	J. W. Phillbrook	6, 983	Nov. 4, 1873	4	478
Bottle-stand, Revolving	T. P. Spencer	6, 582	Apr. 8, 1873	3	387
Bracket	O. F. Fogelstrand	6, 973	Nov. 4, 1873	4	478
Bracket	A. D. Judd	6, 686	May 27, 1873	3	586
Bread-plate	H. S. McKee	6, 636	May 6, 1873	3	497
Bread-pin, &c	G. W. Loomis and A. T. Goodell	6, 964	Oct. 21, 1873	4	425
Buckle	J. R. Smith	7, 005	Dec. 2, 1873	4	585
Buckle, Belt	J. E. Smith	6, 873	Sept. 2, 1873	4	242
Burial-case	B. F. Heimbach	6, 772	July 15, 1873	4	57
Burial-casket	B. F. Heimbach	6, 771	July 15, 1873	4	57
Burner, Gas	E. R. Beach	6, 971	Nov. 4, 1873	4	478
Button for wearing apparel	J. E. Wheeler	6, 947	Oct. 7, 1873	4	380
C.					
Cake-holder	G. Gill	6, 799	Aug. 12, 1873	4	159
Can	H. G. Shook	6, 872	Sept. 2, 1873	4	242
Canister for tea, coffee, &c	S. A. Isley	7, 069-7, 070	Dec. 23, 1873	4	671
Cape	M. Landenberger, jr	6, 629-6, 635	May 6, 1873	3	497
Cape	M. Landenberger, jr	6, 641-6, 643	May 6, 1873	3	497
Cape	M. Landenberger, jr	6, 660	May 20, 1873	3	559
Cape	M. Landenberger, jr	6, 681	May 27, 1873	3	586
Cape	M. Landenberger	6, 702	June 10, 1873	3	640
Cape	M. Landenberger	6, 869	Sept. 2, 1873	4	241
Card-receiver	G. Gill	6, 378	Feb. 4, 1873	3	127
Carpet	J. B. Alden	6, 970	Nov. 4, 1873	4	478
Carpet	J. H. Bromley	6, 386	Feb. 11, 1873	3	156
Carpet	R. R. Campbell	6, 460-6, 472	Mar. 4, 1873	3	245
Carpet	R. R. Campbell	6, 558-6, 560	Apr. 8, 1873	3	386
Carpet	R. R. Campbell	6, 747-6, 752	July 8, 1873	4	36
Carpet	R. R. Campbell	6, 900-6, 908	Oct. 7, 1873	4	379
Carpet	R. Charlton	6, 561	Apr. 8, 1873	3	386
Carpet	J. M. Christie	6, 473-6, 479	Mar. 4, 1873	3	245
Carpet	J. M. Christie	6, 562-6, 571	Apr. 8, 1873	3	386
Carpet	J. M. Christie	6, 753-6, 756	July 8, 1873	4	36
Carpet	A. Cowell	6, 512	Mar. 25, 1873	3	325
Carpet	B. Crabtree, jr	6, 352-6, 353	Jan. 21, 1873	3	70
Carpet	J. Crabtree	6, 865-6, 866	Sept. 2, 1873	4	241
Carpet	J. Dornan	6, 354	Jan. 21, 1873	3	70
Carpet	J. Dornan	6, 811	Aug. 19, 1873	4	185
Carpet	J. Fisher	6, 412-6, 415	Feb. 18, 1873	3	189
Carpet	J. Fisher	6, 594	Apr. 22, 1873	3	444
Carpet	J. Fisher	6, 705-6, 708	June 17, 1873	3	663
Carpet	J. Fisher	7, 050	Dec. 16, 1873	4	641
Carpet	W. Gilmour	6, 338	Jan. 7, 1873	3	7
Carpet	H. F. Goetze	6, 480-6, 481	Mar. 4, 1873	3	245
Carpet	H. F. Goetze	6, 758	July 8, 1873	4	36
Carpet	H. F. Goetze	6, 950	Oct. 7, 1873	4	380
Carpet	J. Hamer	6, 482	Mar. 4, 1873	3	245
Carpet	J. Hamer	6, 575-6, 576	Apr. 8, 1873	3	387
Carpet	A. Heald	6, 355-6, 356	Jan. 21, 1873	3	70
Carpet	A. Heald	6, 588	Apr. 15, 1873	3	417
Carpet	A. Heald	6, 653-6, 654	May 20, 1873	3	558
Carpet	A. Heald	6, 713-6, 720	June 24, 1873	3	691
Carpet	O. Heinicke	6, 416-6, 424	Feb. 18, 1873	3	189
Carpet	O. Heinicke	6, 513-6, 517	Mar. 25, 1873	3	325

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Carpet	O. Heinigke	6, 625	May 6, 1873	3	497
Carpet	O. Heinigke	6, 909-6, 931	Oct. 7, 1873	4	380
Carpet	O. Heinigke	7, 051-7, 059	Dec. 16, 1873	4	641
Carpet	W. J. Hogg	6, 357	Jan. 21, 1873	3	70
Carpet	H. Horan	6, 425-6, 428	Feb. 18, 1873	3	189
Carpet	H. Horan	6, 518-6, 520	Mar. 25, 1873	3	325
Carpet	H. Horan	6, 596-6, 602	Apr. 22, 1873	3	444
Carpet	H. Horan	6, 932	Oct. 7, 1873	4	380
Carpet	H. Horan	7, 025-7, 033	Dec. 9, 1873	4	614
Carpet	H. Horan	7, 060-7, 061	Dec. 16, 1873	4	641
Carpet	R. Hoskin	6, 521	Mar. 25, 1873	3	325
Carpet	J. Humphries	6, 522	Mar. 25, 1873	3	325
Carpet	H. S. Kerr	6, 358	Jan. 21, 1873	3	70
Carpet	H. S. Kerr	6, 687-6, 688	May 27, 1873	3	586
Carpet	H. Knight	7, 034	Dec. 9, 1873	4	614
Carpet	C. S. Lilley	6, 484-6, 485	Mar. 4, 1873	3	245
Carpet	L. G. Malkin	6, 429-6, 430	Feb. 18, 1873	3	189
Carpet	L. G. Malkin	6, 524-6, 525	Mar. 25, 1873	3	325
Carpet	L. G. Malkin	6, 604-6, 605	Apr. 22, 1873	3	444
Carpet	L. G. Malkin	6, 934	Oct. 7, 1873	4	380
Carpet	D. McNair	6, 486	Mar. 4, 1873	3	245
Carpet	D. McNair	6, 936-6, 937	Oct. 7, 1873	4	380
Carpet	E. J. Ney	6, 437-6, 448	Feb. 18, 1873	3	189
Carpet	E. J. Ney	6, 529-6, 532	Mar. 25, 1873	3	325
Carpet	E. J. Ney	6, 606-6, 607	Apr. 22, 1873	3	444
Carpet	E. J. Ney	6, 938-6, 941	Oct. 7, 1873	4	380
Carpet	E. J. Ney	7, 038-7, 043	Oct. 9, 1873	4	614
Carpet	H. Nordmann	6, 449-6, 450	Feb. 18, 1873	3	189
Carpet	H. Nordmann	6, 533	Mar. 25, 1873	3	325
Carpet	H. Nordmann	6, 608	Apr. 22, 1873	3	444
Carpet	H. Nordmann	7, 044-7, 045	Dec. 9, 1873	4	615
Carpet	J. Powell	6, 337	Jan. 7, 1873	3	7
Carpet	J. Powell	6, 360	Jan. 21, 1873	3	71
Carpet	J. Powell	6, 590-6, 591	Apr. 15, 1873	3	417
Carpet	J. Powell	6, 784	July 22, 1873	4	85
Carpet	C. Righter	6, 361	Jan. 21, 1873	3	71
Carpet	C. A. Righter	6, 572-6, 579	Apr. 8, 1873	3	387
Carpet	C. A. Righter	6, 655	May 20, 1873	3	559
Carpet	C. A. Righter	6, 819-6, 823	Aug. 19, 1873	4	185
Carpet	C. A. Righter	6, 984	Nov. 4, 1873	4	478
Carpet	J. H. Smith	6, 452-6, 454	Feb. 18, 1873	3	189
Carpet	J. H. Smith	6, 534	Mar. 25, 1873	3	325
Carpet	J. H. Smith	6, 610-6, 612	Apr. 22, 1873	3	445
Carpet	J. H. Smith	6, 942-6, 945	Oct. 7, 1873	4	380
Carpet	J. H. Smith	7, 065-7, 066	Dec. 16, 1873	4	641
Carpet	H. Smith	6, 790	July 29, 1873	4	108
Carpet	H. Smith	6, 888	Sept. 16, 1873	4	296
Carpet	T. J. Stearns	6, 487	Mar. 4, 1873	3	245
Carpet	A. Webster, Jr	6, 339	Jan. 7, 1873	3	7
Carpet	A. T. Webster	6, 796-6, 797	Aug. 5, 1873	4	135
Carpet	J. T. Webster	6, 551-6, 554	Apr. 1, 1873	3	357
Carpet	J. T. Webster	6, 738-6, 740	July 1, 1873	4	7, 8
Carpet	J. T. Webster	6, 824	Aug. 19, 1873	4	185
Carriage-pole trimming	A. Searls	6, 581	Apr. 8, 1873	3	387
Carriages, Back cross-strap mountings for	A. Searls	6, 593	Apr. 15, 1873	3	417
Casket-handle socket	C. B. Rogers	6, 639-6, 640	May 6, 1873	3	497
Casket-handle tip	G. W. Bunnell	6, 779	July 22, 1873	4	85
Caster, Handle of table	H. C. Wilcox	7, 067	Dec. 16, 1873	4	641
Ceilings, Center-piece for	B. Dreyer	6, 711-6, 712	June 24, 1873	3	691
Center-piece	S. Kellet	6, 381	Feb. 4, 1873	3	127
Chain-link, Ornamental	V. Draper	6, 781-6, 783	July 22, 1873	4	85
Chair	G. M. Harwood	6, 875	Sept. 9, 1873	4	270
Chair	S. Hayward	6, 828	Aug. 26, 1873	4	212
Chair	J. M. Waters	6, 894	Sept. 23, 1873	4	322
Chair-frame	B. J. Harrison	6, 658	May 20, 1873	3	559
Chair-frame	E. Seymour and C. E. Shattuck	6, 458	Feb. 25, 1873	3	218
Chair-frame	J. H. Travis	6, 834	Sept. 2, 1873	4	241
Clock-case	G. H. Blakesley	7, 015	Dec. 2, 1873	4	585
Clock-case	J. F. and H. Mann	6, 800	Aug. 12, 1873	4	159
Clock-front	E. Ingraham	6, 628	May 6, 1873	3	497
Clock-pendulum	H. J. Davies	6, 963	Oct. 21, 1873	4	425
Coffin-handle	N. Hayden	6, 595	Apr. 22, 1873	3	444
Coffin-handle socket	J. S. Ray	6, 584	Apr. 8, 1873	3	387
Coffin-handle socket	J. S. Ray	6, 592	Apr. 15, 1873	3	417
Coffin-handle socket	J. S. Ray	6, 734	June 24, 1873	3	691
Collar-box	R. W. Betts	6, 791	Aug. 5, 1873	4	135
Collarette	A. S. Ellison	6, 988	Nov. 11, 1873	4	504
Cutlery, Handle for table	J. D. Frary	7, 078	Dec. 30, 1873	4	698
Cutlery, Table	J. D. Frary	6, 757	July 8, 1873	4	36
D.					
Dish, Glass	J. H. Hobbs	6, 805	Aug. 19, 1873	4	185
Dishes and nappies, Glass	J. H. Hobbs	6, 587	Apr. 15, 1873	3	417
Door-bolt plate	G. W. White	6, 624	Apr. 29, 1873	3	471
Drawer-pull	O. T. Fogelstrand	6, 775	July 15, 1873	4	58
Drawer-pull	A. Shepard	7, 075	Dec. 23, 1873	5	671
Drawer-pull	L. Widmayer	6, 724	June 24, 1873	3	691
F.					
Fabric	C. H. Landenberger	6, 833	Sept. 2, 1873	4	241
Fabric, Striped	C. H. Landenberger	6, 695	June 3, 1873	3	608
Fan	J. T. Brundage	6, 774	July 15, 1873	4	58
Fan	W. A. Smith	7, 017	Dec. 2, 1873	4	585
Fence	J. I. Healey	6, 411	Feb. 11, 1873	3	157
Fence and gate, Cemetery	J. Sharkey	6, 765	July 8, 1873	4	36

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Fence, Iron.....	M. Krumm.....	6, 373	Jan. 28, 1873	3	100
Figures.....	J. D. Smith.....	7, 079	Dec. 30, 1873	4	698
File, Paper.....	E. J. Steele.....	6, 583	Apr. 8, 1873	3	387
Floor-cloth.....	J. Barrett.....	6, 682-6, 683	May 27, 1873	3	586
Floor-cloth.....	C. T. and V. E. Meyer.....	6, 656-6, 657	May 20, 1873	3	559
Floor-cloth.....	C. T. and V. E. Meyer.....	6, 661-6, 662	May 20, 1873	3	559
Floor-cloth.....	C. T. and V. E. Meyer.....	6, 663	May 20, 1873	3	585
Floor-cloth.....	J. Meyer.....	6, 691	May 27, 1873	3	586
Flower-stand.....	J. E. Morris.....	6, 743	July 1, 1873	4	8
Fly-trap.....	D. K. Thompson.....	6, 968	Oct. 28, 1873	4	452
Fly-wheel.....	J. G. Baker.....	7, 024	Dec. 9, 1873	4	614
Font, Baptismal.....	A. E. Van Wert.....	6, 459	Feb. 25, 1873	3	218
Fork and spoon handle.....	M. H. Mosman.....	6, 577	Apr. 8, 1873	3	387
Fountain-basin.....	J. Moore and W. H. Wilkinson.....	6, 644	May 6, 1873	3	497
Fruit-jar.....	S. B. Rowley.....	6, 886	Sept. 16, 1873	4	296
Fur-collar, Lady's.....	M. Gross and B. B. Zippert.....	6, 827	Aug. 26, 1873	4	212
Fur-trimming.....	A. Molnar.....	7, 064	Dec. 16, 1873	4	641
Furniture.....	T. W. and F. M. Moore.....	6, 722	June 24, 1873	3	691
Furniture, Parlor.....	D. Shales and N. McCully.....	6, 891	Sept. 23, 1873	4	322
G.					
Gas-bracket.....	J. F. Travis.....	6, 809	Aug. 19, 1873	4	185
Gaallier.....	J. F. Travis.....	6, 808	Aug. 19, 1873	4	185
Glass, &c., Drinking.....	T. G. Cook.....	6, 987	Nov. 11, 1873	4	504
Glass-ware.....	T. B. Atterbury.....	6, 613	Apr. 29, 1873	3	471
Goblet, &c.....	J. Hobbs.....	6, 975-6, 976	Nov. 4, 1873	4	478
Goblet, Glass.....	J. H. Hobbs.....	6, 804	Aug. 19, 1873	4	185
Governor-base.....	W. B. Le Van.....	6, 374	Jan. 28, 1873	3	100
Grinding-mill frame or stand.....	J. G. and W. J. Lane.....	7, 022	Dec. 9, 1873	4	614
H.					
Hames-top.....	H. Beagle, jr.....	6, 617	Apr. 29, 1873	3	471
Harness-trimming.....	R. Hoyer.....	7, 071	Dec. 23, 1873	4	671
Hat.....	J. S. Fayerweather.....	6, 952	Oct. 7, 1873	4	390
Hat and coat hook.....	A. D. Judd.....	6, 694	June 3, 1873	3	608
Hinge.....	J. B. Whitney.....	6, 362	Jan. 21, 1873	3	71
Hinge, Butt.....	M. Bradley.....	6, 949	Oct. 7, 1873	4	380
Hinge, Butt.....	W. Gorman.....	7, 018	Dec. 9, 1873	4	614
Hot-air register.....	E. A. Tuttle.....	6, 620-6, 622	Apr. 29, 1873	3	471
Hot-air register.....	E. A. Tuttle.....	6, 645-6, 646	May 6, 1873	3	497
Hub, Carriage-wheel.....	J. R. Locke.....	6, 997	Nov. 18, 1873	4	531
I.					
Inkstand.....	B. Brower.....	6, 878-6, 879	Sept. 9, 1873	4	270
Inkstand.....	G. W. McGill.....	7, 003	Nov. 25, 1873	4	558
Inkstand.....	W. F. Muller.....	6, 528	Mar. 25, 1873	3	325
J.					
Jewelry-box.....	E. C. Moore.....	6, 721	June 24, 1873	3	691
Jewelry-box.....	E. C. Moore.....	6, 773	July 15, 1873	4	58
Jewelry-case.....	M. Hendberg.....	6, 540	Apr. 1, 1873	3	356
K.					
Kettle-cover handle.....	R. B. Wardin.....	6, 376	Jan. 28, 1873	3	100
Key-hole escutcheon.....	W. Gorman.....	7, 021	Dec. 9, 1873	4	614
Key-hole escutcheon.....	J. B. Whitney.....	6, 365	Jan. 21, 1873	3	71
Kite.....	S. M. Simons.....	6, 961	Oct. 14, 1873	4	401
Knife, fork, and spoon handle.....	W. Rogers.....	6, 585	Apr. 8, 1873	3	387
Knife-handle.....	J. D. Frary.....	7, 002	Nov. 25, 1873	4	558
Knife or fork bolster.....	C. H. Crump.....	6, 649	May 13, 1873	3	527
Knitted fabric.....	T. Langham.....	6, 889	Sept. 16, 1873	4	296
Knob and plate.....	G. E. Bringman.....	6, 614	Apr. 29, 1873	3	471
Knob, Door.....	W. Gorman.....	7, 020	Dec. 9, 1873	4	614
Knob, Door.....	J. O. Hollis.....	6, 956	Oct. 14, 1873	4	401
Knob, Door.....	G. W. White.....	6, 623	Apr. 29, 1873	3	471
Knob, Door.....	J. B. Whitney.....	6, 363-6, 364	Jan. 21, 1873	3	71
Knob rose and escutcheon.....	W. Gorman.....	7, 068	Dec. 23, 1873	4	671
Knob-rose, Door.....	W. Gorman.....	7, 019	Dec. 9, 1873	4	614
L.					
Label.....	A. M. Thompson and J. E. Taylor.....	7, 082	Dec. 30, 1873	4	698
Lamp.....	D. Ashworth.....	6, 385	Feb. 11, 1873	3	156
Lamp-bowl.....	J. S. and T. B. Atterbury.....	6, 882	Sept. 16, 1873	4	296
Lamp-chimney.....	M. J. Wellman.....	6, 555-6, 556	Apr. 1, 1873	3	357
Lamp-foot.....	T. B. and J. S. Atterbury.....	6, 948	Oct. 7, 1873	4	380
Lamp-foot.....	N. L. Bradley.....	6, 899	Sept. 30, 1873	4	354
Lamp-pedestal.....	N. L. Bradley.....	7, 049	Dec. 16, 1873	4	641
Lamp-post.....	P. H. Jackson.....	6, 348	Jan. 21, 1873	3	70
Lamp-shade.....	W. L. Libbey.....	7, 023	Dec. 9, 1873	4	614
Lamp-shade.....	W. Maeyers.....	6, 897	Sept. 30, 1873	4	354
Lamp-stand.....	D. Mosman.....	6, 490	Mar. 11, 1873	3	272
Lamp-stand.....	M. H. Mosman.....	6, 616	Apr. 29, 1873	3	471
Lamp-stand.....	W. H. Perkins.....	6, 876	Sept. 9, 1873	4	270
Latch and handle, Door.....	A. Wunder.....	6, 537	Mar. 25, 1873	3	325
Lath-machine bed.....	W. F. Burton.....	6, 703	June 17, 1873	3	663
Lathe-dog.....	B. L. Lathrop.....	6, 933	Oct. 7, 1873	4	380
Lock-case.....	W. H. Andrews.....	6, 996	Nov. 18, 1873	4	531
Lock-case.....	L. Widmayer.....	7, 076	Dec. 23, 1873	4	671
Lock escutcheon-plate.....	W. Gorman.....	6, 867	Sept. 2, 1873	4	241
Lock-front.....	E. J. Steele.....	6, 723	June 24, 1873	3	691
Lounge.....	J. B. Rohrer.....	6, 492	Mar. 11, 1873	3	272
Lounge.....	J. B. Rohrer.....	6, 507	Mar. 18, 1873	3	297
Lubricating-cup.....	F. Lunkenheimer and J. Meehan.....	6, 445	Apr. 1, 1873	3	357

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Machine-frame	J. M. Marston	6,935	Oct. 7, 1873	4	380
Mat, Ornamental	L. Moeslein	7,004	Nov. 25, 1873	4	558
Match-safe	W. A. Haynes	6,974	Nov. 4, 1873	4	478
Monument	W. T. Cross	6,368	Jan. 28, 1873	3	100
Monument	M. V. Mitchell	6,881	Sept. 9, 1873	4	270
Monument	J. Sharkey	6,693	May 27, 1873	3	586
Muff	M. Gross and B. B. Zippert	6,826	Aug. 26, 1873	4	212
Music-stand	W. B. Bigelow	6,538	Apr. 1, 1873	3	356
N.					
Nubia	H. Boot	6,776-6,778	July 22, 1873	4	85
Nubia	H. Boot	6,792	Aug. 5, 1873	4	135
Nubia	J. Phipps	6,696	June 3, 1873	3	608
Nubia	J. Phipps	6,710	June 17, 1873	3	663
O.					
Oil-cloth	J. Barrett	6,810	Aug. 19, 1873	4	185
Oil-cloth	J. Hutchison	6,343-6,347	Jan. 21, 1873	3	70
Oil-cloth	J. Hutchison	6,812-6,818	Aug. 19, 1873	4	185
Oil-cloth	H. Kagy	6,349-6,350	Jan. 21, 1873	3	70
Oil-cloth	H. Kagy	6,991-6,994	Nov. 11, 1873	4	504
Oil-cloth	C. T. and V. E. Meyer	6,431-6,436	Feb. 18, 1873	3	189
Oil-cloth	C. T. and V. E. Meyer	6,786-6,789	July 29, 1873	4	108
Oil-cloth	C. T. and V. E. Meyer	6,871	Sept. 2, 1873	4	242
Oil-cloth	C. T. and V. E. Meyer	6,885	Sept. 16, 1873	4	296
Oil-cloth	C. T. and V. E. Meyer	6,999-7,001	Nov. 18, 1873	4	531
Oil-cloth and carpet, Floor	C. T. and V. E. Meyer	7,035-7,037	Dec. 9, 1873	4	614
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	6,526-6,527	Mar. 25, 1873	3	325
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	6,951	Oct. 7, 1873	4	380
Oil-cloth, Floor	C. T. and V. E. Meyer	6,404-6,505	Mar. 18, 1873	3	297
Oil-cloth, Floor	C. T. and V. E. Meyer	6,546-6,547	Apr. 1, 1873	3	357
Oil-cloth, Floor	C. T. and V. E. Meyer	6,980-6,981	Nov. 4, 1873	4	478
Organ-case	L. K. Fuller	6,677	May 27, 1873	3	586
Organ-case	S. Hayward	6,509-6,511	Mar. 18, 1873	3	297
Organ-case	S. Hayward	6,679	May 27, 1873	3	586
Organ-case, Ends of	L. K. Fuller	6,678	May 27, 1873	3	586
Organ-case, Ends of	S. Hayward	6,680	May 27, 1873	3	586
Organ case, Reed	J. R. Lomas	6,603	Apr. 22, 1873	3	444
Ornamentation	G. Rogers	6,488	Mar. 4, 1873	3	245
Ottoman	C. J. Conradt	6,456	Feb. 25, 1873	3	218
Ottoman	J. D. Ladd	6,455	Feb. 18, 1873	3	189
Ottoman	J. D. Ladd	6,457	Feb. 25, 1873	3	218
Overshoe	G. Watkinson	6,986	Nov. 4, 1873	4	478
P.					
Paper box	E. C. Moore	6,982	Nov. 4, 1873	4	478
Paper clip	T. Orton	6,830	Aug. 26, 1873	4	212
Paper, Shelf	S. Simon	6,766-6,768	July 8, 1873	4	36
Pen-sign	L. W. Fairchild	6,539	Apr. 1, 1873	3	356
Pencil	E. S. Johnson	6,523	Mar. 25, 1873	3	325
Pencil-case	E. Todd	7,006	Dec. 2, 1873	4	585
Phaeton-body	G. Delker and C. L. Blondin	6,770	July 8, 1873	4	36
Picture-frame	B. H. Slusser and L. Pearson	6,609	Apr. 22, 1873	3	445
Picture-frame	L. Steinhilper and L. Welker	6,536	Mar. 25, 1873	3	325
Picture-frame, &c.	J. Nonnenbacher	6,959	Oct. 14, 1873	4	401
Picture-frame, &c.	J. Nonnenbacher	6,995	Nov. 11, 1873	4	505
Picture-frame molding	S. Garrison	6,742	July 1, 1873	4	8
Pin-cushion	A. Merriam and C. L. Little	7,081	Dec. 30, 1873	4	698
Plant-stand	J. R. Robertson	6,580	Apr. 8, 1873	3	387
Plaster-cast	F. S. Batcheller	6,741	July 1, 1873	4	8
Pump, Ale	S. Lane, jr.	6,699-6,700	June 10, 1873	3	640
R.					
Railway-station	J. W. Hoyt	6,760	July 8, 1873	4	36
Range, Cooking	S. S. Utter	6,745	July 1, 1873	4	8
Ruche-holder	D. Kisch	6,880	Sept. 9, 1873	4	270
Ruffle-stand	L. Sutro	6,650	May 13, 1873	3	527
Ruffling	S. E. Barney	7,077	Dec. 30, 1873	4	698
S.					
Sad-iron handle	J. Hargrave	6,874	Sept. 9, 1873	4	270
Saw-frame	T. S. and H. Disston, 2d	6,825	Aug. 26, 1873	4	212
Saw frame, Band	L. M. Collins	6,803	Aug. 19, 1873	4	185
Scarf	C. Button	6,673-6,676	May 27, 1873	3	586
Seal-press	C. A. Mathieson and J. C. Schrader	6,806	Aug. 19, 1873	4	185
Sewing-machine	G. Rehffuss	6,375	Jan. 28, 1873	3	100
Sewing-machine frame	J. O'Neil	6,451	Feb. 18, 1873	3	189
Shawl	F. Wink	6,387-6,409	Feb. 11, 1873	3	156
Shawl-pattern	F. Wink	6,835-6,864	Sept. 2, 1873	4	241
Show-card for head-nets	T. Hall	6,341	Jan. 14, 1873	3	39
Show-case	J. Irons	7,062	Dec. 16, 1873	4	641
Show-case, Corner of glass	T. Vaughn	7,047	Dec. 9, 1873	4	615
Sign	H. B. Titus	6,795	Aug. 5, 1873	4	135
Skirts, Material for gored	J. Anderson	6,829	Aug. 26, 1873	4	212
Slate-frame	J. M. Coffin	6,684	May 27, 1873	3	586
Sleigh, Landau	J. C. Goold	6,410	Feb. 11, 1873	3	157
Soda-water apparatus	C. Lippincott and J. Patterson	6,541-6,543	Apr. 1, 1873	3	356

Alphabetical list of designs—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Soda-water apparatus, Casing for	G. F. Meacham	6,366-6,367	Jan. 21, 1873	3	71
Soda-water apparatus, Casing for	G. F. Meacham	6,690	May 27, 1873	3	586
Soda-water apparatus, Casing of	G. F. Meacham	7,063	Dec. 16, 1873	4	641
Spoon and fork	G. Wilkinson	6,969	Oct. 28, 1873	4	452
Spoon, fork, &c., Handle of	B. D. Biederhase	6,967	Oct. 28, 1873	4	452
Stair-rod	W. T. Mersereau	6,615	Apr. 29, 1873	3	471
Stamp pad and rack	G. K. Cooke	6,798	Aug. 12, 1873	4	159
Statuary, Group of	J. Rogers	6,548	Apr. 1, 1873	3	357
Statue	J. Rogers	7,016	Dec. 2, 1873	4	585
Stirrup, Safety	J. Rogers	6,960	Oct. 14, 1873	4	401
Stocking-fabric	R. Reniff	6,807	Aug. 19, 1873	4	185
Stocking-fabric	C. Button	6,665-6,672	May 27, 1873	3	585
Stocking-fabric	M. Landenberger, jr.	6,651-6,652	May 20, 1873	3	558
Stocking-fabric	M. Landenberger, jr.	6,659	May 20, 1873	3	559
Stocking-fabric	M. Landenberger, jr.	6,689	May 27, 1873	3	586
Stocking-fabric	J. W. Parks	6,664	May 20, 1873	3	585
Stove	C. A. Culter and D. C. Proctor	6,972	Nov. 4, 1873	4	478
Stove	C. Harris and E. Kummer	6,369-6,372	Jan. 28, 1873	3	100
Stove	H. S. and A. S. Hubbell	6,977-6,978	Nov. 4, 1873	4	478
Stove	J. Martina	6,958	Oct. 14, 1873	4	401
Stove	W. D. Southard	6,831	Aug. 26, 1873	4	212
Stove, Base-burning	N. S. Vedder and T. S. Heister	7,012	Dec. 2, 1873	4	585
Stove, Box	N. S. Vedder and T. S. Heister	7,011	Dec. 2, 1873	4	585
Stove, Cook	W. G. Semple	6,549	Apr. 1, 1873	3	357
Stove, Cooking	M. M. Coppuck	6,618	Apr. 29, 1873	3	471
Stove, Cooking	R. R. Finch	6,685	May 27, 1873	3	586
Stove, Cooking	E. Mingay	6,965	Oct. 21, 1873	4	425
Stove, Cooking	J. Peckover	6,692	May 27, 1873	3	586
Stove, Cooking	G. Smith and H. Brown	6,701	June 10, 1873	3	640
Stove, Cooking	W. S. Stevenson	6,737	July 1, 1873	4	7
Stove, Cooking	N. S. Vedder and T. S. Heister	7,008-7,010	Dec. 2, 1873	4	585
Stove, Cooking	N. S. Vedder and F. Ritchie	7,007	Dec. 2, 1873	4	585
Stove, Cooking	N. S. Vedder and F. Ritchie	7,048	Dec. 9, 1873	4	615
Stove, Cooking	H. A. Wood	6,377	Jan. 28, 1873	3	100
Stove, Fire-place	S. B. Sexton	6,877	Sept. 9, 1873	4	270
Stove, Heating	I. J. Baxter	6,340	Jan. 14, 1873	3	38
Stove, Heating	J. Beesley	6,697	June 3, 1873	3	608
Stove, Heating	J. V. B. Carter	6,704	June 17, 1873	3	663
Stove, Heating	J. Magee	6,979	Nov. 4, 1873	4	478
Stove, Heating	N. S. Vedder, F. Ritchie, and T. S. Heister	7,014	Dec. 2, 1873	4	585
Stove, Parlor	W. Doyle	6,586	Apr. 15, 1873	3	417
Stove, Parlor	N. S. Vedder and T. S. Heister	7,013	Dec. 2, 1873	4	585
Stove plates, Cooking	S. H. Ransom	6,726-6,731	June 24, 1873	3	691
Stove, Plates of parlor or heating	S. H. Ransom	6,732-6,733	June 24, 1873	3	691
Sword hilt and scabbard	V. Price	6,338	Jan. 7, 1873	3	7
Sword hilt and scabbard	V. Price	6,763	July 8, 1873	4	36
Sword hilt and scabbard	V. Price	6,953	Oct. 7, 1873	4	380
T.					
Tailor's goose	J. Hargrave	6,832	Sept. 2, 1873	4	241
Tea and coffee pot base	E. B. Manning	6,898	Sept. 30, 1873	4	354
Tea-service	G. Gill	6,802	Aug. 12, 1873	4	159
Toy-bank	F. W. Smith	6,744	July 1, 1873	4	8
Toy-bank	T. Swann	6,946	Oct. 7, 1873	4	380
Toy rail-car	W. A. Harwood	6,868	Sept. 2, 1873	4	241
Toy savings-bank	R. Friebio	6,619	Apr. 29, 1873	3	471
Toy-target	S. Hann	6,966	Oct. 28, 1873	4	452
Trimming	J. B. Clarke	6,572	Apr. 8, 1873	3	497
Trimming	J. Phipps	6,637-6,638	May 6, 1873	3	487
Tug-clip	J. Letchworth	6,885	Sept. 16, 1873	4	286
Tumbler-holder	C. Lippincott and J. Patterson	6,544	Apr. 1, 1873	3	356
Type	J. Herriet	6,626-6,627	May 6, 1873	3	497
Type, Printing	J. M. Conner	6,573-6,574	Apr. 8, 1873	3	387
Type, Printing	J. M. Conner	7,080	Dec. 30, 1873	4	698
Type, Printing	H. Ilenbury	6,989-6,990	Nov. 11, 1873	4	504
Type, Printing	A. Little	6,359	Jan. 21, 1873	3	71
Type, Printing	A. Little	6,735-6,736	July 1, 1873	4	7
Type, Printing	A. Little	6,761	July 8, 1873	4	36
Type, Printing	W. H. Page	7,072-7,074	Dec. 23, 1873	4	671
Type, Printing	E. C. Ruthven	6,890	Sept. 23, 1873	4	282
Type, Printing	E. C. Ruthven	6,954	Oct. 7, 1873	4	380
Type, Printing	R. Smith	6,351	Jan. 21, 1873	3	70
Type, Printing	R. Smith	6,769	July 8, 1873	4	36
Type, Printing	R. Smith	6,892-6,893	Sept. 23, 1873	4	282
Type, Wood	J. F. Blackman	6,342	Jan. 21, 1873	3	70
U.					
Urn for hot-water, &c.	P. P. Meyer	6,382	Feb. 4, 1873	3	127
Urn, Ornamental	N. Brayer	6,785	July 29, 1873	4	108
V.					
Vase	W. H. Wilkinson	6,384	Feb. 4, 1873	3	127
Vase, Flower	J. Mersereau	6,709	June 17, 1873	3	663
Veil	S. M. Meyenberg and R. Collinge	6,870	Sept. 2, 1873	4	241
W.					
Watch-chain	H. H. Markley and A. Mathieu	6,804	Sept. 16, 1873	4	286
Watch-chain charm	W. B. Hamm	6,759	July 8, 1873	4	36
Watch-hands	B. A. Goodell	6,698	June 3, 1873	3	608
Work-holder	R. W. Perkins	6,491	Mar. 11, 1873	3	272

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
A.							
Air-brake device, Steam-power	G. Westinghouse, jr.	5,505	July 29, 1873	1,014	329	4	126
Air or gas with hydro-carbon vapors, Apparatus for charging.	E. H. Covell	5,465	June 24, 1873	839	266	3	708
Anchor for securing cores	Z. Ellis	5,540	Aug. 19, 1873	618	204	4	202
Animal and vegetable substance, Process and apparatus for preserving.	C. Alden	5,648	Nov. 11, 1873	360	122	4	519
Auger	B. Walch	5,238	Jan. 14, 1873	438	139	3	55
Auger-bits, Machine for forming	W. A. Ives	5,455	June 17, 1873	623	196	3	682
Auger-bits, Machine for manufacturing	J. Swan, by R. P. Bruff, assignee.	5,624	Oct. 21, 1873	534	176	4	442
Auger; Earth	S. H. Dickerson	5,508	July 29, 1873	1,018	330	4	126
Auger, Hollow	W. A. Clark	5,393	May 6, 1873	237	74	3	517
Automatic gate	W. I. Wooster	5,489	July 15, 1873	592	199	4	76
Axle-box, Car	A. Higley, by Higley Car-Journal Company, assignees.	5,453	June 17, 1873	621	195	3	682
B.							
Bag-machine	J. M. Hurd	5,454	June 17, 1873	622	196	3	682
Bail-car, Metallic	T. Evans	5,578	Sept. 23, 1873	781	269	4	338
Bale-tie	D. McComb, by M. A. McComb, administratrix.	5,616	Oct. 21, 1873	521	174	4	441
Bale tie, Cotton	G. Brodie, by J. J. McComb, assignee.	5,333	Mar. 25, 1873	843	277	3	342
Bale tie, Cotton	A. J. Going	5,553	Aug. 26, 1873	843	278	4	270
Bale tie, Cotton	J. R. McClintock and J. Cumberland, by A. J. Aiken, assignee, (mesne.)	5,404	May 13, 1873	456	144	3	545
Bale tie, Cotton	J. McMurtry, by F. Cook, assignee, (mesne.)	5,457	June 17, 1873	626	196	3	683
Bale tie, Cotton	J. McMurtry, by F. Cook, assignee.	5,617	Oct. 21, 1873	522	175	4	441
Bale and socket joint	M. W. St. John	5,679	Dec. 9, 1873	392	129	4	629
Band-comb	C. H. Noyes	5,348	Apr. 8, 1873	438	135	3	404
Basket	R. B. Wheeler, by H. Lardner, assignee.	5,332	Mar. 18, 1873	630	208	3	314
Bed-bottom	S. Pearson, by E. G. Gory	5,604	Oct. 14, 1873	328	119	4	415
Bed-bottom	A. Turnbull and R. S. Webb, by National Wire-Mattress Company, assignee, (mesne.)	5,312	Mar. 5, 1873	213	70, 71	3	262
Bed-bottom	A. Turnbull	5,591	Oct. 7, 1873	146	48	4	392
Bed-bottom, Spring	H. D. W. Bailey	5,286	Feb. 18, 1873	681	220	3	206
Bed, Cot.	S. B. Morse, by L. Morse, assignee.	5,380	Apr. 29, 1873	1,111	351	3	459
Bedstead	S. Caro	5,275	Feb. 11, 1873	447	146	3	174
Bedstead-fastening	L. W. Buxton	5,447	June 17, 1873	612	193	3	681
Bedstead-fastening	T. W. Moore, by F. W. Moore, assignee.	5,603	Oct. 14, 1873	328	109	4	415
Bedstead, Sofa	J. B. Harlow	5,678	Dec. 9, 1873	391	129	4	629
Billiard-cue	H. Platts	5,522	Aug. 5, 1873	187	60	4	150
Billiard-cushion	M. Delaney	5,681	Dec. 9, 1873	395	129	4	629
Billiard-cushions, Mold for rubber	M. Delaney	5,680	Dec. 9, 1873	393	129	4	629
Billiard-table cushion	H. W. Collender	5,241	Jan. 21, 1873	634	207	3	86
Billiard-table cushion	G. D. Sharp	5,349	Apr. 8, 1873	439	136	3	404
Blind-slat operator	B. J. Williams	5,523	Aug. 5, 1873	195	61	4	151
Blind-stiles boring and mortising machine	L. Worcester	5,568	Sept. 9, 1873	393	{ 131 } { 132 }	4	285
Boat-detaching apparatus	S. Sneeden	5,584	Sept. 30, 1873	952	321	4	368
Boat-owering apparatus	G. W. Mallory	5,512	July 29, 1873	1,021	331	4	126
Boiler-feeder, Automatic	S. Cook, by Automatic Boiler-Feeder Company, assignee, (mesne.)	5,276	Feb. 11, 1873	448	146	3	174
Boot	P. West and G. S. Lee	5,670	Nov. 25, 1873	763	257	4	575
Boot and shoe nailing machine	{ L. R. Blake and A. S. Libby, by } { G. McKay, trustee and as- } { signee. }	5,606	Dec. 23, 1873	808	{ 264 } { 265 }	4	627
Boot and shoe seam	S. A. Brackett and W. W. Whitcomb.	5,391	May 6, 1873	235	73	3	516
Boots and shoes, Wooden shank for	J. M. Watson, by self and H. A. Lothrop, assignees.	5,315	Mar. 4, 1873	212	72	2	263
Boots and shoes, Machine for punching the lifts of	G. W. Ellis, by J. W. Brooks, trustee and assignee, (mesne.)	5,539	Aug. 19, 1873	616	203	4	202
Boring-machine	N. R. Merchant, by A. P. and M. Merchant, assignee and administrator.	5,222	Jan. 7, 1873	212	69	3	23
Bracelet	J. S. Palmer	5,571	Sept. 9, 1873	397	133	4	286
Bracket	F. M. Sweet, by D. D. and A. E. Coddington and T. J. Smith, assignees.	5,311	Mar. 4, 1873	213	70	3	262
Branding-apparatus	J. W. Dodge	5,420	May 20, 1873	704	221	3	578
Brick-machine	R. A. Smith	5,380	Apr. 29, 1873	1,122	334	3	490

Alphabetical list of reissues—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr & G.	Vol.	Page.
Bridge, Draw	L. Schneider and J. A. Montgomery, by L. Schneider, assignee.	5,372	Apr. 22, 1873	883	279	3	462
Broiler	W. T. Howard, by H. G. Leisenring, assignee.	5,240	Jan. 21, 1873	633	207	3	86
Buckle	J. A. Mashmeyer, by S. S. Sargeant, assignee.	5,411	May 13, 1873	404	146	3	546
Building-block, Machine for forming	J. S. Elliott, by Union Stone Company, assignees.	5,401	May 13, 1873	453	143	3	545
Burring-machine cylinder	J. K. Proctor, by C. R. Lindsay, assignee.	5,493	July 15, 1873	595	200	4	76
Bustle	M. K. Bortree	5,484	July 15, 1873	587	197	4	75
Bustle	H. H. May	5,416	May 20, 1873	700	219	3	592
Butter-package	H. P. Adams	5,464	June 24, 1873	838	266	3	708
Button-fastening	E. F. Lee, by J. Wienhold, assignee.	5,403	May 13, 1873	455	143	3	545
Buttons, Machine for making glass	H. Bock, by W. W. McFarlan, assignee.	5,517	Aug. 5, 1873	181	58	4	150
Buttons, Process of preparing wood for the manufacture of.	R. H. Isbell	5,694	Dec. 23, 1873	806		4	686
C.							
Caps, Mechanism for shearing	R. Cooke and T. Hanford	5,642	Nov. 4, 1873	170	50, 60	4	493
Car-brake apparatus, Steam-power	G. Westinghouse, jr.	5,506	July 29, 1873	1,016	329	4	329
Car-brake, Railway	S. and W. W. Balkwill	5,271	Feb. 11, 1873	444	145	3	174
Car-coupling attachment	W. G. Brown and J. W. Jenkins	5,587	Oct. 7, 1873	143	47	4	392
Car door, Grain	C. Barker, by self and T. C. Thomas, assignees.	5,671	Dec. 2, 1873	207	70	4	601
Car, Dumping	J. Hughes	5,541	Aug. 19, 1873	619	294	4	202
Car-frame	W. G. Von Staden	5,482	July 8, 1873	369	125	4	50
Car, Hand	H. L. Brown	5,273	Feb. 11, 1873	446	145	3	174
Car, Hand	H. L. Brown	5,274	Feb. 11, 1873	447	145	3	174
Car, Railway oil	S. W. Murray and B. P. Lamason	5,406	May 13, 1873	458	144	3	545
Car-roof	J. C. Wands	5,515	July 29, 1873	1,023	331	4	126
Car-seat end-frame	G. Buntin (Design)	5,480	July 8, 1873	367	124	4	49
Car-wheels, Casting	J. K. Sax	5,716	Dec. 30, 1873	1,010	325	4	714
Car-wheels, Manufacture of	W. G. Hamilton, by Hamilton Steeled-Wheel Company, assignee.	5,298	Feb. 25, 1873	894		3	235
Cars, Body-bolster for railway	A. Ward	5,560	Sept. 2, 1873	204	66	4	258
Carbureter	H. S. Maxim, by Maxim Gas Machine Company, assignee, (mesne.)	5,247	Jan. 21, 1873	643	209	3	87
Carriage-seat, Clamping movable	S. W. Beach, by Beach Patent-Shifting Carriage-Seat Manufacturing Company, assignee.	5,262	Jan. 28, 1873	848	273	3	116
Carriage-spring clip-plate	N. C. Dean, by S. S. Bliss, assignee.	5,490	July 15, 1873	593	199	4	76
Carriage-step cover and wheel-fender	J. W. Gosling	5,644	Nov. 4, 1873	179	60	4	493
Carriage-wheel	S. Vreeland, by Metallic Suspension-Wheel Company, assignee, (mesne.)	5,237	Jan. 14, 1873	437	139	3	55
Cartridge, Patched	W. H. Elliot, by E. Remington & Sons, assignees.	5,577	Sept. 23, 1873	780	269	4	338
Carving-machine	B. J. Tayman	5,594	Oct. 7, 1873	149	49	4	392
Cement pipes, Device for lining	M. Stephens	5,494	July 15, 1873	596	200	4	76
Cheese-press	G. B. Boomer, T. G. Morse, and R. E. Boschert, said Boomer assignee of said Morse.	5,256	Jan. 28, 1873	841	271	3	115
Clothes-wringer	A. Albrecht, by American Machine Company, assignee, (mesne.)	5,261	Jan. 28, 1873	848	273	3	115
Clothes-wringer	J. Brinkerhoff	5,218	Jan. 7, 1873	208	67	3	23
Clothes-wringer	R. S. Cathcart, by Queen City Wringer Company, assignee, (mesne.)	5,360	Apr. 22, 1873	866	274	3	461
Clothes-wringer	A. H. Page, by Metropolitan Washing-Machine Company, assignee, (mesne.)	5,223	Jan. 7, 1873	213	68	3	23
Clothes-wringer	A. H. Page, by Metropolitan Washing-Machine Company, assignee, (mesne.)	5,224	Jan. 7, 1873	214	69	3	24
Clothes-wringer	A. H. Page, by Metropolitan Washing-Machine Company, assignee, (mesne.)	5,225	Jan. 7, 1873	215	69	3	24
Clothes-wringer	T. Pool, by Metropolitan Washing-Machine Company, assignee.	5,330	Mar. 18, 1873	628	207	3	314
Coal-drilling machine	J. Grimm	5,499	July 22, 1873	792	259	4	101
Coffee, Compound for coating roasted	J. T. Cooke	5,383	Apr. 29, 1873	1,115		3	489
Coffee-cooler	J. Burns	5,658	Nov. 18, 1873	561	190	4	547
Coffin-handle	C. Strong	5,374	Apr. 22, 1873	886	279	3	462
Coke from lignite, &c., Process of making	H. Engelmann	5,486	July 15, 1873	588	198	4	75
Collar and cuff, Ladies'	W. E. Lockwood	5,259	Jan. 28, 1873	845	272	3	115
Collars, caps, and harness, Lining for horse	D. Curtis, by H. Gilman and G. H. Richards, assignees.	5,251	Jan. 21, 1873	647	210	3	87
Collars, caps, and harness, Lining for horse	D. Curtis, by G. H. Richards and H. Gilman, assignees.	5,443	June 10, 1873	382	119	3	655
Collars, &c., Lining for wooden horse	D. Curtis	5,250	Jan. 21, 1873	646	210	3	87
Combination-lock	H. Clarke, by Clarke Lock Company, assignee.	5,497	July 22, 1873	789	258	4	100

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Condenser and feed-water heater for steam-engines.....	J. Dilworth and J. C. Hodgins, by J. C. Hodgins, T. K. Morgan, and H. Thorn, assignees.	5,394	May 6, 1873	238	74	3	517
Copying press. Letter.....	G. C. Taft.....	5,417	May 20, 1873	701	220	3	578
Corpse-preserving case.....	J. S. Waterman.....	5,355	Apr. 15, 1873	655	206	3	435
Corset-spring.....	S. H. Barnes, by F. S. Egbert, executrix.	5,216	Jan. 7, 1873	206	66	3	23
Cotton-gin.....	R. McKenna.....	5,663	Nov. 18, 1873	567	192	4	547
Cotton-gin saw.....	T. C. Craven, by B. H. Jenks, assignee.	5,229	Jan. 14, 1873	427	137	3	54
Cotton-press.....	M. M. Jones.....	5,319	Mar. 11, 1873	409	135	3	287
Cotton-seed hulling-machine.....	W. R. Fee.....	5,550	Aug. 26, 1873	837	278	4	230
Coupling and steering apparatus.....	J. McCreary.....	5,630	Oct. 28, 1873	739	246	4	469
Cradle.....	L. A. Chichester.....	5,496	July 22, 1873	788	258	4	100
Cradle.....	F. Chichester, by self and L. A. Chichester, assignees.	5,663	Dec. 16, 1873	609	199	4	659
Cradle.....	L. Sperry and L. Robinson, by L. & A. Sperry, assignees.	5,331	Mar. 18, 1873	629	207	3	314
Culinary pot.....	J. S. Kidd and M. L. Melville.....	5,246	Jan. 21, 1873	642	209	3	87
Cultivator.....	C. M. & D. E. Hall, by C. M. Hall, assignee.	5,601	Oct. 14, 1873	325	108	4	414
Cultivator.....	C. P. Norton, by J. P. Pillsbury, assignee.	5,557	Aug. 26, 1873	850	280	4	231
Cultivator.....	R. B. Robbins.....	5,676	Dec. 2, 1873	211	72	4	602
Cultivator.....	A. C. Smith.....	5,547	Aug. 19, 1873	625	206	4	203
Cultivator and plow combined.....	L. R. Wright.....	5,532	Aug. 12, 1873	401	130	4	175
Curtain-fixture.....	C. Eaton.....	5,576	Sept. 23, 1873	779	269	4	338
Curtain-fixture.....	L. A. Tripp, by the Salem Shade-Roller Manufacturing Company, assignee, (mesne.)	5,439	June 3, 1873	188	61	3	624
Cut-off and regulating-cock for gas.....	C. E. Seal, by E. F. Brooks, assignee.	5,585	Sept. 30, 1873	953	321	4	368
D.							
Damper. Stove-pipe.....	R. M. Breckenridge.....	5,239	Jan. 21, 1873	633	206	3	86
Dental instrument.....	I. A. Salmon.....	5,623	Oct. 21, 1873	533	176	4	442
Dental plates, &c., Composition for.....	G. F. J. Colburn, by W. M. Wel-ling, assignee.	5,572	Sept. 10, 1873	582	.....	4	312
Distilling turpentine.....	A. K. Lee.....	5,351	Apr. 15, 1873	649	205	3	434
Dividers.....	O. E. Weatherhead, by A. A. G. L., and S. W. Cooke, assignees.	5,290	Feb. 18, 1873	685	221	3	206
Dress-facing.....	W. H. Gallup.....	5,492	July 15, 1873	595	200	4	76
E.							
Egg-carrier.....	O. T. Bedell, by W. D. Taber, P. P. Josef, and E. Striber, assignees, (mesne.)	5,575	Sept. 23, 1873	778	268	4	338
Egg-carrier.....	A. H. Bryant.....	5,293	Feb. 25, 1873	889	286	3	235
Egg-carrier.....	A. H. Bryant.....	5,392	May 6, 1873	236	74	3	516
Egg-carrier.....	W. D. Taber, by P. P. Josef and E. Striber, assignees.	5,300	Feb. 25, 1873	897	288	3	235
Egg stand and boiler.....	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	5,269	Feb. 4, 1873	218	68	3	144
Egg stand and boiler.....	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	5,270	Feb. 4, 1873	219	68	3	144
Egg stand and boiler.....	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	5,483	July 8, 1873	370	125	4	50
Elevator.....	E. T. Hope, by S. I. Thursby, assignee.	5,556	Aug. 26, 1873	849	280	4	231
Elevator.....	H. S. Stewart.....	5,268	Feb. 4, 1873	217	67	3	144
Engraving and carving machine.....	T. W. Minter.....	5,458	June 17, 1873	626	197	3	683
Envelope.....	R. K. Kuhn and T. O. Atkinson.....	5,592	Oct. 7, 1873	147	49	4	329
Explosive compound.....	A. Nobel, by Giant Powder Company, assignee, (mesne.)	5,619	Oct. 21, 1873	523	.....	4	441
Eyelet-making machine.....	W. R. Landfear, by Hartford Eyelet Company, assignee, (mesne.)	5,662	Nov. 18, 1873	565	192	4	547
F.							
Feed-water heater and filter for steam-boiler.....	J. Armstrong.....	5,569	Sept. 9, 1873	395	132	4	285
Fence.....	I. L. Landis.....	5,511	July 29, 1873	1,020	330	4	126
Fence. Constructing wire.....	J. W. Rappleye.....	5,688	Dec. 16, 1873	613	201	4	659
Fire-arm, Breech-loading.....	W. C. Hicks.....	5,564	Sept. 9, 1873	387	130	4	285
Fire-arm, Breech-loading.....	J. V. Moigs.....	5,433	June 3, 1873	179	59	3	621
Fire-arm, Breech loading and repeating.....	H. Smith and D. B. Wesson, by Winchester Repeating-Arms Company, assignee, (mesne.)	5,710	Dec. 30, 1873	1,002	323	4	713
Fire-arm, Revolving.....	J. Rupertus.....	5,631	Oct. 28, 1873	740	247	4	469
Fire-arm, Revolving.....	R. White.....	5,691	Dec. 16, 1873	616	202	4	660
Fire-pipe for buildings, Stationary.....	H. Palmieri, by G. Monges, assignee.	5,608	Oct. 14, 1873	333	111	4	415
Fluting-iron.....	J. Hewitt.....	5,358	Apr. 15, 1873	658	206	3	435
Fluting-machine.....	J. W. Madden and J. Dodsworth, by J. Hewitt, assignee to said Dodsworth, (mesne.)	5,415	May 20, 1873	699	219	3	577
Foot-rest for chair, Extension.....	J. H. Travis.....	5,690	Dec. 16, 1873	615	201	4	660
Friction-coupling, Double.....	J. Hendy.....	5,335	Mar. 25, 1873	846	277	3	342
Fruit-basket.....	S. R. Conover, by J. A. Mount, assignee.	5,361	Apr. 22, 1873	867	275	3	461

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Fruit-basket.....	J. K. Park, by American Basket Company, assignee.	5, 579	Sept. 23, 1873	762	269	4	338
Fuel for heating, &c., Gasifying.....	W. Elmer.....	5, 283	Feb. 18, 1873	672	.....	3	206
Fuel for producing heat and light, Process and apparatus for using liquid.	T. S. Dickerson and R. M. Whipple.	5, 326	Mar. 18, 1873	624	206	3	214
Fuel, &c., Manufacture of inflammable gases for.....	W. Elmer.....	5, 284	Feb. 18, 1873	674	.....	3	206
Furnace.....	D. Harger.....	5, 614	Oct. 21, 1873	519	174	4	441
Fur-set box.....	J. W. Aikin and J. H. Stone, by F. Crane, assignee.	5, 430	June 3, 1873	176	58	3	623
G.							
Gaiters, Machinery for goring.....	J. Walden, by G. Platts, assignee	5, 488	July 15, 1873	591	199	4	76
Gas, Apparatus for manufacture of illuminating.....	J. C. Tiffany.....	5, 324	Mar. 11, 1873	414	137	3	288
Gas fire-log.....	A. H. Mershon, by self and G. B. Mershon, assignees.	5, 278	Feb. 11, 1873	451	147	3	174
Gas from petroleum, &c., Manufacture and application of.	T. S. Dickerson, by self and R. M. Whipple, assignees.	5, 327	Mar. 18, 1873	625	206	3	314
Governor for steam-engines.....	G. W. Clark.....	5, 258	Jan. 28, 1873	344	272	3	115
Grain-drill.....	B. Kühns.....	5, 432	June 3, 1873	178	58	3	623
H.							
Hame-tug clip.....	J. B. Welpton.....	5, 376	Apr. 22, 1873	888	280	3	463
Hammer, Power.....	J. Palmer.....	5, 381	Apr. 29, 1873	1, 113	352	3	489
Harness-pad.....	J. Hughes.....	5, 628	Oct. 28, 1873	737	246	4	468
Harness-pad.....	J. Hughes.....	5, 629	Oct. 28, 1873	738	246	4	469
Harvester.....	L. M. Batty, by W. K. Miller, assignee.	5, 316	Mar. 11, 1873	403	134	3	287
Harvester.....	O. Billings.....	5, 538	Oct. 19, 1873	614	202 } 203 }	4	202
Harvester.....	C. Crook, by M. G. Hubbard, assignee.	5, 428	May 27, 1873	909	293	3	602
Harvester.....	C. Crook, by M. G. Hubbard, assignee.	5, 429	May 27, 1873	910	293	3	602
Harvester.....	T. N. Foster, by H. H. Doubleday, assignee.	5, 606	Oct. 14, 1873	331	109 } 110 }	4	415
Harvester.....	T. N. Foster, by H. H. Doubleday, assignee.	5, 607	Oct. 14, 1873	332	110 } 111 }	4	415
Harvester.....	J. Pine.....	5, 714	Dec. 30, 1873	1, 008	324	4	713
Hatchway.....	J. D. Sinclair, by E. A. Lambert, W. S. Harris, and N. B. Rhodes, assignees, (mesne.)	5, 387	Apr. 29, 1873	1, 118	353	3	489
Hay and manure fork.....	L. D. Pitcher.....	5, 279	Feb. 11, 1873	452	147	3	175
Hay-rake, Horse.....	B. J. Downing.....	5, 704	Dec. 23, 1873	819	267	4	687
Hay-rake, Horse.....	H. W. Sabin, by C. E. Cox, executrix.	5, 242	Jan. 21, 1873	635	207	3	86
Hay-rake, Horse.....	H. W. Sabin, by C. E. Cox, executrix.	5, 243	Jan. 21, 1873	637	208	3	87
Hay-rake, Horse.....	H. W. Sabin, by C. E. Cox, executrix.	5, 244	Jan. 21, 1873	639	208	3	87
Hay-rake, Horse.....	H. W. Sabin, by C. E. Cox, executrix.	5, 245	Jan. 21, 1873	641	208	3	87
Heads, Manufacture of spring.....	G. Hopson.....	5, 219	Jan. 9, 1873	209	67	3	23
Heels of boots and shoes, Machinery for trimming the	C. H. Helms, by J. W. Brooks, trustee and assignee, (mesne.)	5, 424	May 27, 1873	905	292	3	602
Heels to boots and shoes and polishing same, Machinery for attaching.	G. W. Ellis and C. W. Glidden, by J. W. Brooks, trustee.	5, 413	May 20, 1873	696	218 } 219 }	3	577
Horn-mill.....	T. Hudnut.....	5, 520	Aug. 5, 1873	185	59	4	150
Hoop-skirt.....	T. B. D. Forest and T. S. Gilbert, by A. K. Young, assignee, (mesne.)	5, 334	Mar. 25, 1873	844	277	3	342
Horse-grooming apparatus.....	J. J. Greenough.....	5, 589	Oct. 7, 1873	144	48	4	392
Horse-power.....	H. Smith.....	5, 226	Jan. 7, 1873	216	69	3	24
Horseshoe-nails, Machine for finishing.....	H. A. Wills, by J. A. Wills and L. S. Kingsland, assignees.	5, 249	Jan. 21, 1873	645	209	3	87
Horse sun-shield.....	H. D. McGovern.....	5, 456	June 17, 1873	625	196	3	682
Hot-air engine.....	A. K. Rider.....	5, 340	Mar. 25, 1873	851	279	3	343
Hub for vehicles.....	A. Warner, by E. Hall & Co., assignees, (mesne.)	5, 366	Apr. 22, 1873	877	277	3	462
Hydraulic telescopic platform-elevator.....	J. Parker and I. Cook, by S. P. Taylor, assignee of said Parker.	5, 296	Feb. 25, 1873	892	287	3	235
I.							
Ice-machine.....	F. P. E. Carré, by J. B. J. Mignon and H. S. Rouart, assignees.	5, 287	Feb. 18, 1873	682	220	3	206
Ice, Manufacture of.....	F. P. E. Carré, by J. B. J. Mignon and H. S. Rouart, assignees.	5, 288	Feb. 18, 1873	683	220	3	206
Ingot-mold.....	A. L. Holley.....	5, 318	Mar. 11, 1873	407	135	3	287
Ingot-molds, Stopper for.....	A. L. Holley.....	5, 317	Mar. 11, 1873	406	134	3	287
Inhaler.....	W. H. Cutler.....	5, 449	June 17, 1873	617	194	3	682
Inhaler.....	N. I. Donaldson.....	5, 491	July 15, 1873	593	200	4	76
J.							
Jelly-glass.....	W. Doyle.....	5, 356	Apr. 15, 1873	656	206	3	435
Journal-box.....	H. H. Thayer, by J. A. Woodbury, assignee.	5, 323	Mar. 11, 1873	414	137	3	287
K.							
Kaleidoscope.....	C. G. Bush, by self and J. W. Hoard, assignees.	5, 649	Nov. 11, 1873	362	122	4	519
King-bolt for railway-car trucks.....	S. W. Murray and B. P. Lamason.....	5, 546	Aug. 19, 1873	624	205	4	203
Knitting-machine.....	W. A. Tangeman.....	5, 552	Aug. 26, 1873	839	278	4	230
Knob, Door.....	C. Rebstock and J. Ottner, by Bridgeport Electro-Casting Co., assignee, (mesne.)	5, 445	June 10, 1873	384	119	3	656

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Knobs, Mold for casting	C. Rebstock and J. Ottner, by Bridgeport Electro-Casting Co., assignees, (mesne.)	5,444	June 10, 1873	383	119	3	655
Knobs to screws, Mode of attaching	C. H. Thurston	5,631	Oct. 22, 1873	744	247	4	469
L.							
Label-holder, Drawer-pull	J. A. Evarts and P. Cinquini, by Bradley & Hubbard, assignees.	5,395	May 6, 1873	239	74	3	517
Ladder, Step	C. Hays, by Kip Manufacturing Company, assignee.	5,451	June 17, 1873	619	195	3	682
Lamp	J. E. Ambrose, by S. T. Ambrose and E. Miller, assignees, (mesne.)	5,412	May 20, 1873	694	218	3	577
Lamp	C. A. Kleemann, by C. F. A. Hinrichs, assignee, (mesne.)	5,708	Dec. 30, 1873	999	322	4	713
Lamp, Hanging	G. Bohner	5,534	Aug. 19, 1873	610	201	4	201
Lantern, Magic	L. J. Marcy	5,638	Oct. 28, 1873	749	249	4	469
Lantern, Magic	L. J. Marcy	5,686	Dec. 16, 1873	611	200	4	659
Lasting boots and shoes, Hand-bailer for	W. E. Fischer, by C. H. Trask and F. Gould, assignees, (mesne.)	5,475	July 1, 1873	203	67	4	25
Latch, Gate	J. Bull, by Van Wagoner and Williams, assignees.	5,668	Nov. 25, 1873	761	257	4	574
Leather, Manufacture of	C. J. Tinnerholm, by J. C. White, assignee.	5,301	Feb. 25, 1873	898	.....	3	235
Leather, Treating tanned	B. H. Lightfoot	5,652	Nov. 11, 1873	360	.....	4	519
Life-preserving stool	H. T. Pratt	5,425	May 27, 1873	906	292	3	692
Lifting-jack	J. D. Otstot	5,263	Jan. 28, 1873	849	273	3	116
Liquid-evaporating process and apparatus	J. J. Johnston, by J. Campbell and C. Seibert, assignees.	5,570	Sept. 9, 1873	396	132	4	286
Locomotive-wheel	J. R. Richardson	5,665	Nov. 18, 1873	568	192	4	548
Log-turning machine	E. Tarrant, by A. Rodgers, assignee.	5,487	July 15, 1873	590	199	4	75
Loom for weaving pile-fabrics	E. K. Davis, by S. C. Davis, administratrix.	5,347	Apr. 8, 1873	436	{ 134 135 }	{ 3 }	404
Loom, Lappet	F. W. Newton, by W. L. Pomeroy and J. F. Plummer, assignees, (mesne.)	5,365	Apr. 22, 1873	871	{ 276 277 }	{ 3 }	419
Looms, Take-up for	C. Gahren, by M. Cohn, assignee.	5,706	Dec. 23, 1873	821	267	4	688
Lubricator	W. T. Garratt	5,328	Mar. 18, 1873	627	207	3	314
M.							
Malt-dryer	W. W. Hughes	5,602	Oct. 14, 1873	326	108	4	415
Match-sticks, Machine for making	F. Zaiss	5,548	Aug. 19, 1873	626	206	4	203
Matter, Composition of	G. F. J. Colburn, by W. M. Wel-ling, assignee.	5,596	Oct. 14, 1873	321	.....	4	414
Mattress-stuffing	F. A. Lane, by self, S. S. Lane, and E. Kendall, assignees, (mesne.)	5,266	Feb. 4, 1873	216	67	3	144
Mattress-stuffing	F. A. Lane, by self, S. S. Lane, and E. Kendall, assignees, (mesne.)	5,379	Apr. 29, 1873	1,111	351	3	489
Meat curing and packing	I. Atkinson	5,410	May 13, 1873	463	.....	3	546
Medicine for lung and other diseases	W. Trinder	5,254	Jan. 21, 1873	651	.....	3	87
Middlings-purifier	E. N. Lacroix	5,711	Dec. 30, 1873	1,004	323	4	713
Middlings-purifier	E. P. Welch, by self, J. H. R. W., and H. P. Welch, and J. A. Maloney, assignees.	5,346	Apr. 1, 1873	229	70	3	375
Milk-can handle	H. W. Shepard	5,280	Feb. 11, 1873	453	147	3	175
Mold-boards, Chill for casting	J. Oliver	5,321	Mar. 11, 1873	412	136	3	287
Molding machine	H. B. Smith	5,535	Aug. 19, 1873	611	201	4	201
Motion, Apparatus for transmitting	A. H. Kennedy, by J. M. Segur, assignee, (mesne.)	5,476	July 1, 1873	204	68	4	25
Music-teaching apparatus	L. A. Seward	5,632	Oct. 28, 1873	741	247	4	469
N.							
Nail-extractor	G. J. Capewell	5,502	July 29, 1873	1,010	328	4	125
Nails, Machine for arranging	A. Knowlton, by J. Hill, trustee.	5,313	Mar. 4, 1873	214	71	3	262
Nitro-glycerine, Exploding	A. Nobel, by Atlantic Giant-Powder Co., assignees, (mesne.)	5,620	Oct. 21, 1873	525	175	4	441
Nitro-glycerine, Method of exploding	A. Nobel, by Atlantic Giant-Powder Co., assignees, (mesne.)	5,621	Oct. 21, 1873	527	175	4	441
O.							
Offal, entrails, flesh, &c., for preservation, manure, &c., Drying	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	5,611	Oct. 21, 1873	517	.....	4	440
Offal, flesh, entrails, &c., for preservation, manure, &c., Treating	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	5,610	Oct. 21, 1873	516	.....	4	440
Offal, flesh, &c., Manure from	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	5,612	Oct. 21, 1873	517	.....	4	440
Offal-treating establishments, Process and apparatus for deodorizing and destroying the gases from	J. J. Storer	5,703	Dec. 23, 1873	817	267	4	687
Oil-can	J. G. Evenden	5,597	Oct. 14, 1873	322	107	4	414
Oil-can	J. G. Evenden	5,598	Oct. 14, 1873	322	107	4	414
Ordnance, Breech-loading	E. A. Sutcliffe	5,375	Apr. 22, 1873	887	279	3	462
Ore-washer for hydraulic mining	J. M. Allenwood, by R. R. Craig and J. Craig, assignees.	5,255	Jan. 28, 1873	840	271	3	115
Organ, Reed	R. Burdett	5,485	July 15, 1873	587	198	4	75
Oscillating steam-engine	A. Nittinger, jr	5,353	Apr. 15, 1873	653	205	3	433

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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P.							
Packing for journals and other parts of machinery	C. A. Stevens, by J. D. Clift, assignee.	5,551	Aug. 26, 1873	809		4	230
Paint	D. R. Averill, by The Averill Chemical Paint Co., assignee.	5,695	Dec. 23, 1873	807		4	686
Paint	F. W. Gerdes	5,669	Nov. 25, 1873	762		4	575
Painting, Material for distemper	H. M. Johnston	5,510	July 29, 1873	1,019		4	126
Paper-cutting machine	H. Law	5,503	July 29, 1873	1,011	{ 328 329	4	125
Paper-cutting machine	G. A. Walker, by W. G. Ely, assignee.	5,463	June 24, 1873	837	266	3	708
Paper, Die for cutting out ornamental forms of	A. Dolkescamp, by J. J. Nichols, assignee.	5,635	Oct. 28, 1873	745	248	4	469
Paper-folding machine	C. Chambers, jr.	5,533	Aug. 12, 1873	402	131	4	175
Paper-folding machine	A. Washburn	5,516	July 29, 1873	1,024	332	4	127
Paper-washer	E. S. Hanna	5,422	May 20, 1873	706	222	3	578
Paste, Machine and process for making	G. G. Noah	5,289	Feb. 18, 1873	624	221	3	206
Pasteboard, Apparatus for manufacture of	H. L. Palmer, by E. W. O'Neill and M. Fitzgibbons, assignees.	5,471	July 1, 1873	199	66	4	24
Pavement, Concrete	G. Bassett, by T. G. Bassett, assignee.	5,586	Oct. 7, 1873	142	47	4	392
Pen and pencil case	G. H. Downes	5,518	Aug. 5, 1873	182	58	4	150
Pencil-case	W. S. Hicks	5,384	Apr. 29, 1873	1,115	352	3	489
Pencil-case, Ornamental	E. S. Johnson	5,469	July 1, 1873	197	66	4	24
Pencils, Machine for cutting lead	A. Warth, by E. Faber, assignee	5,228	Jan. 7, 1873	217	70	3	24
Pencils, Machine for cutting off lead	P. Schrag and P. Hufeland, by E. Faber, assignee.	5,236	Jan. 14, 1873	436	138	3	55
Photographic negative, Varnish for coating	J. W. Morgencier	5,618	Oct. 21, 1873	522		4	441
Photographs, &c., Burnisher for	E. R. Weston, by T. McDonald, assignee.	5,281	Feb. 11, 1873	454	147	3	175
Piano, Upright	G. C. Manner	5,470	July 1, 1873	198	66	4	24
Pitman	F. R. Glascock	5,600	Oct. 14, 1873	324	107	4	414
Planing-machines, Stock for holding cutters in	I. Gibbs	5,329	Mar. 18, 1873	627	207	3	314
Planter, Seed	B. Kuhns	5,542	Aug. 19, 1873	620	204	4	202
Plaster for walls	B. R. Smith and J. C. Harris	5,389	Apr. 29, 1873	1,121		3	490
Plow	L. Gibbs, by self, J. R. Bucher, and W. A. Wikidal, assignees.	5,421	May 20, 1873	705	221	3	578
Plow	G. Shelton	5,530	Aug. 12, 1873	398	130	4	175
Plow, Cotton	Z. B. Sims	5,513	July 29, 1873	1,022	331	4	126
Portfolio	J. C. Koch	5,221	Jan. 7, 1873	212	68	3	23
Press	R. Esmond, by United Power-Press Company, assignee.	5,613	Oct. 21, 1873	518	174	4	440
Printing-press	G. W. Prouty	5,664	Nov. 18, 1873	567	192	4	547
Printing-press, Rotary	C. Montague, by C. C. Child, assignee.	5,501	July 22, 1873	794	260	4	101
Propeller, Operating screw	A. Lee	5,371	Apr. 22, 1873	822	278	3	462
Propeller, Screw	J. Montgomery	5,364	Apr. 22, 1873	870	275	3	461
Puddling-furnace	H. McDonald	5,500	July 22, 1873	793	260	4	101
Puddling iron and steel, Process and apparatus for	J. G. Blunt, by M. H. Insley, assignee.	5,367	Apr. 22, 1873	878	277	3	462
Pump	E. Graser	5,396	May 6, 1873	229	75	3	517
Pump	R. M. Lafferty, by self and E. P. Smith, assignees.	5,440	June 10, 1873	378	118	3	655
Pump	R. M. Lafferty, by self and E. P. Smith, assignees.	5,441	June 10, 1873	379	118	3	655
Pump, Oil-well	J. B. Root, by A. S. Hill, H. H. Noyes, and H. M. Haskell, assignees, (meane.)	5,525	Aug. 5, 1873	193	61	4	151
Pump-rod attachment	H. H. Locke, by D. Bly, assignee.	5,543	Aug. 19, 1873	621	205	4	202
Pump, Steam-vacuum	W. Burdon	5,640	Nov. 4, 1873	173	58, 59	4	492
Pump, Steam-vacuum	W. Burdon	5,641	Nov. 4, 1873	174	59	4	493
Punch, Hand	A. S. Eckert, by W. F. Ebbs, assignee.	5,450	June 17, 1873	618	195	3	682
R.							
Railway-frog	J. Wood, by E. R. Bennett, assignee.	5,473	July 1, 1873	201	67	4	24
Railway-rail	A. McKenney	5,307	Mar. 4, 1873	209	69	3	262
Railway-rail joint, Nut-locking device for	A. McKenney	5,308	Mar. 4, 1873	210	69	3	261
Railway water-tank	J. Morton, by the McGowan Pump Company, assignee, (meane.)	5,544	Aug. 19, 1873	622	205	4	202
Railway water-tank	J. Morton, by the McGowan Pump Company, assignee, (meane.)	5,545	Aug. 19, 1873	623	205	4	203
Railways, Electric signaling-apparatus for	F. L. Pope, by self, S. C. Hendrickson, J. N. Ashley, and J. D. Lincoln, assignees.	5,622	Oct. 21, 1873	529	{ 175 176	4	441
Razor-strap	O. B. Howard, by O. P. Shepherd, assignee.	5,402	May 13, 1873	455	143	3	545
Rendering fats and deodorizing the gases, Apparatus for	H. S. Firman	5,643	Nov. 4, 1873	176	60	4	493
Revolving and tilting chair	D. E. Teal, by Heywood Brothers & Co., assignees.	5,345	Apr. 1, 1873	229	70	3	375
Rivet	J. E. Wootteer	5,567	Sept. 9, 1873	392	131	4	285
Riveting-tool	B. F. Cobb, by E. Prescott, assignee.	5,297	Feb. 25, 1873	894	287	3	235
Rock-drilling machine	S. W. Robinson and D. V. Wood	5,285	Feb. 18, 1873	679	220	3	206
Roving and spinning-frame flier	T. Mayor	5,295	Feb. 25, 1873	891	287	3	235
Rubber, gutta-percha, &c., Coating wood with	K. W. Holmes and A. Albright, by said Albright, assignee.	5,343	Apr. 1, 1873	226		3	375
Rubber, Hard	A. G. Day	5,232	Jan. 14, 1873	439	137	3	54
Rubber, Manufacture of hard flexible	A. G. Day	5,231	Jan. 14, 1873	430	137	3	54
Rubber, Process of manufacturing hard	A. G. Day	5,230	Jan. 14, 1873	428	137	3	54

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Ga t e.	
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S.							
Sad and fluting iron.....	J. Hewitt.....	5,302	Mar. 4, 1873	203	67	3	261
Saddle-tree.....	S. E. Tompkins.....	5,495	July 15, 1873	597	201	4	76
Saddle tree, Side.....	J. Straus.....	5,609	Oct. 14, 1873	335	111	4	415
Salt and pepper dredge.....	D. C. Ripley.....	5,666	Nov. 18, 1873	569	193	4	548
Sash-holder.....	R. B. Huguinin.....	5,559	Sept. 2, 1873	202	65	4	258
Sash-holder for carriage-window.....	S. E. Totten, jr., by W. Bloodgood, assignee.	5,426	May 27, 1873	907	292	3	602
Sash-lock.....	G. McGregor and G. Voll, by W. A. Hopkins and F. Z. Dickenson, assignees, (mesne.)	5,253	Jan. 21, 1873	650	210	3	87
Saw-frame.....	D. and E. Moore, by Bisell & Moore Manufacturing Company, assignee.	5,674	Dec. 2, 1873	210	72	4	602
Saw-hanging.....	L. Morrison and A. G. Harms.....	5,646	Nov. 4, 1873	180	61	4	493
Saw-hanging.....	L. Morrison and A. G. Harms.....	5,647	Nov. 4, 1873	181	61	4	493
Saw-mill, Circular.....	L. C. Pattee.....	5,303	Mar. 4, 1873	204	68	3	261
Saws, Attaching handle to cross-cut.....	I. Pelham, by E. Andrews, assignee.	5,339	Mar. 25, 1873	850	278	3	343
Saws, Gate for gang for marble.....	L. B. Clogston, by C. H. Sheldon, assignee.	5,672	Dec. 2, 1873	208	71	4	602
Sawing-machine for edging lumber.....	E. Tarrant.....	5,336	Aug. 19, 1873	613	202	4	202
Scoop, Vegetable.....	J. F. English, by J. E. Thompson, assignee.	5,675	Dec. 2, 1873	210	72	4	602
Screen and shutter, Window.....	B. J. Williams.....	5,527	Aug. 5, 1873	195	61	4	151
Screw-blanks, Machine for threading.....	E. Croft.....	5,673	Dec. 2, 1873	208	71	4	602
Screw machine, Wood.....	C. B. F. Tingley, by W. H. Haskell, assignee.	5,472	July 1, 1873	200	67	4	24
Seams for uniting material, Metallic.....	J. Keith, by A. B. Keith, trustee and assignee.	5,645	Nov. 4, 1873	180	60	4	493
Seed-dropper.....	F. W. Young.....	5,529	Aug. 5, 1873	196	62	4	151
Seed-separator.....	W. J. Walker.....	5,227	Jan. 7, 1873	217	70	3	24
Sewing-machine.....	W. C. Hicks.....	5,305	Mar. 4, 1873	205	68	3	262
Sewing-machine.....	G. Rehtuss, by American Button-hole Overseaming and Sewing-machine Co., assignee.	5,290	Jan. 28, 1873	845	{ 272 } { 273 }	{ 3 } { 3 }	115
Sewing machine.....	E. H. Smith.....	5,388	Apr. 29, 1873	1,110	353	3	490
Sewing-machine extension-table.....	J. Benuor, by N. D. Storps and J. B. Myers, assignees, (mesne.)	5,667	Nov. 25, 1873	761	257	4	574
Sewing-machine for making button-holes.....	E. Howard and W. H. Jackson, by H. E. Townsend, C. P. Brigham, and G. W. Simmons, assignees, (mesne.)	5,336	Mar. 25, 1873	846	278	3	342
Sewing-machine for working button-holes.....	E. Howard and W. H. Jackson, by H. E. Townsend, C. P. Brigham, and G. W. Simmons, assignees, (mesne.)	5,306	Mar. 4, 1873	208	68, 69	3	262
Sewing-machine gage.....	C. C. Roberts.....	5,689	Dec. 16, 1873	615	201	4	659
Sewing-machine hammer.....	E. Howell.....	5,414	May 20, 1873	697	219	3	577
Sewing-machine mechanical-movement.....	E. Cowles, by E. Holmes, assignee, (mesne.)	5,481	July 8, 1873	368	{ 124 } { 125 }	{ 4 } { 4 }	49
Sewing-machine ruffling-attachment.....	D. C. Carey, by W. G. Wilson, assignee.	5,368	Apr. 22, 1873	879	278	3	462
Sewing-machine shuttle.....	G. A. Edwards and G. Schieder.....	5,342	Apr. 1, 1873	236	69	3	375
Sewing-machine shuttle.....	G. A. Edwards and G. Schieder.....	5,436	June 3, 1873	185	60	3	624
Sewing-machine treadle.....	S. B. Bushfield, by self, R. D. Morrison, J. H. Warner, and W. L. Stork, assignees, (mesne.)	5,595	Oct. 14, 1873	320	106	4	414
Sewing-machine tucker.....	J. H. Bean, by F. W. Brown, assignee.	5,427	May 27, 1873	908	292	3	602
Sewing-machine, Wax-thread.....	E. E. Bean, by Shoe Machinery Manufacturing Company, assignee, (mesne.)	5,423	May 27, 1873	903	291	3	602
Shade-fixture.....	S. Hartshorn.....	5,558	Sept. 2, 1873	201	65	4	258
Sheep, Device for shearing.....	A. J. Fullam, by W. Earl, jr., J. G. Blunt, R. T. Smith, and J. K. Priest, assignees.	5,701	Dec. 23, 1873	815	266	4	687
Sheep-shearing machine.....	A. H. Kennedy, by J. M. Segur, assignee, (mesne.)	5,477	July 1, 1873	205	68	4	25
Sheet-iron, Manufacture of.....	W. D. Wood.....	5,474	July 1, 1873	202	68	4	25
Sheet-metal, can.....	J. G. Evenden.....	5,599	Oct. 14, 1873	323	107	4	114
Sheet-metal ware, Die for forming.....	M. Bray.....	5,257	Jan. 28, 1873	842	271	3	115
Show-case, Thread.....	A. Steward.....	5,526	Aug. 5, 1873	194	61	4	151
Shutter-fastening.....	R. D. Washburn.....	5,625	Oct. 21, 1873	535	176	4	442
Sifter, Flour.....	L. S. Nourse, by H. A. Hildreth and W. J. Johnson, assignees.	5,248	Jan. 21, 1873	644	209	3	87
Skate.....	J. Forbes.....	5,660	Nov. 18, 1873	563	191	4	547
Skate.....	J. Forbes.....	5,705	Dec. 23, 1873	820	267	4	687
Skate, Roller.....	W. P. Gregg.....	5,207	Dec. 23, 1873	822	268	4	688
Skylight.....	G. Hayes.....	5,650	Nov. 11, 1873	363	123	4	519
Skylight.....	G. Hayes.....	5,693	Dec. 23, 1873	805	264	4	687
Slate-frames, Machine for dressing the edge of.....	J. W. Sayre and A. S. Shull, by H. W. Harper, assignee.	5,322	Mar. 11, 1873	413	136	3	287
Slotting-machines, Tool-holder for.....	J. S. Ettenborough.....	5,277	Feb. 11, 1873	450	146	3	174
Smelting furnace, Iron and other ore.....	S. W. Harris, by B. Ray, M. Martin, and J. W. Hoysrath, assignees.	5,397	May 6, 1873	240	75	3	517
Smoothing and fluting iron.....	J. Hewitt.....	5,357	Apr. 15, 1873	657	206	3	435
Smoothing and fluting iron.....	J. Hewitt.....	5,437	June 3, 1873	186	60	3	624
Snap-hook.....	C. B. Bristol.....	5,639	Nov. 4, 1873	173	58	4	492
Snap-hook, Whiffletree.....	C. W. Saladee.....	5,399	May 6, 1873	243	75	3	517
Snow and ice from roadway, Machine for removing.....	M. C. Bogia.....	5,697	Dec. 23, 1873	813	265	4	687
Soldering-apparatus.....	J. Gulden.....	5,362	Apr. 22, 1873	868	275	3	461

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Sole edge-trimming machine, Boot and shoe	R. C. Lambert, by The Shoe Machinery Manufacturing Company, assignee, (mesne.)	5, 661	Nov. 18, 1873	564	191	4	547
Soles of boots and shoes, Machine for channeling	M. Wesson, by G. McKay, assignee.	5, 561	Sept. 2, 1873	205	66	4	258
Spark-arrester for locomotive-engine	W. M. Thornton and T. A. Buckland.	5, 667	Dec. 16, 1873	612	{ 200 201	{ 4 4	{ 659 367
Speaking-tube	J. R. Creighton, by O. B. Hall, 2d assignee.	5, 580	Sept. 30, 1873	946	320	4	367
Speaking-tube	C. A. Fredericks	5, 588	Oct. 7, 1873	144	48	4	392
Spinning-machine spindle	B. H. Jenks	5, 521	Aug. 5, 1873	166	59	4	150
Spinning-ring	W. Jenckes, by G. Draper & Son, assignees.	5, 702	Dec. 23, 1873	816	266	4	687
Spittoon	W. H. Topham	5, 514	July 29, 1873	1,022	331	4	126
Spoon and fork handle, Design for	E. C. Moore, by Tiffany & Co., assignees.	5, 573	Sept. 16, 1873	582	196	4	312
Spring	F. K. John	5, 685	Dec. 16, 1873	610	200	4	659
Squares, Machine for graduating carpenters	H. K. Jones, by Hart, Bliven & Mead Manufacturing Company, assignees.	5, 408	May 13, 1873	461	145	3	546
Stamp, Hand	H. Holt, by Secombe Manufacturing Company, assignee, (mesne.)	5, 555	Aug. 26, 1873	849	280	4	230
Stalk-cutter	T. A. Galt and G. S. Tracy	5, 233	Jan. 14, 1873	434	138	3	54
Stave crozing and chamfering machine	H. Wilde, by E. and B. Holmes, assignees.	5, 626	Oct. 21, 1873	536	177	4	442
Steam-boiler and furnace	G. W. Lascell, by self and H. Robinson, assignees.	5, 398	May 6, 1873	241	75	3	517
Steam-gage	T. W. Lane	5, 320	Mar. 11, 1873	410	{ 135 136	{ 3 3	{ 287 87
Steam-gage, Recording	D. P. Davis, by G. J. Hunter, assignee.	5, 252	Jan. 21, 1873	648	210	3	87
Steam-generator	J. B. Root, by T. C. M. Paton, assignee, (mesne.)	5, 524	Aug. 5, 1873	191	60	4	151
Steam-power brake-device	G. Westinghouse, jr.	5, 504	July 29, 1873	1,012	329	4	125
Steam-trap	J. H. Blessing, by self and F. Townsend, assignees.	5, 549	Aug. 26, 1873	835	278	4	230
Steel-casting, Manufacture of	W. Kelly, by T. C. Coleman, assignee.	5, 636	Oct. 28, 1873	747	248	4	469
Steel mold and core for casting	W. Kelly, by T. C. Coleman, assignee.	5, 637	Oct. 28, 1873	748	248	4	469
Stench traps, Casting	J. E. White, by L. A. Cauvet, assignee.	5, 291	Feb. 18, 1873	686	221	3	206
Stippling metallic surfaces, Process and apparatus for	R. Dimes, by Tiffany & Co., assignees.	5, 378	Apr. 29, 1873	1,110	351	3	489
Stove	J. G. Widmann	5, 605	Oct. 14, 1873	330	109	4	415
Stove	E. Smith	5, 700	Dec. 30, 1873	1,000	322	4	713
Stove, Base-burning	J. Easterly, by J. S. Perry, trustee, and N. B. Perry, assignees.	5, 498	July 23, 1873	791	259	4	100
Stove, Base-burning	J. Spear	5, 459	June 17, 1873	629	197	3	683
Stove, Base-burning	J. Spear	5, 460	June 17, 1873	630	197	3	683
Stove, Coal-oil	J. H. Thorp	5, 418	Mar. 20, 1873	701	320	3	578
Stove, Cooking	J. Easterly	5, 627	Oct. 28, 1873	736	246	4	468
Stove, Cooking	R. M. Hormance, by J. B. Wilkinson, assignee, (mesne.)	5, 554	Aug. 26, 1873	844	{ 279 280	{ 4 4	{ 230 230
Stove, Cooking	G. H. Phillips	5, 583	Sept. 30, 1873	950	321	4	368
Stove-door	D. N. Martin, by D. N. and C. M. Martin, assignees.	5, 405	May 13, 1873	457	144	3	545
Stove, Heating	E. Mingay	5, 712	Dec. 30, 1873	1,006	.....	4	713
Stove, Heating	J. Spear	5, 314	Mar. 4, 1873	216	71	3	263
Stove, Reservoir	H. F. T. Hale	5, 369	Apr. 22, 1873	880	278	3	462
Stove, Reservoir cooking	E. Bussey, by C. A. McLeod, assignee.	5, 435	June 3, 1873	183	59, 60	3	624
Stove, Reservoir cooking	G. G. Wolfe	5, 442	June 10, 1873	380	118	3	655
Strap-machine	A. F. Stowe	5, 462	June 24, 1873	836	265	3	708
Street-sprinkler	L. F. Bancroft, by E. E. Quimby, trustee and assignee, (mesne.)	5, 325	Mar. 18, 1873	623	206	3	314
Suspender	T. O. Potter and J. W. Smith, by Bay State Suspender Company, assignee.	5, 593	Oct. 7, 1873	118	49	4	392
T.							
Tablet platform or mat, Non-conducting	H. L. Palmer, by C. C. Skilton, assignee.	5, 562	Sept. 2, 1873	206	67	4	258
Tea-kettle spout	J. Ash	5, 537	Aug. 19, 1873	614	202	4	202
Telegraph-apparatus, Duplex	J. B. Stearns, by Western Union Telegraph Company, assignee.	5, 344	Apr. 1, 1873	227	69	3	375
Telegraph, Printing	T. A. Edison, by The Gold Stock Telegraph Company, assignee, (mesne.)	5, 519	Aug. 5, 1873	183	58, 59	4	150
Telegraph, Printing	G. Little	5, 267	Feb. 4, 1873	216	67	3	144
Telegraph, Printing	F. L. Pope and T. A. Edison, by The Gold Stock Telegraph Company, assignee, (mesne.)	5, 523	Aug. 5, 1873	187	60	4	150
Thrashers' rewinnowing attachment	J. B. Padon	5, 438	June 3, 1873	187	60	3	624
Thrashing and hulling clover, Machine for	J. Bradley and J. Nicholas	5, 634	Oct. 28, 1873	744	247	4	469
Thrashing-machine	D. C. Baughman	5, 217	Jan. 7, 1873	206	67	3	23
Tile-dressing machine	G. and V. G. Barney	5, 468	July 1, 1873	195	65, 66	4	24
Till-alarm	C. and W. H. Tucker, by N. Tucker and R. S. Dorsey, assignees, (mesne.)	5, 566	Sept. 9, 1873	391	130	4	285
Tilting-chair	M. V. Howe, by Heywood Brothers & Co., assignees.	5, 419	May 20, 1873	703	{ 220 221	{ 3 3	{ 578 546
Tire-bending machine	J. Tomlinson	5, 409	May 13, 1873	462	145	3	546
Tire-setter	J. Fallica	5, 565	Sept. 9, 1873	390	130	4	285

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Tournure	A. W. Thomas	5,563	Sept. 2, 1873	207	67	4	258
Toy	C. Ball, by T. Marriott, assignee.	5,479	July 8, 1873	367	124	4	49
Traveling-bag	A. Sonneck and J. W. Lieb, by said Lieb, assignee.	5,299	Feb. 25, 1873	895	287	3	235
Treadle	G. B. Kirkham	5,385	Apr. 29, 1873	1,116	352	3	489
Trimming, Machine for producing folded	C. O. Crosby and H. Kellogg, by Elm City Company, assignee.	5,448	June 17, 1873	613	193	3	682
Truck, Car	A. Higley, by Higley Car Journal Company, assignee.	5,452	June 17, 1873	620	195	3	682
Truck, Changeable-gage car	C. D. Tisdale	5,382	Apr. 29, 1873	1,113	352	3	489
Trunk-lock hasp	C. Liebrich, by L. Hillebrand and D. Wolf, assignees, (mesne.)	5,352	Apr. 15, 1873	652	205	3	435
Tubing, Machine for bending	W. T. Farre	5,581	Sept. 30, 1873	947	320	4	368
Tubing, Method of bending	W. T. Farre	5,582	Sept. 30, 1873	949	321	4	368
Tug-holder	T. J. Bottomley, by Pratt & Letchworth, assignees.	5,657	Nov. 18, 1873	561	190	4	547
Turn-table for railways	W. Sellers	5,373	Apr. 22, 1873	883	279	3	462
U.							
Umbrella-frame runner and notch	A. Herzberg, by I. Herzberg, assignee.	5,234	Jan. 14, 1873	435	138	3	54
Umbrella-runner	O. M. Smith	5,478	July 1, 1873	206	68	4	25
V.							
Valve, Flexible lip-formed	E. Field	5,431	June 3, 1873	177	58	3	623
Valve for steam-engines, Slide	J. Nesbitt, by W. G. Ulery, assignee.	5,310	Mar. 4, 1873	212	70	3	262
Valve for water-pipes	W. Kearney	5,220	Jan. 7, 1873	211	68	3	23
Valve, Slide	J. Nesbitt, by W. G. Ulery, assignee.	5,309	Mar. 4, 1873	211	70	3	262
Vault-cover, Illuminating	W. Dale, by W. S. O. Brien, assignee.	5,684	Dec. 16, 1873	609	199	4	659
Vehicle lubricating-axle	J. S. Eggleston, by E. H. Kellogg, assignee.	5,466	June 24, 1873	841	266	3	709
Vehicle-seat	J. Burt, by A. F. Hubbell and E. R. Williams, assignees, (mesne.)	5,446	June 17, 1873	612	193	3	681
Vehicle-wheel	A. L. Blackman, by S. K. Schwenk and J. E. Saunders, assignees.	5,264	Jan. 28, 1873	850	274	3	116
Vehicle-wheel	L. Dorman, by C. W. Fillmore and J. R. Miner, assignees.	5,509	July 29, 1873	1,018	330	4	126
Vehicles, Car-spring for	C. W. Saladee, by L. Dobbins, assignee.	5,359	Apr. 15, 1873	659	207	3	435
Ventilator	S. C. Maine, by Maine's Portable Ventilator Company, assignee, (mesne.)	5,363	Apr. 22, 1873	869	275	3	461
Vise	H. K. and T. W. Porter, by C. Parker, assignee, (mesne.)	5,653	Nov. 11, 1873	366	123	4	519
Vise	G. N. Stearns	5,574	Sept. 16, 1873	583	197	4	312
W.							
Wagon-spring	E. P. McCarthy, by self and J. B. Grant, assignees.	5,615	Oct. 21, 1873	520	174	4	441
Wagon-top	A. R. Tully	5,467	June 24, 1873	842	267	3	709
Wash-boiler	J. Davis	5,350	Apr. 15, 1873	648	204	3	434
Water-elevator, Steam	W. E. Prall	5,715	Dec. 30, 1873	1,009	324	4	714
Water-wheel	J. P. Collins	5,407	May 13, 1873	459	145	3	545
Water-wheel	J. E. Stevenson	5,341	Mar. 25, 1873	854	279	3	343
Water-wheel	J. Taney	5,682	Dec. 9, 1873	396	130	4	629
Water-wheel and sewing-machine, Combined	I. Hyde, by O. J. Backus, assignee.	5,590	Oct. 7, 1873	145	48	4	392
Weaver's harness, Machine for making	J. S. Winsor, by L. A. Cook and J. Kendrick, assignees, (mesne.)	5,282	Feb. 11, 1873	455	148	3	175
Weighing machine, Grain	F. S. McWhorter	5,337	Mar. 25, 1873	848	278	3	342
Well-tube	S. H. Dickerson	5,507	July 29, 1873	1,017	330	4	126
Wells, Device for steaming oil	T. B. Carothers	5,659	Nov. 18, 1873	562	191	4	547
Wells, Grab-tool for oil	J. H. Luther	5,386	Apr. 29, 1873	1,118	353	3	489
Wells, Increasing capacity of oil	E. A. L. Roberts	5,434	June 3, 1873	181	59	3	623
Wells, Mode of constructing	A. Curtis	5,677	Dec. 9, 1873	390	128	4	629
Wheat and other grain for food, Preparing	R. B. Fitts, by The Nutrio Manufacturing Company, assignee, (mesne.)	5,654	Nov. 11, 1873	367	.....	4	519
Wheat, corn, and other grain for food, Preparing	R. B. Fitts, by The Nutrio Manufacturing Company, assignee, (mesne.)	5,655	Nov. 11, 1873	368	.....	4	519
Whip-socket	S. W. Beach	5,272	Feb. 11, 1873	445	145	3	174
Whip socket	C. B. Morehouse, by E. Chamberlin and J. O. Merriam, assignees, (mesne.)	5,235	Jan. 14, 1873	435	138	3	55
Whip-socket	E. W. Scott, by self and A. Searls, assignees.	5,400	May 6, 1873	244	76	3	517
Whip-socket to vehicles, Device for clamping	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	5,698	Dec. 23, 1873	814	265	4	687
Whip-socket to vehicles, Device for clamping	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	5,699	Dec. 23, 1873	814	265	4	687
Whip-socket to vehicles, Device for clamping	C. B. Morehouse, by E. Chamberlin and J. O. Merriam, assignees, (mesne.)	5,713	Dec. 30, 1873	1,007	324	4	713
Whip-socket to vehicles, Device for coupling	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	5,700	Dec. 23, 1873	815	266	4	687
Whip-stock, Manufacture of	D. C. Hull	5,651	Nov. 11, 1873	365	123	4	519
Windlasses, Method of operating	P. Philip	5,304	Mar. 4, 1873	205	68	3	262

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Windmill	E. A. Atwood and H. H. Bodwell.	5, 656	Nov. 18, 1873	560	180	4	547
Windmill	M. Crossman and P. A. Spicer ..	5, 692	Dec. 23, 1873	803	263	4	686
Windmill	W. I. Tustin	5, 354	Apr. 15, 1873	654	205	3	435
Windmill	L. H. Wheeler, by H. W. Wheeler, executrix, and W. H. Wheeler, assignee.	5, 531	Aug. 12, 1873	399	130	4	175
Window-button	A. D. Judd	5, 370	Apr. 22, 1873	881	278	3	462
Window-shades, Tassel-clip for	F. Müller	5, 338	Mar. 25, 1873	850	278	3	342
Wood, Process of transferring the grain-marks of	J. R. Cross, by self and A. J. Bastine, assignees.	5, 377	Apr. 29, 1873	1, 110	351	3	488
Wrench	L. Jordan and L. E. Smith, by Collins Company, assignee.	5, 294	Feb. 25, 1873	890	286	3	235
Wringing-machine	H. Glass, by Bailey Washing and Wringing Machine Com- pany, assignee, (mesne.)	5, 265	Feb. 4, 1873	215	67	3	144
Z.							
Zinc from gold and silver, Separating	E. Balbach, jr	5, 461	June 24, 1873	835	265	3	708

ALPHABETICAL LIST OF EXTENSIONS.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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A.					
Advertising, Mode of	E. Wiebé	26, 136	Nov. 15, 1859	4	504
Animal-trap	A. S. Blake	23, 750	Apr. 26, 1859	3	444
Anger, Hollow	A. Wyckoff	24, 773	July 12, 1859	4	36
B.					
Bakers' oven	G. C. Jennison	22, 209	Feb. 1, 1859	3	160
Bale-band, Metallic	G. Brodie	23, 291	Mar. 22, 1859	3	296
Barrel crozing and chamfering machine	H. Littlejohn	23, 097	Mar. 1, 1859	3	918
Bed-bottom	B. F. S. Monroe	22, 742	Jan. 25, 1859	3	70
Bedstead-fastening	L. H. Buxton	23, 525	Apr. 5, 1859	3	325
Bedstead-slat	T. Howe	25, 569	Sept. 27, 1859	4	322
Belting, Making rubber	D. C. Gately	26, 177	Nov. 22, 1859	4	531
Belting, Rubber	D. C. Gately	26, 178	Nov. 22, 1859	4	531
Blind-rods, Hand-machine for wiring	B. C. Davis	25, 736	Oct. 11, 1859	4	379
Blind-stile boring or mortising machine	L. Worcester	24, 688	July 5, 1859	4	7
Boiler furnace, Steam	J. Amory	23, 650	Apr. 19, 1859	3	415
Boot and shoe tip	N. Silverthorn	26, 329	Nov. 29, 1859	4	558
Bottle, Nursing	F. J. La Forme	26, 327	Nov. 29, 1859	4	557
Bottle-stopper fastening	H. W. Putnam	23, 263	Mar. 15, 1859	3	244
Box-joints, Machine for making	J. Simpson	26, 060	Nov. 8, 1859	4	504
Brace-bit	N. Spofford	25, 984	Nov. 1, 1859	4	452
Bronzing-machine	G. H. Babcock	25, 874	Oct. 25, 1859	4	425
Burglar-alarm	A. Q. Ross	25, 586	Sept. 27, 1859	4	322
Burnishing-machine	L. S. White	23, 520	Apr. 5, 1859	3	325
C.					
Cakes, Cutting and panning	J. H. Shrote	25, 767	Oct. 11, 1859	4	379
Canal-lock gate	C. W. Williams	23, 635	Apr. 12, 1859	3	326
Cane-grinding mill	I. A. Hedges	22, 902	Feb. 1, 1859	3	70
Car, Body-bolster for railway	A. Ward	24, 512	June 21, 1859	3	662
Car couches, Arranging railway	E. C. Knight	24, 563	June 23, 1859	3	690
Car-couches, Mode of arranging	E. C. Knight	25, 570	Sept. 27, 1859	4	322
Car roof, Railway	A. P. Winalow	25, 070	Aug. 9, 1859	4	135
Car seat and couch	T. T. Woodruff	24, 257	May 31, 1859	3	525
Car seat, Railway	E. Wheeler	25, 499	Sept. 20, 1859	4	295
Car, Sleeping	J. Danner	25, 814	Oct. 18, 1859	4	400
Car-spring	A. B. Davis	22, 941	Feb. 15, 1859	3	156
Carpet-sweeper	N. B. Pratt	22, 890	Feb. 8, 1859	3	100
Carriage-top prop	G. Cook and H. I. Kimball	26, 564	Dec. 27, 1859	4	670
Casting, Molding for metal	J. P. Broadmeadow	26, 331	Nov. 29, 1859	4	557
Clock-dial	S. E. Root	23, 950	May 10, 1859	3	497
Clothes-drier	B. B. Hawse	26, 674	Jan. 3, 1860	4	698
Clothes-pins, Machine for wiring the joints of	A. C. Mason	25, 344	Sept. 6, 1859	4	240
Cock, Try	J. F. Cook	25, 544	Sept. 20, 1859	4	296
Cock, Water-closet	D. Wellington	26, 145	Nov. 15, 1859	4	504
Coffin, Sheet-metal	I. C. Shuler	24, 635	July 5, 1859	4	7
Collar and cuff, Ladies'	W. E. Lockwood	23, 771	Apr. 26, 1859	3	444
Collar and cuff, Ladies'	W. E. Lockwood	23, 771	Apr. 26, 1859	3	444
Collar and cuff, Ladies'	W. E. Lockwood	23, 771	Apr. 26, 1859	3	444
Corrugating sheet-metal	W. E. Worthen and H. B. Renwick	24, 689	July 5, 1859	4	7
Corrugating sheet-metal, Machine for	J. Wilson, C. Green, and W. Wilson, jr.	23, 736	Apr. 19, 1859	3	416
Cotton-scraper	J. H. Mitchell	25, 434	Sept. 13, 1859	4	270
Cracker-machine	J. Fox	22, 783	Feb. 1, 1859	3	324
Cultivator	M. Alden	23, 286	May 10, 1859	3	497
Cultivator	T. McQuiston	25, 843	Oct. 18, 1859	4	400
Cultivator	R. M. Melton	24, 227	May 31, 1859	3	525
Cut-off valve, Steam-engine	E. R. Arnold	25, 936	Nov. 1, 1859	4	452
Cylinders, Casting copper	F. Adams	24, 915	Aug. 2, 1859	4	85
D.					
Drain-pipe, Machine for making	B. S. and M. R. Pierce	23, 703	Apr. 19, 1859	3	416
E.					
Elevator for warehouses, factories, mines, &c.	A. Betteley	24, 923	Aug. 2, 1859	4	85
Elevator or hoisting apparatus for hotels, &c.	O. Tufts	25, 061	Aug. 9, 1859	4	108
Emery wheels and sticks, Manufacture of	T. J. Mayall	22, 806	Jan. 11, 1859	3	7
Emery with caoutchouc, Combining	T. J. Mayall	25, 747	Oct. 11, 1859	4	379
Envelope	S. E. Pettee	23, 309	Mar. 22, 1859	3	297
F.					
Fabrics, Machine for rolling	T. H. Murphy	24, 046	May 17, 1859	3	527
Felt fabric, Machinery for disintegrating waste	J. F. Greene	23, 643	Apr. 12, 1859	3	326
Felted fabric, Obtaining fiber from waste	J. F. Greene	23, 642	Apr. 12, 1859	3	326
Fence, Ornamental connection for iron	H. Jenkins	8, 654	Jan. 13, 1852	3	386
Fire-alarm apparatus, Electro-magnetic	M. G. Farmer	23, 060	Feb. 22, 1859	3	218
Fire-arm, Breech-loading	B. Burton	26, 475	Dec. 20, 1859	4	640
Fire-arm, Many-barreled	C. Sharps	22, 753	Jan. 25, 1859	3	70
Fire, Composition for kindling	E. Bellinger	26, 408	Dec. 13, 1859	4	614

Alphabetical list of extensions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Fire-plug.....(Reissues 1,096, 5,017)...	J. L. Lowry.....	23, 034	Feb. 22, 1850	3	158
Fishing-reel.....	W. Billingham.....	24, 987	Aug. 9, 1850	4	108
Flour-packer.....(Reissue 4,696)...	S. Taggart.....	24, 963	Aug. 9, 1850	4	84
Friction-coupling, Double.....(Reissue 5,335)...	J. Hendy.....	25, 733	Oct. 11, 1850	4	379
Furnace boiler and steamer, Portable.....(Reissues 864, 5,095)...	D. R. Prindle.....	25, 448	Sept. 13, 1850	4	270
Furnace-door frame.....	P. A. Sabbaton.....	24, 493	June 21, 1850	3	662
G.					
Gas, Apparatus for manufacture of.....(Reissue 3,873)...	L. D. Gale.....	26, 030	Nov. 8, 1850	4	504
Gas-lighting by electricity.....	A. Wilson.....	25, 167	Aug. 16, 1850	4	159
Gas-pipe cutter.....	J. E. Stanwood.....	23, 792	Apr. 26, 1850	3	444
Gas-regulator.....	E. H. Covell.....	24, 189	May 31, 1850	3	585
Gas-retort.....	W. Beaumont.....	24, 531	June 28, 1850	3	690
Grain-separator.....(Reissues 1,045, 1,826)...	J. L. Booth.....	25, 464	Sept. 20, 1850	4	285
H.					
Hammer, Trip.....	B. Hotchkiss.....	24, 428	June 14, 1850	3	640
Harness saddle-tree.....(Reissue 4,699)...	S. E. Tompkins and J. Maclure.....	22, 841	Feb. 1, 1850	3	70
Harvester.....	E. Ball.....	25, 797	Oct. 18, 1850	4	400
Harvester.....(Reissue 1,129)...	J. Gore.....	26, 568	Dec. 27, 1850	4	670
Harvester.....	L. and J. Miller.....	24, 700	July 5, 1850	4	6
Harvester.....(Reissue 2,366)...	W. K. Miller.....	22, 885	Feb. 8, 1850	3	100
Harvester.....(Reissue 2,367)...	W. K. Miller.....	22, 885	Feb. 8, 1850	3	100
Harvester.....(Reissue 2,368)...	W. K. Miller.....	22, 885	Feb. 8, 1850	3	100
Harvester.....(Reissue 2,369)...	W. K. Miller.....	22, 885	Feb. 8, 1850	3	100
Harvester.....(Reissue 2,370)...	W. K. Miller.....	22, 885	Feb. 8, 1850	3	100
Harvester.....(Reissues 2,230, 4,824.) (Division A)...	S. Ray and M. R. Shalters.....	23, 707	Apr. 19, 1850	3	416
Harvester.....(Reissues 2,230, 4,826.) (Division C)...	S. Ray and M. R. Shalters.....	23, 707	Apr. 19, 1850	3	416
Harvester.....	I. S. and H. R. Russell.....	23, 399	Mar. 29, 1850	3	527
Harvester-rake.....(Reissue 3,978)...	M. Young, jr.....	24, 598	June 28, 1850	4	6
Harvesting-machine.....	M. G. Hubbard.....	23, 921	May 10, 1850	3	497
Hay-rake, Horse.....	S. Leasig.....	26, 599	Dec. 27, 1850	4	671
Hay-spreader.....(Reissue 3,481)...	J. C. Stoddard.....	24, 598	June 28, 1850	3	690
Heel for boot and shoe.....	S. Dodge, jr., and B. Potter, jr.....	25, 395	Sept. 13, 1850	4	270
Hem-folder.....	L. Clark.....	25, 807	Oct. 18, 1850	4	400
Hoe, Weeding.....	J. M. Adams.....	25, 882	Oct. 18, 1850	4	401
Horseshoe-iron, Machine for rolling.....(Reissue 3,354)...	W. W. Lewis.....	23, 812	Feb. 1, 1850	3	156
Hose, Manufacture of India-rubber.....(Reissue 5,111)...	T. J. Mayall.....	26, 276	Nov. 29, 1850	4	557
Hose-tubing, Elastic.....	J. C. Boyd.....	25, 239	Aug. 30, 1850	4	240
Hydrant.....(Reissue 1,985)...	C. L. Stacy.....	25, 683	Oct. 4, 1850	4	353
Hydro-carbon vapor apparatus.....	E. H. Covell.....	24, 200	May 31, 1850	3	585
I.					
Iron articles, Protecting surfaces of.....	T. Selleck.....	24, 685	July 5, 1850	4	7
Iron, Manufacture of.....	B. Lauth.....	25, 235	Aug. 23, 1850	4	135
J.					
Jacquard machine.....	A. Babbett.....	25, 796	Oct. 18, 1850	4	400
Jewelry, Rolling metal for.....	J. S. Palmer.....	24, 432	June 14, 1850	3	640
Journal-box.....	J. A. Montgomery.....	24, 947	Aug. 9, 1850	4	108
Journal-box, Saw-mill.....	W. M. Ferry, jr.....	26, 262	Nov. 29, 1850	4	557
K.					
Kettle, Brass....(Extended seven years. Reissues 2,171, 3,996. Extended by act of Congress March 3, 1873.) (Division B)...	H. W. Hayden.....	8, 589	Dec. 16, 1851	3	272
Kettles, Machine for making....(Extended seven years. Reissues 2,171, 3,995. Extended by act of Congress March 3, 1873.) (Division A)...	H. W. Hayden.....	8, 589	Dec. 16, 1851	3	271
L.					
Lamp.....	E. J. Hale and C. H. Chandler.....	23, 085	Mar. 1, 1850	3	189
Lamp.....(Reissues 4,413, 4,660)...	H. Halvorson.....	25, 506	Sept. 20, 1850	4	295
Lamp-holder.....	C. Monson.....	23, 664	Jan. 18, 1850	3	37
Lamp-shade.....(Reissue 1,025)...	C. and A. C. Wilhelm.....	23, 875	May 3, 1850	3	470
Lasting boots and shoes, Machine for.....(Reissue 1,362)...	J. Furrington, jr.....	25, 673	Oct. 4, 1850	4	353
Lathe-attachment for cutting veneers.....	B. F. Starkevart.....	26, 627	Dec. 27, 1850	4	671
Lathe for turning irregular forms.....	C. and A. Spring.....	23, 357	May 10, 1850	3	497
Loom picker-motion, Power.....	W. Stearns.....	24, 668	July 5, 1850	4	7
M.					
Mail-bag.....	T. J. Lamden.....	23, 924	May 10, 1850	3	497
Meat-cutter.....	J. G. Perry.....	24, 953	Aug. 2, 1850	4	85
Meat-mincer.....	A. W. Hale.....	23, 246	Mar. 15, 1850	3	244
Mop-head.....(Reissues 3,192, 3,215, 3,682)...	L. Taylor.....	22, 990	Feb. 15, 1850	3	127
N.					
Nail-machine.....	D. Dodge.....	25, 183	Aug. 23, 1850	4	185
Nail-machine.....	D. Dodge.....	25, 309	Aug. 30, 1850	4	213
Nut-making machine.....(Reissue 2,434)...	W. E. Ward.....	15, 861	Oct. 7, 1856	4	35
Nut-making machine.....(Reissue 2,434)...	W. E. Ward.....	15, 861	Oct. 7, 1856	4	270
O.					
Ore-separator.....	W. O. Bourne.....	24, 367	June 14, 1850	3	640
P.					
Pail, &c., Metallic ear for attaching handle to.....(Reissue 3,063)...	T. Evans.....	24, 451	June 21, 1850	3	662
Paint-can.....	J. W. Masury.....	24, 748	July 12, 1850	4	35

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Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Paper-bags, Machine for making.....	W. Goodale.....	24, 734	July 12, 1859	4	35
Paper-bags, Machine for making.....	W. Goodale.....	25, 191	Aug. 23, 1859	4	185
Paper-boxes, Machine for making..... (Reissue 3,985)	S. B. Terry.....	25, 373	Sept. 6, 1859	4	240
Paper-folding machine.....	C. Chambers, jr.....	23, 445	Apr. 5, 1859	3	325
Paper-folding machine..... (Reissue 5,533)	C. Chambers, jr.....	26, 090	Nov. 15, 1859	4	504
Paper-pulp, Apparatus for manufacture of..... (Reissues 996, 2,730)	J. B. Palser and G. Howland.....	24, 484	June 21, 1859	3	662
Paper-pulp, Manufacture of..... (Reissues 996, 2,731)	J. B. Palser and G. Howland.....	24, 484	June 21, 1859	3	662
Paper-pulp, Preparation of straw for..... (Reissues 997, 1,590)	J. B. Palser and G. Howland.....	24, 484	June 21, 1859	3	662
Peg blank, Shoe.....	B. F. Sturtevant.....	25, 149	Aug. 16, 1859	4	159
Pin-sticking machine.....	J. W. Naramore.....	24, 654	July 5, 1859	4	7
Pipe-molding..... (Reissue 1,463)	J. Firth and J. Ingham.....	26, 486	Dec. 20, 1859	4	640
Pivot-bearings.....	F. C. Lowthorp.....	26, 689	Jan. 3, 1860	4	698
Planing-machine for curved surfaces.....	J. B. Grosvenor.....	26, 584	Dec. 27, 1859	4	671
Planter, Corn.....	E. C. Allen.....	26, 006	Nov. 8, 1859	4	504
Planter, Seed.....	W. Blessing.....	26, 410	Dec. 13, 1859	4	614
Porous ware, Manufacture of.....	R. S. & M. R. Pierce.....	26, 614	Dec. 27, 1859	4	671
Powder-keg..... (Reissues 1,383, 3,757)	J. Wilson, C. Green, and W. Wilson, jr.....	24, 772	July 12, 1859	4	36
Pressure-gauge, Steam.....	T. W. Lane.....	23, 032	Feb. 22, 1859	3	156
Printing-machine, Railway and other ticket.....	R. M. Hoe.....	23, 172	Mar. 8, 1859	3	244
Printing-press, Feeding paper to..... (Reissue 4,429)	R. M. Hoe.....	25, 199	Aug. 23, 1859	4	185
Prisons, Construction of.....	E. May.....	25, 662	Oct. 4, 1859	4	353
Propeller, Screw.....	J. Montgomery.....	23, 598	Apr. 12, 1859	3	386
Pump.....	W. Wright.....	26, 139	Nov. 15, 1859	4	504
Pump-box.....	F. and J. Stock.....	23, 795	Apr. 26, 1859	3	444
Pump, Portable..... (Reissue 1,146)	W. T. Vose.....	26, 135	Nov. 15, 1859	4	504
Pumping-engine.....	H. R. Worthington.....	24, 838	July 19, 1859	4	57
Pyrotechnic night-signal.....	B. F. Coston.....	23, 436	Apr. 5, 1859	3	325
R.					
Railway-bar.....	H. Webb.....	24, 436	June 14, 1859	3	640
Railway, Dispensing with switches on..... (Reissue 942)	W. Wharton, jr.....	26, 454	Dec. 13, 1859	4	614
Railway-frog..... (Reissue 1,602)	D. D. Lewis.....	24, 034	May 17, 1859	3	527
Railway-frog, Elastic.....	G. P. Sanborn and W. Mansfield.....	24, 664	July 5, 1859	4	6
Range, Cooking.....	B. W. Dunklee.....	23, 665	Apr. 19, 1859	3	415
Rolling-mill.....	J. and G. Fritz.....	25, 565	Sept. 27, 1859	4	321
Rolls, Machine for moving iron at the.....	C. Hewitt.....	24, 304	June 7, 1859	3	608
Roofing-cement.....	N. A. Dyar.....	23, 882	May 3, 1859	3	471
Rope-laying machinery.....	G. W. Pittman and W. C. Boone.....	23, 491	Apr. 5, 1859	3	325
Ruling-machine attachment.....	J. B. Blair.....	23, 152	Mar. 8, 1859	3	244
S.					
Saddle-tree, Machine for covering.....	J. Maclure.....	25, 867	Oct. 18, 1859	4	401
Scales.....	A. Turnbull.....	25, 473	Sept. 13, 1859	4	270
Scales, Platform.....	T. Fairbanks.....	26, 484	Dec. 20, 1859	4	640
Scales, Platform.....	F. M. Strong and T. Ross.....	24, 161	May 24, 1859	3	558
Scales, Weighing.....	F. M. Strong and T. Ross.....	25, 148	Aug. 16, 1859	4	159
Screw-tap.....	W. and R. Foster.....	26, 487	Dec. 20, 1859	4	640
Seaming-machine, Double.....	L. T. Hulbert.....	26, 679	Jan. 3, 1860	4	698
Seaming-machine, Double.....	J. Wilson, G. Green, and W. Wilson, jr.....	23, 736	Apr. 19, 1859	3	416
Sewing-machine.....	J. Gray.....	24, 022	May 17, 1859	3	527
Sewing-machine..... (Reissue 5,305)	W. C. Hicks.....	23, 557	Apr. 12, 1859	3	356
Sewing-machine..... (Reissue 1,805)	K. Vogel.....	25, 692	Oct. 4, 1859	4	353
Skate-fastening..... (Reissue 3,333)	J. H. Coe and W. B. Sniffin.....	23, 826	May 3, 1859	3	470
Skirt, Skeleton..... (Reissues 870, 2,046)	J. Draper.....	25, 701	Oct. 4, 1859	4	354
Soles, Channeling boot and shoe..... (Reissue 1,586)	M. Wesson.....	24, 182	May 24, 1859	3	558
Spectacle-frame..... (Reissue 3,725)	T. Noel.....	22, 572	Jan. 11, 1859	3	7
Spools, Machine for winding thread on.....	H. Conant.....	26, 415	Dec. 13, 1859	3	662
Stamp, Postmarking.....	M. P. Norton.....	25, 036	Aug. 9, 1859	4	134
Steam-boiler.....	J. Harrison, jr.....	25, 640	Oct. 4, 1859	4	353
Steam-boiler, Skimming-apparatus for.....	A. M. Sprague.....	23, 320	Mar. 22, 1859	3	272
Steam-heater for buildings..... (Reissue 4,774)	S. F. Gold.....	24, 456	June 21, 1859	3	662
Steam-pressure regulator.....	A. P. Pitkin.....	24, 402	June 14, 1859	3	640
Stone-sawing machine.....	A. T. Merriman.....	24, 478	June 21, 1859	3	662
Stove.....	P. Dodge.....	22, 787	Feb. 1, 1859	3	70
Stove.....	E. M. Manigle.....	25, 343	Sept. 6, 1859	4	240
Stove..... (Reissues 1,242, 1,622)	S. B. Sexton.....	23, 716	Apr. 19, 1859	3	416
Stove.....	J. G. Widmann.....	23, 970	May 10, 1859	3	497
Stove, Cooking.....	H. G. Leonard.....	23, 983	May 10, 1859	3	497
Stove, Cooking..... (Reissues 1,684, 3,027, 3,452)	P. P. Stewart.....	22, 681	Jan. 18, 1859	3	37
Stove, Cooking..... (Reissues 1,673, 2,915)	P. P. Stewart.....	23, 622	Apr. 12, 1859	3	386
Stove, Heating..... (Reissues 1,242, 1,622, 1,774, 2,476)	S. B. Sexton.....	23, 716	Apr. 19, 1859	3	416
Stove, Molding covers for cook..... (Reissues 1,242, 1,622, 1,774, 2,476)	G. W. Gardiner.....	23, 022	Feb. 22, 1859	3	156
Straw-cutter.....	R. Daniels.....	24, 446	June 21, 1859	3	662
Surgical instrument.....	D. Ahl.....	23, 996	May 17, 1859	3	527
T.					
Tackle-block..... (Reissues 1,534, 1,932, 3,226)	I. E. Palmer.....	25, 978	Nov. 1, 1859	4	452
Tailors' shears.....	R. Heinisch.....	25, 508	Sept. 20, 1859	4	296
Telegraph, Electro-magnetic..... (Reissue 5,181)	M. G. Farmer.....	26, 097	Nov. 15, 1859	4	504
Telegraphic machine.....	G. M. Phelps.....	26, 003	Nov. 1, 1859	4	452
Till-alarm attachment.....	E. B. White.....	24, 685	July 5, 1859	4	7
Tire-upsetting machine.....	C. L. Crowell and R. Smith.....	24, 009	May 17, 1859	3	527
Tobacco-stems, Coloring and curing.....	B. Payn.....	22, 668	Jan. 18, 1859	3	37
Toy, Elastic.....	L. P. Porter.....	23, 001	Feb. 15, 1859	3	127
Truss-spring..... (Reissue 4,589)	J. W. Riggs.....	22, 674	Jan. 18, 1859	3	37
V.					
Valve, Governor.....	B. Fitts.....	25, 005	Aug. 9, 1859	4	134
Vessel, Steam.....	J. Montgomery.....	23, 105	Mar. 1, 1859	3	189

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Wagon-brake, Self-acting	B. S. Healey	25, 115	Aug. 16, 1859	4	158
Watch-case, Manufacture of	J. Boss	23, 820	May 3, 1859	3	470
Water-closet basin	W. Boch, sr	26, 243	Nov. 29, 1859	4	557
Water-trap	J. A. Lowe	26, 506	Dec. 20, 1859	4	640
Water-trap molding	J. A. Lowe	25, 572	Sept. 27, 1859	4	392
Water-wheel	N. F. Burnham	23, 011	Feb. 22, 1859	3	156
Water-wheel	J. P. Collins	26, 339	Dec. 6, 1859	4	585
Water-wheel	J. Temple	22, 901	Feb. 8, 1859	3	188
Windlass, Method of operating	P. Philip	24, 755	July 12, 1859	4	35
Wood-saw frame	J. Haynes	25, 015	Aug. 9, 1859	4	108
Wooden trough, Machine for manufacturing	S. T. Field	22, 792	Feb. 1, 1859	3	70
Wooden-ware, Machine for cutting out	G. R. Hay	25, 014	Aug. 9, 1859	4	134
Wrench	D. P. Foster	22, 947	Feb. 15, 1859	3	127
Wringing-machine	J. Allender	22, 539	Jan. 11, 1859	3	7
Wringing machine, Clothes	S. A. Bailey	23, 436	Apr. 5, 1859	3	325

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Invention or discovery.	Name of patentee.	Original No.	Original date.	Disclaimer filed.	Volume of Gazette.	Page of Gazette.
B.						
Bedstead-fastening	L. W. Buxton	23,525	Apr. 5, 1859	Apr. 1, 1873	3	356
C.						
Canal-lock gate	C. W. Williams	23,635	Apr. 12, 1859	Apr. 11, 1873	3	386
Car-spring..(Reissued January 6, 1863, No. 1,371, and March 17, 1863, No. 1,431.)	A. B. Davis	22,941	Feb. 15, 1859	Feb. 10, 1873	3	156
Car-spring..(Reissued January 6, 1863, No. 1,371, and March 17, 1863, No. 1,431.)	A. B. Davis	22,941	Feb. 15, 1859	Feb. 15, 1873	3	156
F.						
Fire-arm, Breech-loading..(Reissued December 21, 1869, No. 3,770.)	B. Burton	26,475	Dec. 20, 1859	Dec. 4, 1873	4	641
Flour-packer..(Reissued November 7, 1871, No. 4,626)	S. Taggart	24,963	Aug. 2, 1859	July 19, 1873	4	85
G.						
Glove	J. F. Mason	133,376	Nov. 26, 1872	Apr. 4, 1873	3	356
H.						
Harvester... (Reissued January 15, 1861, No. 1,129)	J. Gore	26,562	Dec. 27, 1859	Dec. 15, 1873	4	671
Harvesting-machine..(Reissued May 17, 1870, No. 3,978.)	M. Young, jr.....	24,568	June 28, 1859	June 27, 1873	4	7
Hay-spreader.... (Reissued June 1, 1869, No. 3,481)	J. C. Stoddard.....	24,568	June 28, 1859	June 26, 1873	4	7
Horsehoe-machine..(Reissued March 30, 1869, No. 3,354.)	W. W. Lewis.....	22,812	Feb. 1, 1859	Feb. 13, 1873	3	156
J.						
Jacquard machine.....	A. Babbett.....	25,796	Oct. 18, 1859	Oct. 11, 1873	4	401
L.						
Ladder, Step	C. C. Udell	90,973	Mar. 22, 1870	June 9, 1873	3	605
Lasting boots and shoes, Machine for..(Reissued January 6, 1863, No. 1,332.)	J. Purinton	25,673	Oct. 4, 1859	Sept. 27, 1873	4	354
Lathe-attachment for cutting veneers	B. F. Sturtevant.....	26,627	Dec. 27, 1859	Dec. 26, 1873	4	671
Looms, Picker-motion for power.....	W. Stearns.....	24,668	July 5, 1859	June 30, 1873	4	7
M.						
Mail bag	T. J. Lamdin	23,924	May 10, 1859	May 9, 1873	3	497
Molding and casting apparatus.....	G. Ross	53,883	Apr. 10, 1866	Jan. 9, 1873	3	38
O.						
Ore-separator.....	W. O. Bourne	24,307	June 14, 1859	June 11, 1873	3	640
P.						
Paper-folding machine	C. Chambers, jr	23,445	Apr. 5, 1859	Apr. 4, 1873	3	356
Paper-pulp, Apparatus for the manufacture of..(Reissued July 3, 1860, No. 996, and August 13, 1867, No. 2,730.)	J. B. Palser and G. Howland.....	24,484	June 21, 1859	June 20, 1873	4	477
Paper-pulp, Apparatus for the manufacture of..(Reissued July 3, 1860, No. 996, and August 13, 1867, No. 2,731.)	J. B. Palser and G. Howland.....	24,494	June 21, 1859	June 20, 1873	4	478
Passenger-elevator	O. Tufts	25,061	Aug. 9, 1859	Aug. 7, 1873	4	102
Portable furnace, boiler, and steamer..(Reissued December 13, 1859, No. 864, and October 8, 1872, No. 5,095.)	D. R. Prindle.....	25,442	Sept. 13, 1859	Sept. 12, 1873	4	270
R.						
Ruffle	G. B. Arnold.....	28,244	May 2, 1860	Dec. 10, 1873	4	614
S.						
Seal-lock	J. E. Thomson	143,201	Sept. 23, 1873	Nov. 1, 1873	4	525
Skate-fastening. (Reissued March 3, 1869, No. 3,333)	J. H. Coe and W. B. Sniffin.....	23,896	May 3, 1859	Apr. 30, 1873	3	471
Steam-pressure gage	T. W. Lane	23,032	Feb. 22, 1859	Feb. 15, 1873	3	156
Stove..(Reissued December 3, 1861, No. 1,242, and February 16, 1864, No. 1,622.)	S. B. Sexton	23,716	Apr. 19, 1859	Apr. 18, 1873	3	416
Stove..(Reissued December 3, 1861, No. 1,242, February 16, 1864, No. 1,622, September 27, 1864, No. 1,774, and February 12, 1867, No. 2,476.)	S. B. Sexton	23,716	Apr. 19, 1859	Apr. 18, 1873	3	416
W.						
Water-wheel.....(Reissued Feb. 10, 1863, No. 1,405)	J. Temple.....	22,901	Feb. 8, 1859	Feb. 20, 1873	3	189

ALPHABETICAL LIST OF TRADE-MARKS.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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A.					
Agricultural implements	L. W. Rumsey & Co	1,535	Nov. 18, 1873	4	531
Alpaca	W. R. Lewis	1,428	Aug. 26, 1873	4	213
Alpaca and mohair	Moore, Tingue & Co	1,405	Aug. 12, 1873	4	159
Ax and hatchet	The Collins Company	1,126	Feb. 11, 1873	3	157
Ax and other tools	The Collins Company	1,328	June 17, 1873	3	663
Axle-grease	The Palm-Oil Axle-Grease Company	1,437	Sept. 2, 1873	4	242
B.					
Baking-powder	J. H. Lippincott	1,203	Apr. 8, 1873	3	387
Baking-powder	Woody Brothers	1,148	Feb. 25, 1873	3	218
Baking-powder	Royal Baking-Powder Company	1,495	Oct. 14, 1873	4	401
Baking-powders	B. T. Babbitt	1,529	Nov. 18, 1873	4	531
Beer, Lager	T. Rommeny	1,327	June 17, 1873	3	663
Beer, Small or root	S. F. Stowe	1,391	July 29, 1873	4	109
Beverage	S. F. Stowe	1,298	June 3, 1873	3	609
[Beverage.] Ginger-ale, seltzer, champagne, cider, soda-water, &c.	Berlin Mineral-Water Company	1,383	July 29, 1873	4	109
Blacking, Boot and shoe	L. Anson & Co	1,488	Oct. 14, 1873	4	401
Blacking or grease, Shoe	L. Anson & Co	1,489	Oct. 14, 1873	4	401
Blasting squib and fuse	S. H. Daddow	1,103	Jan. 21, 1873	3	71
Bluing	H. Sawyer	1,242	Apr. 29, 1873	3	471
Bobbin, Quill	D. Baas, jr.	1,362	July 15, 1873	4	58
Bone, horn, hard rubber, &c., Goods made of a composition substitute for.	Greanelle Manufacturing Company	1,574	Dec. 16, 1873	4	641
Books	D. C. Cutler	1,309	June 10, 1873	3	640
Boot and shoe	H. H. Bigelow	1,319	June 17, 1873	3	663
Boot and shoe	Burt & Mears	1,141	Feb. 18, 1873	3	189
Boot and shoe	T. Emerson's Sons	1,188	Apr. 1, 1873	3	357
Boot and shoe	T. Emerson's Sons	1,189	Apr. 1, 1873	3	357
Boot and shoe	C. Merritt	1,119	Feb. 4, 1873	3	127
Boot and shoe	T. W. Seaverns, jr.	1,164	Mar. 11, 1873	3	272
Boot and shoe peg	Kearsage Peg Company	1,466	Sept. 23, 1873	4	322
Boot and shoe peg	Kearsage Peg Company	1,467	Sept. 23, 1873	4	322
Boot, India-rubber	The L. Candee & Co	1,498	Oct. 14, 1873	4	401
Bottle, Cap of cordial	Cazade & Crooks	1,244	May 6, 1873	3	497
Bottle, Cordial	Cazade & Crooks	1,246	May 6, 1873	3	497
Bottle, Cordial	Cazade & Crooks	1,247	May 6, 1873	3	497
Bottle, Brandy	H. Imhorst	1,376	July 22, 1873	4	85
Braids, gimps, fringes, trimmings, &c	T. Kohn	1,283	May 27, 1873	3	586
Brandies	M. Doherty & Co.	1,479	Sept. 30, 1873	4	354
Brandy, Blackberry	I. A. Jackson & Co.	1,325	June 17, 1873	3	663
Brandy, Bottles for	Cazade & Crooks	1,234	Apr. 29, 1873	3	471
Brandy, Bottles of	Cazade & Crooks	1,200	Apr. 8, 1873	3	387
Bread	MacWilliams & Pieper	1,158	Mar. 4, 1873	3	245
Brush	I. M. C. Martin	1,493	Oct. 14, 1873	4	401
Brush, Toilet	Thomson, Langdon & Co	1,277	May 20, 1873	3	559
Brush, Tooth	S. L. Mintzer	1,290	June 3, 1873	3	609
Brush, Varnish	E. Clinton & Co	1,330	June 24, 1873	3	691
Brushes, Varnish and other	C. C. Thum	1,438	Sept. 2, 1873	4	242
Burner, Gas	A. H. Wood	1,243	Apr. 29, 1873	3	471
Burning-fluids and liniment	Netterfield & Smith	1,575	Dec. 16, 1873	4	641
Butter	S. Straith & Son	1,387	July 29, 1873	4	109
C.					
Candle	G. Delano	1,251	May 6, 1873	3	497
Candle	Procter & Gamble	1,192	Apr. 1, 1873	3	357
Cards, Playing	V. E. Mauger	1,191	Apr. 1, 1873	3	357
Cards, Playing	C. K. Pevey	1,341	July 1, 1873	4	8
Cards, Playing	C. K. Pevey	1,348	July 1, 1873	4	8
Cards, Playing	C. K. Pevey	1,349	July 1, 1873	4	8
Carpet	J. Dornan	1,571	Dec. 9, 1873	4	615
Carpet, drugget, rug, and mat	J. E. Hughes	1,420	Aug. 26, 1873	4	212
Cask and package, Whisky	Howe & Hubbell	1,364	July 15, 1873	4	58
Chair, settee, and car-seat	Gardner Manufacturing Company	1,289	June 3, 1873	3	609
Champagne	W. Chillingworth & Son	1,506	Oct. 21, 1873	4	425
Cheese	Webb, Turner & Co.	1,480	Sept. 30, 1873	4	354
Chemical compound	J. W. Chisholm	1,157	Mar. 4, 1873	3	245
Cigar	F. De Bary & Co	1,105	Jan. 21, 1873	3	71
Cigar	F. De Bary & Co	1,109	Jan. 24, 1873	3	100
Cigar	Gilmor & Gibson	1,588	Dec. 30, 1873	4	698
Cigar	Goldsmith Brothers & Benjamin	1,453	Sept. 16, 1873	4	296
Cigar	J. Heller	1,454	Sept. 16, 1873	4	296
Cigar	S. Jacoby & Co.	1,111	Jan. 28, 1873	3	100
Cigar	Kerbs & Spiess	1,179	Mar. 25, 1873	3	326
Cigar	Kerbs & Spiess	1,180	Mar. 25, 1873	3	326
Cigar	Seidenberg & Co	1,227	Apr. 22, 1873	3	445
Cigar	T. B. Singerland	1,541	Nov. 25, 1873	4	558
Cigar and tobacco	The Consolidated Tobacco Company	1,542	Nov. 25, 1873	4	558
Cigar, cheroots, and cigarettes	F. S. Kinney	1,365	July 15, 1873	4	58
Cigars, tobacco, and snuff	Batchelor Brothers	1,278	May 27, 1873	3	586
Cleaning-powder	J. A. Wright & Co	1,441	Sept. 2, 1873	4	242
Clothes-wringer	Bailey Washing and Wringing Machine Company	1,130	Feb. 18, 1873	3	189
Clothes-wringer	Bailey Washing and Wringing Machine Company	1,131	Feb. 18, 1873	3	189
Clothes-wringer	Queen City Wringer Company	1,494	Oct. 14, 1873	4	401

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
				Vol.	Page.
Clothes-wringing machine	Haley, Morse & Co.	1,523	Nov. 11, 1873	4	505
Clothing for women and children	M. Newman & B. Liebman	1,469	Sept. 23, 1873	4	322
Coffee, Ground	Hawley, Bowen & Co.	1,590	Dec. 30, 1873	4	698
Coffee, Roasted	Dilworth Brothers	1,363	July 15, 1873	4	58
Coffee, spice, &c	W. H. Crawford & Co.	1,133	Mar. 4, 1873	3	245
Colors, dye-stuffs, chemicals, &c	F. Bredt & Co.	1,263	May 13, 1873	3	527
Cordials, Package of	Cazade & Crooks	1,245	May 6, 1873	3	497
Cord, Solid braided	The Silver Lake Company	1,400	Aug. 5, 1873	4	135
Corn-meal, Kiln-dried	Kipe & Townsend	1,213	Apr. 15, 1873	3	417
Corset	Thomson, Langdon & Co.	1,114	Jan. 28, 1873	3	100
Corset-spring, Steel	F. L. Egbert	1,567	Dec. 9, 1873	4	615
Corset steel springs	F. L. Egbert	1,491	Oct. 14, 1873	4	401
Cosmetic	Miller Brothers	1,224	Apr. 22, 1873	3	445
Cosmetic	W. T. Wenzell	1,334	June 24, 1873	3	691
Cotton-gin	The Brown Cotton-Gin Company	1,570	Dec. 9, 1873	4	615
Cotton-gin	The Gullet Gin-Manufacturing Company	1,400	Aug. 19, 1873	4	185
Crackers, Sponge or butter	J. Fox	1,248	May 6, 1873	3	497
Cranberries, Packages containing	N. H. Bishop	1,352	July 8, 1873	4	36
Cutlery	N. Joseph	1,146	Feb. 25, 1873	3	218
Cutlery	I. T. Meyer	1,533	Nov. 18, 1873	4	531
D.					
Distilled liquors	M. M. Smith & Brothers	1,483	Oct. 7, 1873	4	381
Distilled liquors	M. M. Smith & Brothers	1,484	Oct. 7, 1873	4	381
Distilled liquors	M. M. Smith & Brothers	1,485	Oct. 7, 1873	4	381
Distilled liquors	M. M. Smith & Brothers	1,486	Oct. 7, 1873	4	381
Dresses, Chart and pattern for cutting	W. Cornwell	1,123	Feb. 11, 1873	3	157
Driers, paints, varnishes, &c	G. C. Liszka	1,536	Nov. 18, 1873	4	531
Druggists' goods	Arnold & McNary	1,299	June 10, 1873	3	640
Dry goods	Emery, Ivey & Lee	1,545	Dec. 2, 1873	4	585
Dyes, Aniline	Wells, Richardson & Co.	1,585	Dec. 23, 1873	4	671
E.					
Emery	Abbott & Howard	1,537	Nov. 25, 1873	4	558
Explosive compound, Dynamite	The Giant Powder Company and the Atlantic Giant Powder Company	1,582	Dec. 23, 1873	4	671
Explosive compound, Giant-powder	The Giant Powder Company and the Atlantic Giant Powder Company	1,583	Dec. 23, 1873	4	671
Extracts, Flavoring	Steele & Price	1,306	June 10, 1873	3	640
F.					
Fancy and other dry goods	E. Flaxland & Co.	1,414	Aug. 19, 1873	4	185
Fancy and other dry goods	E. Flaxland & Co.	1,415	Aug. 19, 1873	4	185
Fertilizer	G. Dugdale & Co.	1,432	Sept. 2, 1873	4	242
Fertilizer	G. Dugdale & Co.	1,433	Sept. 2, 1873	4	242
Fertilizer	G. Dugdale & Co.	1,440	Sept. 2, 1873	4	242
Fertilizer	G. Dugdale & Co.	1,475	Sept. 30, 1873	4	354
Fertilizer	G. Dugdale & Co.	1,476	Sept. 30, 1873	4	354
Fertilizer	Hunt, Rankin & Lamar	1,345	July 1, 1873	4	8
Fertilizer	Lorentz & Rittler	1,581	Dec. 23, 1873	4	671
Fertilizer	M. J. Solomons	1,411	Aug. 19, 1873	4	185
Fertilizer, Agricultural	O. Wittichen	1,396	Aug. 5, 1873	4	135
Fertilizer, Ammoniated superphosphate	J. M. Rhodes & Co.	1,569	Dec. 9, 1873	4	615
File	Crocker Cutter-Tooth File Company	1,168	Mar. 18, 1873	3	297
File	T. Jowitt & Son	1,161	Jan. 7, 1873	3	7
File and rasp	G. and H. Barnett	1,281	May 27, 1873	3	586
File, rasp, and steel	The Sheffield File-Works	1,350	July 1, 1873	4	8
Fish	The American Sardine Company	1,280	May 27, 1873	3	586
Fish, Cured or smoked	H. Mayo & Co.	1,305	June 10, 1873	3	640
Fish, Prepared and preserved	Dodd, Tarr & Co.	1,478	Sept. 30, 1873	4	354
Fish, Preserved	Ocean Trout Company	1,514	Oct. 28, 1873	4	452
Flour	The Gallego Mills Manufacturing Company	1,266	May 13, 1873	3	527
Flour	Jones, Williams & Faxon	1,229	Apr. 22, 1873	3	445
Flour	Haxall, Crenshaw & Co.	1,512	Oct. 28, 1873	4	452
Flour	Haxall, Crenshaw & Co.	1,513	Oct. 28, 1873	4	452
Flour, Prepared	Hopkins & Co.	1,238	Apr. 29, 1873	3	471
Flue for draft, ventilation, &c	H. R. Farmer	1,270	May 20, 1873	3	559
Fork, spoon, and other table-ware	C. Rogers & Brothers	1,342	July 1, 1873	4	8
Frillings	F. Browett & Co.	1,233	Apr. 29, 1873	3	471
Frillings, gimps, ribbons, &c	F. Browett & Co.	1,211	Apr. 15, 1873	3	417
Fruit-jar	The Consolidated Fruit-Jar Company	1,307	June 10, 1873	3	640
Fruit-jar	The Consolidated Fruit-Jar Company	1,308	June 10, 1873	3	640
G.					
Gas-machine	F. W. Ofelitt	1,429	Aug. 26, 1873	4	213
Gin	J. W. Culbert	1,481	Oct. 7, 1873	4	381
Gin	W. P. Sanger	1,150	Feb. 25, 1873	3	218
Gin	F. E. Suire & Co.	1,120	Feb. 4, 1873	3	127
Gin	F. E. Suire & Co.	1,121	Feb. 4, 1873	3	127
Gin	F. E. Suire & Co.	1,122	Feb. 4, 1873	3	127
Glass shades, cylinders, &c	S. J. Pardessus & Co.	1,515	Oct. 28, 1873	4	452
Glass-ware	T. G. Cook & Co.	1,201	Apr. 8, 1873	3	387
Glove, Kid	F. Hegle	1,532	Nov. 18, 1873	4	531
Gold and silver solutions for electro-plating without a battery	A. B. Morrison	1,534	Nov. 18, 1873	4	531
Gold-foil	S. S. White	1,184	Mar. 25, 1873	3	326
Gold ring	The Dueber Watch-Case Manufacturing Company	1,450	Sept. 9, 1873	4	271
Grinding-mill	I. Straub & Co.	1,497	Oct. 14, 1873	4	401
Grinding-mill	The Straub Mill Company	1,330	Apr. 22, 1873	3	445

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Grinding-mill	A. W. Winall	1,295	June 3, 1873	3	609
Guano	Guanahau Guano Company	1,538	Nov. 25, 1873	4	558
Guano	B. M. Rhodes & Co.	1,395	Aug. 5, 1873	4	135
H.					
Hair-dressing	E. A. E. Meyer	1,223	Apr. 22, 1873	3	445
Hair-preparation	M. T. Clackner	1,431	Sept. 2, 1873	4	242
Ham	Evans Brothers	1,115	Feb. 4, 1873	3	127
Ham, shoulder, bacon, &c	W. J. Riegan & Son	1,408	Aug. 12, 1873	4	159
Hams and cured meat	W. G. Bell & Co.	1,199	Apr. 8, 1873	3	387
Hams and shoulders of pork	F. P. Woodbury	1,196	Apr. 1, 1873	3	357
Hams and shoulders of pork	F. P. Woodbury	1,197	Apr. 1, 1873	3	357
Hams and shoulders of pork	F. P. Woodbury	1,198	Apr. 1, 1873	3	357
Hams, Sugar-cured	Evans, Lippincott & Cunningham	1,268	May 13, 1873	3	527
Hams, Sugar-cured	Oakford & Co.	1,346	July 1, 1873	4	8
Hardware, cutlery, guns, pistols, and lead-pencils	T. Hessenbruch	1,546	Dec. 2, 1873	4	585
Harness dressing and cleaning compound	S. E. Cox & Co.	1,144	Feb. 25, 1873	3	218
Harvester	D. M. Osborne & Co.	1,241	Apr. 29, 1873	3	471
Harvester guard-finger, section-knife, &c	Whiteley, Fassler & Kelly	1,129	Feb. 11, 1873	3	157
Harvesters, Self-rake, dropper, and reel of	Whiteley, Fassler & Kelly	1,128	Feb. 11, 1873	3	157
Harvesting-machine	Whiteley, Fassler & Kelly	1,127	Feb. 11, 1873	3	157
Harvesting-machine, Sections for the cutters of	W. A. Wood Mowing and Reaping Machine Company.	1,262	May 13, 1873	3	527
Hat	O. Benedict & Co.	1,578	Dec. 23, 1873	4	671
Hat	O. Benedict & Co.	1,579	Dec. 23, 1873	4	671
Hat	O. Benedict & Co.	1,580	Dec. 23, 1873	4	671
Hat	J. S. Fayerweather & Co.	1,445	Sept. 9, 1873	4	271
Heater	The Gold-Heating Company	1,381	July 22, 1873	4	85
Hog products	G. Cassard & Son	1,301	June 10, 1873	3	640
Hose and belting, Rubber	National Rubber Company	1,162	Mar. 11, 1873	3	272
Hose, Rubber	The Boston Elastic-Fabric Company	1,174	Mar. 18, 1873	3	297
Hose, Rubber	The Boston Elastic-Fabric Company	1,175	Mar. 18, 1873	3	297
Hosiery	Smvth & Co.	1,449	Sept. 9, 1873	4	271
I.					
Ice	Knickerbocker Ice Company	1,524	Nov. 11, 1873	4	505
Ink and varnish printing	L. H. Gein	1,190	Apr. 1, 1873	3	357
Ink, Burnishing	Fletcher & Dwyer	1,236	Apr. 29, 1873	3	471
Insect-powder	P. Reynard	1,326	June 17, 1873	3	663
Iron and steel	Leng & Ogden	1,422	Oct. 7, 1873	4	381
Iron, Black and galvanized sheet	Marshall Brothers & Co.	1,274	May 20, 1873	3	559
Iron, Galvanized sheet	McCullough Iron Company	1,117	Feb. 4, 1873	3	127
Iron, Galvanized sheet	McCullough Iron Company	1,118	Feb. 4, 1873	3	127
K.					
Kaleidoscope	C. G. Bush & Co.	1,417	Aug. 26, 1873	4	212
Knit scarf or tippet	J. W. Tuttle	1,519	Nov. 4, 1873	4	478
L.					
Lead, White	Beymer, Bauman & Co.	1,439	Sept. 2, 1873	4	242
Leather, Composition for softening, polishing, and preserving	J. G. North	1,386	July 29, 1873	4	109
Licorice, Mass	Hoffman, Lee & Co.	1,455	Sept. 16, 1873	4	296
Licorice-paste	D. V. Arqumbau	1,361	July 15, 1873	4	58
Licorice-paste	D. V. Arqumbau	1,442	Sept. 9, 1873	4	271
Licorice-paste	Hoffman, Lee & Co.	1,456	Sept. 16, 1873	4	296
Liniment	W. Kidder	1,587	Dec. 23, 1873	4	671
Liniment	Merchant's Gargling-Oil Company	1,214	Apr. 15, 1873	3	417
Liniment	Merchant's Gargling-Oil Company	1,215	Apr. 15, 1873	3	417
Liniment	W. E. Rainey	1,422	Aug. 26, 1873	4	212
Liniment	I. Vallier	1,563	Dec. 2, 1873	4	586
Liquors, Spirituous	G. W. Kidd & Co.	1,468	Sept. 23, 1873	4	322
Liquors, wines, bitters, sirups, and cordials	W. S. Duham	1,340	July 1, 1873	4	8
Lozenges and sirup	Towsend & Co.	1,210	Apr. 8, 1873	3	387
Lubricating compound	Gerdom, Cook & Co.	1,212	Apr. 15, 1873	3	417
M.					
Maizola, (a product of corn)	Warder & Cooper	1,165	Mar. 11, 1873	3	272
Meat and smoked beef, Sugar-cured	G. Phipps & Co.	1,354	July 8, 1873	4	36
Meat, Cured	W. H. Davis & Co.	1,566	Dec. 9, 1873	4	615
Medal	Hartell & Letchworth	1,271	May 20, 1873	3	559
Medicated liquor	M. Vergnole	1,409	Aug. 12, 1873	4	159
Medicated Manila paper	J. Robertson	1,458	Sept. 16, 1873	4	296
Medicine	F. W. Barnum & Co.	1,329	June 24, 1873	3	691
Medicine	S. Bonsall	1,451	Sept. 16, 1873	4	296
Medicine	C. D. Bradley	1,389	July 21, 1873	4	109
Medicine	E. R. Burnham	1,282	May 27, 1873	3	586
Medicine	S. De Grath	1,302	June 10, 1873	3	640
Medicine	S. De Grath	1,394	Aug. 5, 1873	4	135
Medicine	D. Dick	1,373	July 22, 1873	4	85
Medicine	T. S. Fellows and J. R. Smith	1,403	Aug. 12, 1873	4	159
Medicine	Fenton Manufacturing Company	1,446	Sept. 9, 1873	4	271
Medicine	E. Froese	1,124	Feb. 11, 1873	3	157
Medicine	H. W. Fuller	1,265	May 13, 1873	3	527
Medicine	J. L. Graham	1,501	Oct. 14, 1873	4	401
Medicine	W. H. Gregg & Co.	1,531	Nov. 18, 1873	4	531
Medicine	J. H. Hopkins	1,206	Apr. 8, 1873	3	387
Medicine	R. Hoyt	1,178	Mar. 25, 1873	3	286
Medicine	Pacific Balm Company	1,284	May 27, 1873	3	586
Medicine	D. Ransom, Son & Co.	1,257	May 13, 1873	3	527
Medicine	D. Ransom, Son & Co.	1,258	May 13, 1873	3	527

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Medicine	D. Ransom, Son & Co.	1,259	May 13, 1873	3	527
Medicine	D. Ransom, Son & Co.	1,260	May 13, 1873	3	527
Medicine	D. Ransom, Son & Co.	1,261	May 13, 1873	3	527
Medicine	R. Rattinger	1,193	Apr. 1, 1873	3	357
Medicine	H. A. Tilden	1,156	Mar. 4, 1873	3	245
Medicine	D. D. Tomlinson	1,195	Apr. 1, 1873	3	357
Medicine	E. M. Tubbs & Co.	1,313	June 10, 1873	3	640
Medicine	Willson Carbolated Cod-Liver Oil Co.	1,392	July 29, 1873	4	109
Medicine	C. C. Zimmerman	1,296	June 3, 1873	3	609
Medicine, Balsam, Cough	F. W. Kinsman	1,171	Mar. 18, 1873	3	297
Medicine, Bitters	J. Clove	1,204	Apr. 8, 1873	3	387
Medicine, Bitters	W. H. Knoepfel	1,112	Jan. 28, 1873	3	100
Medicine, Castor-oil pills	W. Scruton	1,424	Aug. 26, 1873	4	212
Medicine, Fever and ague cure	H. Van Ripper and J. G. Beach	1,477	Sept. 30, 1873	4	354
Medicine for rheumatism	Moyer & Co.	1,564	Dec. 2, 1873	4	546
Medicine, Globule for homœopathic	Smith & Parks	1,369	July 15, 1873	4	58
Medicine, Pile remedy	J. P. Miller	1,216	Apr. 15, 1873	3	417
Medicine, Pile remedy	M. H. Stoner	1,151	Feb. 25, 1873	3	218
Medicine, Toothache preparation	R. A. Tracy	1,351	July 1, 1873	4	8
Men's furnishing goods	Fisk, Clark & Flagg	1,434	Sept. 2, 1873	4	242
Metal and journal bearings, Anti-friction	I X L Metal Company	1,116	Feb. 4, 1873	3	127
Motto-papers	T. Van Skelline	1,584	Dec. 23, 1873	4	671
N.					
Nails, Selected	J. Coyne	1,413	Aug. 19, 1873	4	185
O.					
Oatmeal	J. McCann	1,509	Oct. 21, 1873	4	426
Oil	M. T. D., and S. Hodgkinson	1,324	June 17, 1873	3	663
Oil-can or package	Meissner, Ackermann & Co.	1,357	July 8, 1873	4	36
Oil, Clock and watch	E. Kelley	1,249	May 6, 1873	3	497
Oil, Coal	W. A. Kowalski	1,133	Feb. 18, 1873	3	189
Oil, Cod-liver	H. M. Rogers & Co.	1,312	June 10, 1873	3	640
Oil for medical purposes	M. S. Goodrich & Co.	1,237	Apr. 29, 1873	3	471
Oil, Illuminating	The Devoe Manufacturing Company	1,337	June 24, 1873	3	691
Oil, Illuminating	The Devoe Manufacturing Company	1,338	June 24, 1873	3	691
Oil, Lubricating	Leonard & Ellis	1,502	Oct. 14, 1873	4	401
Oil, Medicinal	E. F. Libby	1,252	May 6, 1873	3	497
Ointment, Salt-rheum	F. H. Kimberly	1,239	Apr. 29, 1873	3	471
Opera-glasses, field-glasses, and other telescopes	Sassfeld, Lorsch & Co.	1,231	Apr. 22, 1873	3	445
Organ	G. Woods & Co.	1,544	Nov. 25, 1873	4	558
Oysters	O. W. Miller & Co.	1,573	Dec. 9, 1873	4	615
Oysters and fruits, Packed	Barnes, Adams & Co.	1,474	Sept. 30, 1873	4	354
Oysters, fruits, and vegetables, Packed	Wentz & Barndollar	1,412	Aug. 19, 1873	4	185
P.					
Packing for engine, Steam	The Silver Lake Company	1,397	Aug. 5, 1873	4	135
Packing for engine, Steam	The Silver Lake Company	1,398	Aug. 5, 1873	4	135
Packing for engine, Steam	The Silver Lake Company	1,399	Aug. 5, 1873	4	135
Packing for railway-car journal-boxes	P. S. Devlan	1,463	Sept. 23, 1873	4	322
Packing, Miller's soap-stone	Sellers Brothers	1,379	July 22, 1873	4	85
Packing, &c., Steam	J. Glauding & Co.	1,436	Sept. 2, 1873	4	242
Packing, &c., Steam	J. Glauding & Co.	1,435	Sept. 2, 1873	4	242
Paint	H. P. Webb	1,336	June 24, 1873	3	691
Paint and colors	Harrison Brothers & Co.	1,202	Apr. 8, 1873	3	387
Paint and colors	McClosky Brother & Co.	1,404	Aug. 12, 1873	4	159
Paint, Metallic	Prince's Metallic Paint Company	1,135	Feb. 18, 1873	3	189
Paint, Metallic	Prince's Metallic Paint Company	1,406	Aug. 12, 1873	4	159
Paint, Rubber	The Rubber Paint Company	1,208	Apr. 8, 1873	3	387
Paint, Rubber	The Rubber Paint Company	1,209	Apr. 8, 1873	3	387
Paint, White zinc	Wadsworth Brothers & Co.	1,285	May 27, 1873	3	586
Paper, Bluing	Dole Brothers	1,384	July 29, 1873	4	109
Paper, Writing	S. Beach	1,107	Jan. 28, 1873	3	100
Parer, Apple	D. H. Goodell	1,385	July 29, 1873	4	109
Patterns, Dress	The Domestic Sewing-Machine Company	1,402	Aug. 12, 1873	4	159
Patterns of paper, cloth, &c.	The Domestic Sewing-Machine Company	1,401	Aug. 12, 1873	4	159
Pen, Gold	C. M. Fisher	1,522	Nov. 11, 1873	4	505
Pencil	American Lead-Pencil Company	1,430	Sept. 2, 1873	4	242
Pepsin	Lilly & Phelan	1,421	Aug. 26, 1873	4	212
Perfume, medicine, &c.	G. J. Wenck	1,577	Dec. 16, 1873	4	641
Perfumery	T. E. Jenkins	1,356	July 8, 1873	4	36
Perfumery and toilet articles	F. Prot & Co.	1,540	Nov. 25, 1873	4	558
Petroleum	The Atlantic Refining Company	1,460	Sept. 16, 1873	4	296
Petroleum	Brown Brothers	1,286	June 3, 1873	3	608
Petroleum, Product of	J. Chandler	1,176	Mar. 25, 1873	3	326
Petroleum, Refined	C. West & Sons	1,520	Nov. 4, 1873	4	478
Pickle and sauce	Crane & Co.	1,145	Feb. 25, 1873	3	218
Pistol, Revolving	Merwin, Hulbert & Co.	1,322	June 17, 1873	3	663
Pistol, Revolving	Merwin, Hulbert & Co.	1,323	June 17, 1873	3	663
Pitcher, Ice	Adams, Hallock & Co.	1,527	Nov. 18, 1873	4	531
Plow	Hunter & Frost	1,539	Nov. 25, 1873	4	538
Plow	J. Oliver	1,275	May 20, 1873	3	559
Plow	E. Remington & Son	1,149	Feb. 25, 1873	3	218
Polishing material	Coffin, Reddington & Co.	1,267	May 13, 1873	3	527
Preserved and canned food	Gordon & Dilworth	1,508	Oct. 21, 1873	4	426
Preserved, canned, or bottled vegetables, fruits, pickles, sauces, and honey	Sleeper, Wells & Aldrich	1,355	July 8, 1873	4	36
Printed publications	F. and J. Rives & G. A. Bailey	1,163	Mar. 11, 1873	3	272
Printed publications	D. Williams	1,152	Feb. 25, 1873	3	218
Printing-press	J. C. Tripp	1,106	Jan. 21, 1873	3	71
Prints	J. R. Osgood & Co.	1,217	Apr. 15, 1873	3	417
Pruning-shears	Christy & Hughes	1,102	Jan. 28, 1873	3	100

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Pump, Fountain	J. A. Whitman	1,339	June 24, 1873	3	691
Pyroxyline, Compound of	Celluloid Manufacturing Company	1,102	Jan. 14, 1873	3	33
Q.					
Quicksilver-flask	The Quicksilver Mining Company	1,499	Oct. 14, 1873	4	401
R.					
Radish, Horse	Heinz, Noble & Co.	1,426	Aug. 26, 1873	4	213
Railway-grease	A. Gunnison & Co.	1,353	July 8, 1873	4	36
Raisins	F. C. Lewis	1,310	June 10, 1873	3	640
Rake-handle	Smith & Montross	1,240	Apr. 29, 1873	3	471
Razor	H. Boker & Co.	1,504	Oct. 21, 1873	4	425
Razor and cutlery	Friedmann & Lauterjung	1,367	July 15, 1873	4	58
Rubber-goods	M. A. Cately	1,505	Oct. 21, 1873	4	425
Ruffles and dress-trimmings	J. V. Rockwell	1,194	Apr. 1, 1873	3	357
S.					
Saddle-tree	S. E. Tompkins & Co.	1,366	July 15, 1873	4	58
Saddle-tree	S. E. Tompkins	1,589	Dec. 30, 1873	4	698
Salmon, Packed fresh	L. H. Newton	1,125	Feb. 11, 1873	3	157
Salt	Stone & Spencer	1,276	May 20, 1873	3	559
Salve	L. Harwood & Son	1,272	May 20, 1873	3	559
Salve	G. Long	1,147	Feb. 25, 1873	3	218
Salve, Eye	W. T. Blow	1,142	Feb. 25, 1873	3	218
Sauce	S. P. Agresta & A. Menecci	1,503	Oct. 21, 1873	4	425
Sauce, Celery	Heinz, Noble & Co.	1,425	Aug. 26, 1873	4	212
Sauce, Table	J. K. MacGowan & Co.	1,134	Feb. 18, 1873	3	189
Saw, Cross-cut wood	E. C. Atkins & Co.	1,371	July 22, 1873	4	85
Saw, tool, steel, and file	H. Disston & Sons	1,452	Sept. 16, 1873	4	296
Saw, tool, steel, and file	H. Disston & Sons	1,464	Sept. 23, 1873	4	322
Scarf, tie, and bow	Brownson Brothers & Co.	1,372	July 22, 1873	4	85
Sealing-wax	R. B. Dovell's Son	1,235	Apr. 29, 1873	3	471
Seeds	D. M. Ferry & Co.	1,447	Sept. 9, 1873	4	271
Seeds, bulbs, vines, and cuttings	Chase Brothers & Woodward	1,418	Aug. 26, 1873	4	212
Sewing-machine needle, Cold-swaged	Bridgeport Cold-Swaged Needle Co.	1,232	Apr. 29, 1873	3	471
Sewing-machine shuttle, Machine-wound bobbin or spool for	J. H. Bullard	1,344	July 1, 1873	4	8
Shingle	L. M. Blakely	1,511	Oct. 28, 1873	4	452
Shirt	W. A. Farr & Co.	1,288	June 3, 1873	3	609
Shirt	Finley, Gourlay & Finch	1,465	Sept. 23, 1873	4	322
Shirt	C. W. Jenks	1,100	Jan. 7, 1873	3	7
Shirt	Kohn, Leberman & Co.	1,492	Oct. 14, 1873	4	401
Shirt, shirt-fronts, &c.	L. Sternberger	1,154	Mar. 4, 1873	3	245
Shirts, Linen and muslin	T. J. Irving & Co.	1,161	Mar. 11, 1873	3	272
Shirtings	J. L. Moss, jr., and N. F. Moss	1,358	July 8, 1873	4	36
Shoe	G. A. Reynolds	1,407	Aug. 12, 1873	4	159
Shoes, Ladies' and children's	Kefny & McPartland	1,516	Nov. 4, 1873	4	478
Silicias and goods of like character	Leshner, Whitman & Co.	1,304	June 10, 1873	3	640
Silk fabrics and "passementerie" goods, Woven	Bernstein & Mack	1,461	Sept. 23, 1873	4	322
Sirup	Fairbanks & Gilman	1,169	Mar. 18, 1873	3	297
Sirup	Fairbanks & Gilman	1,170	Mar. 18, 1873	3	297
Slate, Roofing	T. W. Parry	1,347	July 1, 1873	4	8
Snap-hook	The New York Wire-Snap Company	1,510	Oct. 21, 1873	4	426
Soap	R. W. Bell & Co.	1,218	Apr. 22, 1873	3	445
Soap	R. M. Bishop & Co.	1,565	Dec. 9, 1873	4	615
Soap	J. O. Draper & Co.	1,390	July 29, 1873	4	109
Soap	J. Eavenson & Sons	1,586	Dec. 23, 1873	4	671
Soap	J. S. and T. Elkinton	1,160	Mar. 11, 1873	3	272
Soap	J. Oakley & Co.	1,291	June 3, 1873	3	609
Soap	Sherwood & Genin	1,343	July 1, 1873	4	8
Soap	W. L. Troxell	1,427	Oct. 7, 1873	4	381
Soap	J. B. Williams & Co.	1,185	Mar. 25, 1873	3	326
Soap	J. B. Williams & Co.	1,186	Mar. 25, 1873	3	326
Soap, Hard	O. Cutts & Co.	1,462	Sept. 23, 1873	4	322
Soap-powders	B. T. Babbitt	1,528	Nov. 18, 1873	4	531
Spice for seasoning meat, Compound	E. R. Durkee & Co.	1,530	Nov. 18, 1873	4	531
Spice, mustard, soda, and cream of tartar	E. R. Durkee & Co.	1,419	Aug. 26, 1873	4	212
Spoon, fork, &c.	Hall, Elton & Co.	1,110	Jan. 28, 1873	3	100
Starch	Procter & Gamble	1,226	Apr. 22, 1873	3	445
Starch, Rice	W. J. Rand	1,269	May 13, 1873	3	527
Steam-gage and engine-room fixtures	The Utica Steam-gage Company	1,382	July 22, 1873	4	85
Steel and iron	Leng & Ogden	1,377	July 22, 1873	4	85
Steel and iron ware	Sweet, Barnes & Co.	1,380	July 22, 1873	4	85
Stocking-supporter, clasps, and suspenders	C. A. Straw	1,335	June 24, 1873	3	691
Stove	W. J. Keep	1,457	Sept. 16, 1873	4	296
Stove	J. Spear & Co.	1,496	Oct. 14, 1873	4	401
Stove	The Union Stove and Manufacturing Company	1,518	Nov. 4, 1873	4	478
Stove, Cooking	Bussey, McLeod & Co.	1,182	Mar. 25, 1873	3	326
Stove, Cylinder	Southard, Robertson & Co.	1,370	July 15, 1873	4	58
Stove, heater, and range	Hicks & Wolfe	1,303	June 10, 1873	3	640
Stove-polish	Fletcher & Dwyer	1,375	July 22, 1873	4	85
Sugar and lemons, Compound of	Preston & Merrill	1,183	Mar. 25, 1873	3	326
T.					
Tea and coffee	The Great Eastern Tea Company	1,543	Nov. 25, 1873	4	558
Teas	Newton Brothers & Co.	1,470	Sept. 23, 1873	4	322
Thermometer-tube	The Buffalo Dental Manufacturing Company	1,525	Nov. 11, 1873	4	505
Tobacco and snuff	G. W. Gail & Ax	1,320	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1,137	Feb. 18, 1873	3	189
Tobacco, Chewing	Allen & Ellis	1,138	Feb. 18, 1873	3	189

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Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Tobacco, Chewing	Allen & Ellis	1,130	Feb. 18, 1873	3	189
Tobacco, Chewing	Allen & Ellis	1,314	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1,315	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1,316	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1,317	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1,318	June 17, 1873	3	663
Tobacco, Chewing	Walker, McGraw & Co.	1,250	May 6, 1873	3	497
Tobacco, Chewing	Wall, Belvin & Day	1,308	July 29, 1873	4	109
Tobacco, Fine-cut chewing	Walker, McGraw & Co.	1,136	Feb. 18, 1873	3	129
Tobacco, Fine-cut chewing and smoking	Robinson Tobacco Manufacturing Company.	1,173	Mar. 18, 1873	3	297
Tobacco, Leaf	Weiss, Eller & Kaoppel	1,471	Sept. 23, 1873	4	322
Tobacco, Leaf	Weiss, Eller & Kaoppel	1,472	Sept. 23, 1873	4	322
Tobacco, Manufactured	J. W. Stone	1,155	Mar. 4, 1873	3	245
Tobacco, Plug chewing	Ericsson & Harris	1,192	Feb. 18, 1873	3	129
Tobacco, Plug chewing	Liggett & Myers	1,253	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1,254	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1,255	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1,256	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1,311	June 10, 1873	3	640
Tobacco, Plug chewing	Liggett & Myers	1,331	June 24, 1873	3	691
Tobacco, Plug chewing	Liggett & Myers	1,332	June 24, 1873	3	691
Tobacco, Smoking	Lowenthal, Kaufmann & Co.	1,378	July 22, 1873	4	85
Tobacco, Smoking	Robinson Tobacco Manufacturing Company.	1,172	Mar. 18, 1873	3	297
Tobacco, Smoking	J. W. Stone	1,159	Mar. 4, 1873	3	245
Tobacco, Smoking and chewing	L. Bremer's Sons	1,166	Mar. 18, 1873	3	297
Tobacco, Smoking and chewing	L. Bremer's Sons	1,167	Mar. 18, 1873	3	297
Towel, Rough bathing	The Stark Mills	1,360	July 8, 1873	4	36
Toy-wheel	S. T. Wheelwright and C. L. Locke	1,521	Nov. 4, 1873	4	478
Trimmings for ladies' wear	Erskine & Co.	1,205	Apr. 8, 1873	3	387
U.					
Umbrella	A. M. & R. Davies	1,507	Oct. 21, 1873	4	426
Umbrella and parasol	Dawes & Fanning	1,104	Jan. 21, 1873	3	71
V.					
Varnish	L. L. Mandel	1,368	July 15, 1873	4	58
W.					
Watch	Courvoisier, Wilcox & Co.	1,287	June 3, 1873	3	608
Watch	The National Watch Company	1,526	Nov. 11, 1873	4	505
Watch	The National Watch Company	1,547	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,548	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,549	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,550	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,551	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,552	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,553	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,554	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,555	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,556	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,557	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,558	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,559	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,560	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,561	Dec. 2, 1873	4	585
Watch	The National Watch Company	1,562	Dec. 2, 1873	4	585
Watch and watch materials	Bourquin Brothers	1,187	Apr. 1, 1873	3	357
Watch-case	J. C. Dueber	1,444	Sept. 9, 1873	4	271
Watch-glass	J. B. Laurentot	1,273	May 20, 1873	3	559
Water-gage for steam-boiler	Tomey & Sons	1,359	July 8, 1873	4	36
Water, Mineral	C. & E. E. Dumbar	1,374	July 22, 1873	4	85
Water, Mineral	The Siloam Mineral-Spring Company	1,228	Apr. 22, 1873	3	445
Wheat, Pearl	J. B. Clow	1,143	Feb. 25, 1873	3	218
Whisky	J. Bumgardner & Sons	1,300	June 10, 1873	3	640
Whisky	J. E. Cassidy	1,393	Aug. 5, 1873	4	135
Whisky	Derby & Day	1,443	Sept. 9, 1873	4	271
Whisky	B. H. Engelke	1,177	Mar. 25, 1873	3	326
Whisky	Flack Brothers	1,140	Feb. 18, 1873	3	189
Whisky	W. M. Fliess & Co.	1,448	Sept. 9, 1873	4	271
Whisky	Hastings & Berlin	1,321	June 17, 1873	3	663
Whisky	E. Howe	1,572	Dec. 9, 1873	4	615
Whisky	Livingston & Co.	1,517	Nov. 4, 1873	4	478
Whisky	J. J. McClelland	1,181	Mar. 25, 1873	3	326
Whisky	Morehead, Young & Co.	1,207	Apr. 8, 1873	3	387
Whisky	J. T. M. Orendorf	1,297	June 3, 1873	3	609
Whisky	D. Porter	1,576	Dec. 16, 1873	4	641
Whisky	Walsh, Brooks & Kellogg	1,292	June 3, 1873	3	609
Whisky	Walsh, Brooks & Kellogg	1,293	June 3, 1873	3	609
Whisky	Walsh, Brooks & Kellogg	1,294	June 3, 1873	3	609
Whisky, Barrel of	Derby & Day	1,490	Oct. 14, 1873	4	401
Whisky, Barrel of	W. S. Stewart	1,459	Sept. 16, 1873	3	296
Whisky, Bourbon	Du Vivier & Co.	1,219	Apr. 22, 1873	3	445
Whisky, Bourbon	Du Vivier & Co.	1,221	Apr. 22, 1873	3	445
Whisky, Bourbon	E. A. Fargo & Co.	1,568	Dec. 9, 1873	4	615
Whisky, Bourbon	H. Livingston	1,279	May 27, 1873	3	586
Whisky, Rye	Du Vivier & Co.	1,220	Apr. 22, 1873	3	445
Whisky, Rye	Du Vivier & Co.	1,222	Apr. 22, 1873	3	445
Whisky, Rye	T. L. Hume	1,427	Aug. 26, 1873	4	213
Windmill	Atwood & Bodwell	1,473	Sept. 30, 1873	4	354
Window and mirror polish	H. M. Wade	1,500	Oct. 14, 1873	4	401

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Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Wine and liquors.....	Morrow, Chamberlin & Co.....	1,333	June 24, 1873	3	691
Wine and liquors.....	O. Schloemer.....	1,423	Aug. 26, 1873	4	212
Wine, Champagne.....	F. De Bary & Co.....	1,099	Jan. 7, 1873	3	7
Wines, liquors, beer, mineral water, &c.....	S. McCullagh.....	1,416	Aug. 19, 1873	4	185
Woolen goods.....	G. F. Ellis.....	1,264	May 13, 1873	3	527
Y.					
Yeast-powder.....	Preston & Merrill.....	1,225	Apr. 22, 1873	3	445



