

International Exhibition of 1876.

HOSPITAL

OF THE

Medical Department, United States Army.

No. 5.

DESCRIPTION

OF

PEROT & CO.'S

IMPROVED U. S. A. MEDICINE WAGON

EXHIBITED IN THE GROUNDS ADJOINING THE HOSPITAL :

AND OF

PEROT & CO.'S U. S. A. MESS CHEST.

EXHIBITED IN ROOM NO. 5.

Philadelphia, 1876.

ADVERTISEMENT.

The following descriptions and statements were furnished by the manufacturers, T. Morris Perot & Co., 314 Vine street, Philadelphia, Pa., who alone are responsible for their accuracy.

J. J. WOODWARD,
Assistant Surgeon, U. S. A.

IN CHARGE OF THE REPRESENTATION OF THE MEDICAL DEPARTMENT, U. S. A.

U. S. ARMY MESS-CHEST.

T. Morris Perot & Co.'s Pattern.

These chests were largely used by the medical department of the U. S. Army during the war of the rebellion, and were highly appreciated by the surgeons and other officers who used them, being the most compact possible form for carrying the articles desired in a camp-chest. They contain the ordinary articles of a mess-chest, such as camp-kettles, mess-pans, tea-kettle, coffee and tea-pot, tin cups and tumblers, frying-pan, gridiron, cans for tea, coffee, sugar, and butter, plates, knives and forks, cook's knife, spoons, ladles, &c., &c., besides which each one has in it a large sheet-iron stove, a tin oven, and a box lantern. The chest when opened forms a good table. The manufacturers, *T. Morris Perot & Co.*, No. 314 Vine street, Philadelphia, would call the especial attention of those interested in such articles to the chest of this pattern now exhibited by the Medical Department of the U. S. Army at the Centennial Exhibition in Philadelphia. This firm also made for the Army a number of other articles, among which were a medicine pannier, a medicine knapsack, a medicine case, and an ambulance—none of which, however, are on exhibition. The ambulance was invented after a very careful examination of the different kinds of springs in use, and finally india-rubber springs were adopted as having great advantages over steel, as by their peculiar arrangement they adapted themselves to any weight, prevented lateral motion, and travelled over rough roads with the greatest ease to the patient.

DESCRIPTION
OF
T. MORRIS PEROT & CO.'S
Improved Patent U. S. A. Medicine Wagon.

This wagon is exhibited on the grounds immediately in the rear of the hospital of the Medical Department, U. S. Army, International Exhibition of 1876. It was built under the supervision of Mr. Perot by Mr. Jacob Rech, and the wooden interior fixtures were made by Mr. C. C. Alvord, both of whom deserve credit for the promptness with which they executed Mr. Perot's order, given but a few weeks before the opening of the Exhibition.

During the year 1862, our Mr. Perot thought that a great improvement could be made in the mode of carrying medicines and hospital supplies for field service. He got up models of his plans of packing, and exhibited them to the Surgeon-General, stating to him that by his method of packing the then large supply for a regiment for three months could be carried in one wagon, besides giving the requisite room for dispensing. A sample wagon was ordered, and gave such satisfaction that a board of Army surgeons, of which Col. Richard H. Coolidge was president, adopted it as the United States standard, in consequence of which a large number were ordered, and from the testimony in our possession, of surgeons, &c., who have used them, a few of whose letters will be found on another page, we believe they gave entire satisfaction. In getting up the first wagon, after mature consideration and consultation with the Surgeon-General, it was decided to use the ordinary Army wagon, with the body placed upon springs. The reasons for this were, that in case of breaking down, the parts injured could be replaced by others, which are carried by the Quartermaster's Department—for instance, another wheel, an axle, a tongue, &c., or if entirely useless, the fixtures and supplies would fit into the body of an ordinary Army wagon; add to this the great strength of the regular Army wagon, and we think all will agree that a wise selection was made. The only objection that we have ever heard in reference to these wagons has been in regard to weight. Probably there are very few surgeons in the Army who have not seen our large No. 1 medicine wagon. We will therefore pass to the present improvement. In 1863 the supply table was reduced, and it was determined to have one medicine wagon for each brigade, instead of each regiment, and this wagon only to carry one month's supply, instead of three months' as formerly. In 1864 it was further thought best by the department to have a smaller and lighter wagon used, into which fixtures could be fitted. The consequence was the adoption by the Department of a very handsome, durable, and convenient wagon. By the authority of Surgeon-General Jos. K. Barnes, we altered our fixtures to fit the wagon and carry the articles in accordance with the new supply table, diagrams, drawings, and descriptions of which will be found in this pamphlet. The weight of the wagon is 1,527 pounds, being nearly 500 pounds less than the Army wagon. The weight, including our fixtures and all the supplies, is only 2,630 pounds. Some of the advantages of this wagon are as follows:

1st. One of the main considerations was to get the heavy articles as far as possible near the bottom, so as to prevent the wagon from upsetting. This, in practice, has proved a great advantage, as is stated in some of the letters from surgeons, herewith attached.

2d. In this wagon there is a special place for each article, so that a person in the habit of using it may find almost in the dark anything wanted, while in most of the other wagons the articles are put together without partitions; if a small item is wanted, a whole drawer, probably containing twenty articles, will have to be unpacked

and repacked. In our wagon no unpacking, unwrapping, rewrapping, and repacking is required.

3d. In this wagon no tow or other matter is required for packing the bottles, as with our patented packing arrangements they will carry over any road without breaking.

4th. In this wagon the dispensing apartment is conveniently arranged inside the wagon, not exposed to the weather; each bottle is placed upon a spiral spring, which throws it up into a notch on top. It cannot break, and will always remain in its place. In other wagons the dispensing apartment is on the back of the wagon, exposed to wind and beating rains, with merely a curtain overhead. No one can weigh medicines with any accuracy under such circumstances.

5th. The amputating table is under the wagon body, supported with iron rods and rollers, and is entirely out of the way. In some wagons the table is placed on the top, supported by the wagon bows, which are liable to break with the weight, besides adding to the liability to upset.

6th. Our fixtures occupy only a little more than half the wagon, thus leaving the whole back portion of it for anything the surgeon in charge may wish to carry. This desirable object is obtained by our superior method of close packing. In other wagons the fixtures take up all the room.

We could mention various other advantages ours possess, but we presume from the accompanying description and cuts they will be apparent to every one.

We can alter these wagons to suit any supply by changing the articles and quantities as desired.

One of these wagons was sent to the Paris Universal Exposition of 1867, and in competition with various others was awarded the silver medal from the Société de Secours aux Blessés. In the Report on Ambulance and Sanitary Material, Dr. Thomas W. Evans, a member of the jury of the Universal Exposition, says: "It is remarkable not only for the elegance of its construction but for the very ingenious and effective system employed to prevent the breaking of bottles, these being secured against fracture either by the employment of springs upon which they rest or by placing them in paper boxes, thickened at each extremity by bands which receive all concussions." We also refer with pleasure to the following personal letter from Dr. Evans, in transmitting the silver medal and diploma:

PARIS, *Feb.* 21, 1868.

T. MORRIS PEROT, *Philadelphia*:

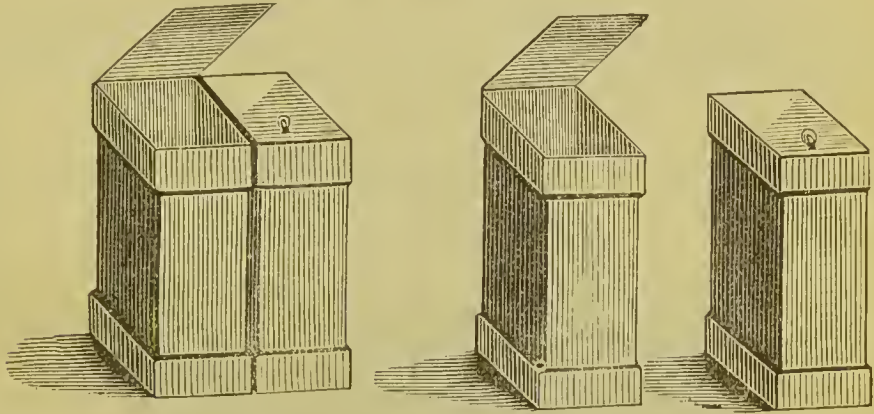
SIR: It is with very great pleasure that I send you to-day the silver medal and diploma awarded you by the Société de Secours aux Blessés, as an exhibitor at the Exposition Universelle. This medal was the highest award made by the Société to an exhibitor. The delay in forwarding these testimonials has been occasioned by circumstances quite independent of my own will, but which, nevertheless, I have very much regretted, as I have felt myself under many obligations for your co-operation in a work which has deeply interested me. Trusting that these evidences of European favor which I now have the honor of transmitting to you may be considered as a proper acknowledgment for the services you have rendered the International work: I am, yours very truly,

THOMAS W. EVANS, *M. D.*

DESCRIPTIONS OF MEDICAL WAGON FIXTURES.

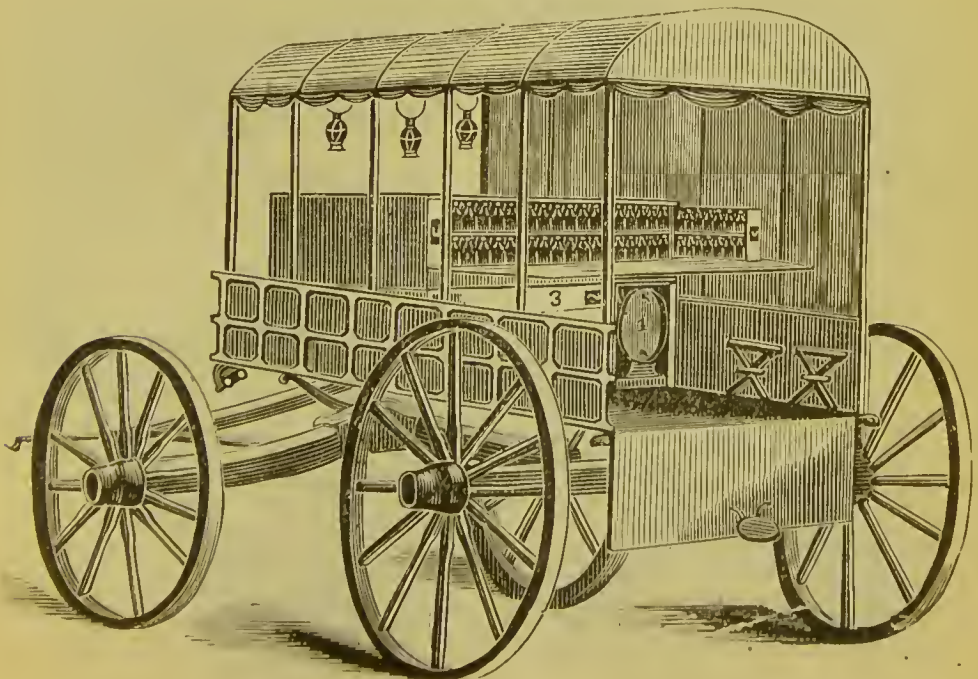
The fixtures are composed of four boxes—two on top of each other facing towards the front of the wagon and two towards the back. These boxes occupy only a little more than one-half of the wagon, leaving the balance of the room for any necessary purpose. The amputating table has a perfectly immovable catch to fasten the legs. By this arrangement the table is put up in a very short time, and is perfectly steady; it is very strong, the top being composed of plank $6\frac{1}{2}$ feet long, $2\frac{1}{2}$ feet wide, and $1\frac{1}{2}$ inches thick. This table is placed entirely out of the way, under the body of the wagon, instead of inside on the bottom, as in our old pattern.

MODE OF PACKING BOTTLES.



The above cut represents the form of our pasteboard boxes for packing the bottles. It will be observed that each box has a flange on the top and bottom, and when they come together they can only touch on the flanges, leaving a column of air between them; with these boxes placed side by side in a drawer or box there is no danger of breakage. An ambulance officer, in charge of one of our original wagons, has informed us that his wagon overturned into a ravine, from 14 to 16 feet deep, without a bottle being broken. Another wagon fell 8 feet with the same result. The general features and mode of packing in the new form of wagon do not differ from the old one.

BACK VIEW OF MEDICINE WAGON.

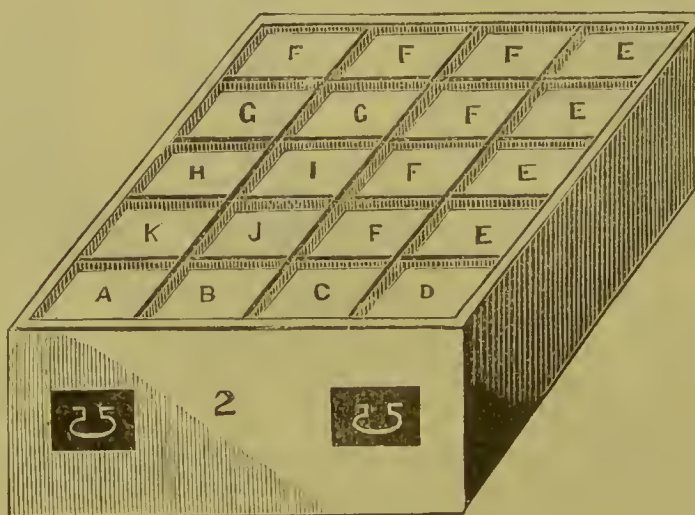


The preceding cut represents a back view of the wagon, with the tail-board down, showing a vacant space inside, about $3\frac{1}{2}$ feet wide and 4 feet long, with the two hind boxes fronting into this space. The lower box contains the closet No. 1, holding the whiskey keg. Nos. 2 and 3 are two drawers, and No. 4 is a small closet for a can of alcohol. The upper box or dispensing case contains two drawers, Nos. 4 and 5, and over them the dispensing apartment, of which a view is given, the operator occupying a camp stool in the vacant space in the wagon. This differs from our old wagon, as in it the door was in the side instead of the back, and the vacant space, which was only about half as large as in the new one, was in the centre. Below we give the diagrams and contents of the drawers, &c., fronting towards the back.

No. 1.

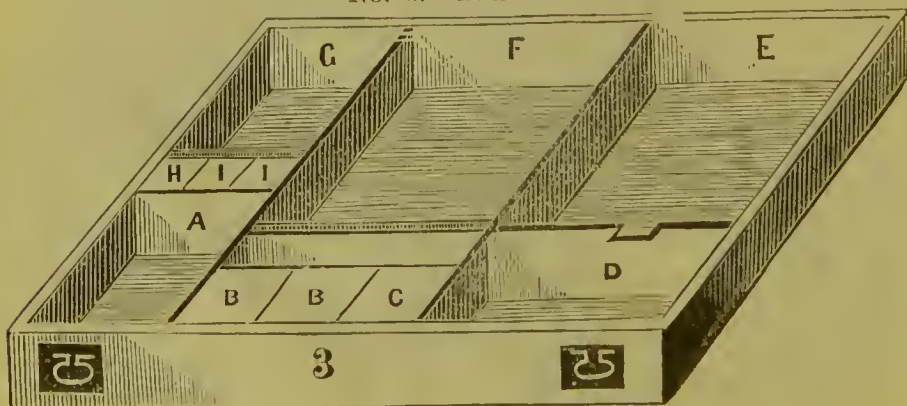
Is a locked closet occupying one side of the lower box, containing an oval keg for 6 galls. of whiskey, with a cock on top and bottom, one to let air in, the other to draw from. This keg is on skids, and can be drawn out, and filled at the bung.

No 2. —DRAWER.

*Contents of Drawer No. 2.*

- | | |
|--|---|
| A. Thirty-two oz. stronger ether, for
anæsthesia. | G. Two qt. bottles olive oil. |
| B. Thirty-two oz. sweet spirit of nitre. | H. Thirty-two oz. purified chloroform. |
| C. Thirty-two oz. solution of ammonia. | I. Thirty-two oz. copaiba. |
| D. One qt. bottle oil of turpentine. | J. Ten oz. sulphate of quinia. |
| E. Four qt. bottles castor oil. | K. Four lb. syrup of squill, (part in
Drawer No. 9.) |
| F. Six qt. bottles brandy. | |

No. 3. —DRAWER.



Contents of Drawer No. 3.

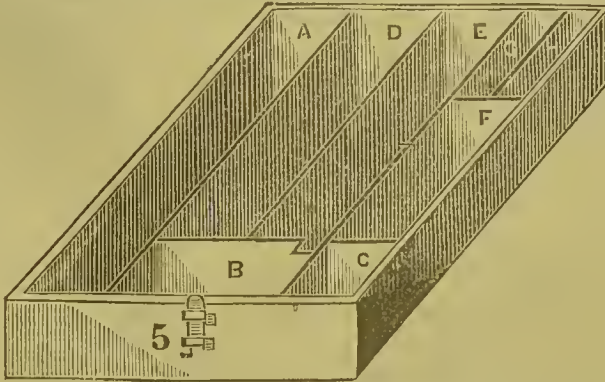
- | | |
|---|---|
| A. One sponge-holder, for the throat. | F. One copy Gray's Anatomy. |
| A. Twelve probangs. | F. One copy Erichsen's Surgery. |
| A. One tongue-depressor, hinged. | F. One copy Minor Surgery, Packard's. |
| A. Four trusses, single. | F. One case book. |
| B. Two bottles ink. | F. One copy Gunshot Wounds, Longmore. |
| C. One bottle mucilage. | G. One tooth-extracting case, army pattern. |
| D. One U. S. Dispensatory. | G. One hard rubber syringe, 8 ounce. |
| E. One portfolio, cap size. | G. One rubber syringe, self-injecting. |
| E. Two blank books, quarto. | H. Two thumb-lanets. |
| E. One order and letter book. | H. Twelve hair pencils. |
| E. Four quires writing paper. | I. Two scarificators. |
| E. One register of patients, small, flexible cover. | |

No. 4.

Contents of No. 4.

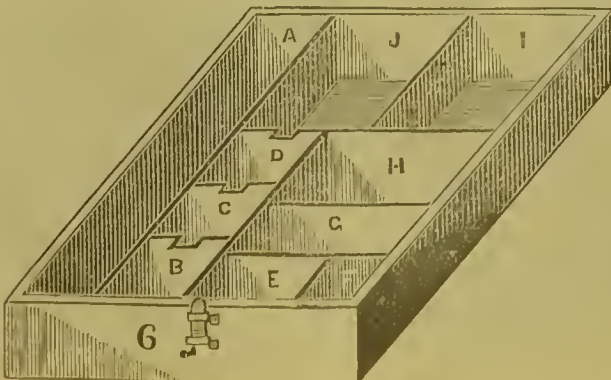
A locked closet on one side of the box which contains a can for 3 gallons of alcohol, and a vacant drawer for any articles desired.

No. 5.—DRAWER IN DISPENSING CASE.

*Contents of Drawer No. 5.*

- | | |
|---|---|
| A, D, and E. One set splints, 6 for forearm, 4 for leg, 6 large coaptation, 4 small coaptation. | E. Eight pieces binder's bds., $2\frac{1}{2}$ by 12 in. |
| B. Two papers pill boxes, turned wood. | E. Razor strop, in case. |
| C. One pair pliers. | E. One file. |
| C. One gimlet. | F. Six penis syringes, glass. |
| C. One tape-measure. | F. One corkscrew. |
| D. Eight pieces binder's boards, 4 by 17 inches. | F. One set Aiken's tool pad. |
| | G. Eight oz. twine, $\frac{1}{2}$ coarse. |
| | H. One honc. |
| | H. One razor. |

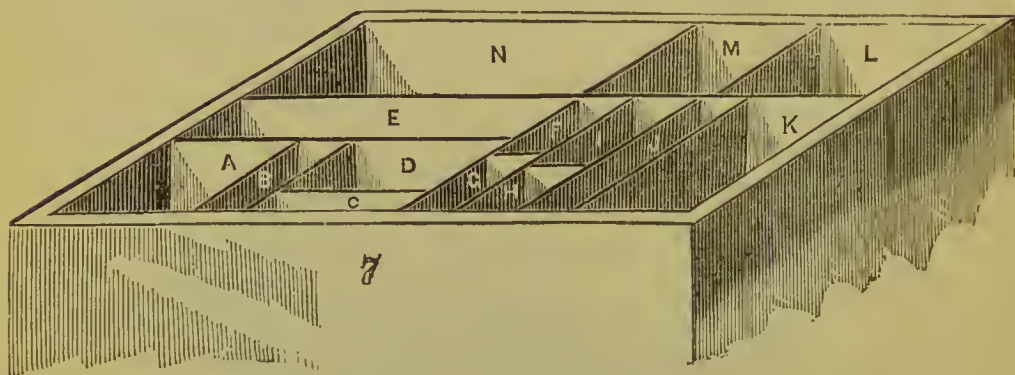
No. 6.—DRAWER IN DISPENSING CASE.



Contents of Drawer No. 6.

- | | |
|--|-------------------------------------|
| A. Two quires wrapping paper, white and blue. | F. Twelve cupping tins. |
| B. Two oz. ligature silk. | G. Two scissors, (large and small.) |
| B. One oz. linen thread, unbleached. | G. One pocket case. |
| C. Two papers pins. | H. <i>Vacant for sundries.</i> |
| C. Four pieces cotton tape. | I. One hundred printed envelopes. |
| D. Case containing 25 needles, 1 spool of cotton, and thimble. | J. One traveller's inkstand. |
| D. One yard gray silk, for shades. | I. Twenty-four steel pens. |
| E. Eight field tourniquets. | I. Two penholders. |
| E. Two screw tourniquets, with pad. | I. Six lead pencils, No. 2. |
| | I. One stiek sealing-wax. |
| | J. One sheep-skin, dressed. |

No. 7.—DISPENSING CASE.



This is an inside view of the ease, with the dispensing department in front, closed.

Contents of Dispensing Case.

- | | |
|---|---|
| A. One Wedgewood mortar. | J. One set prescription scales and weights. |
| B. Two dozen vials, six 6-oz., twelve 4-oz., three 2-oz., three 1-oz. | K. Two spatulas, 3 and 6 inch. |
| C. One pill tile, 6 by 8 inches. | K. Two glass urinals. |
| D. Eight oz. fine sponge, small pieces. | K. Eight suspensory bandages. |
| D. One tin funnel, pint. | L. Two lb. scraped or picked lint. |
| E. Five yards adhesive plaster. | L. Two and one-quarter yards oiled silk. |
| E. Four lb. patent lint. | L. Two and one-quarter yards oiled muslin. |
| E. Pestle for mortar. | M. Sixteen dozen roller bandages, assorted. Two doz. 1 inch by 1 yard; four doz. 2 inches by 3 yards; four doz. 2½ inches by 3 yards; two doz. 3 inches by 4 yards; two doz. 3½ inches by 4½ yards; one doz. 4 inches by 6 yards; one doz. 4 inches by 8 yards. |
| F. Four yards red flannel, all wool. | N. Ten lb. pressed tow. |
| F. Two medicine measuring glasses. | N. One doz. towels. |
| G. Two yards gutta-percha cloth. | |
| G. Five yards isinglass plaster. | |
| H. Eight doz. assorted corks. | |
| H. One glass graduated measure, 4-oz. | |
| H. One minim measure. | |
| I. Ten yards bleached muslin. | |
| J. Two cotton bats. | |
| J. One sheet cotton wadding. | |

*Articles in Dispensing apartment.**In the Front.*

- | | |
|--|---|
| Aromatic sulphuric acid. | Sulphate of alumina and potassa, (alum.) |
| Tannic acid. | Aromatic spirits of ammonia. |
| Spirit of nitrous ether, (sweet spirits of nitre.) | Purified chloroform. |
| Stronger ether, for anæsthesia. | Compound powder of opium. (Dover's powder.) |
| Strong alcohol. | Sulphate of morphia. |

Olive oil.
 Castor oil.
 Tincture of opium, (laudanum.)
 Camphorated tincture of opium.
 Acetate of lead.
 Bicarbonate of potassa.
 Creasote.
 Fluid-extract of colehicium seed.
 Fluid-extract of aconite root.
 Fluid-extract of ipecacuanha.
 Fluid-extract of seneka.
 Tincture of the chloride of iron.

In Right-Hand Side.

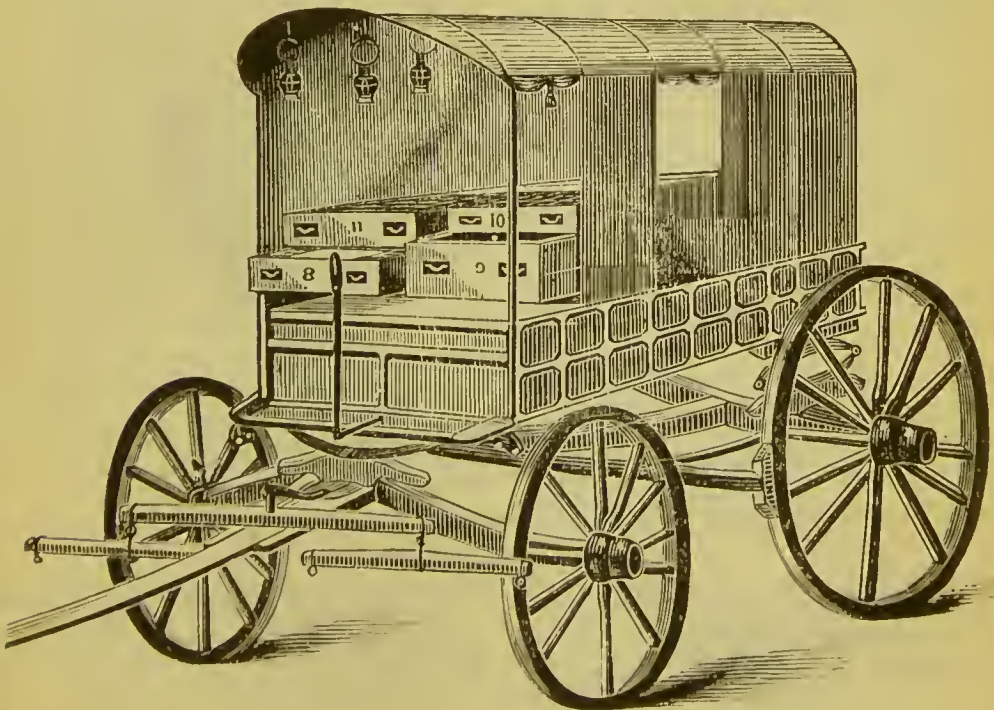
Comp. spt. of ether, (Hoffman's anodyne)
 Carbonate of ammonia.
 Solution of ammonia.
 Camphor.
 Collodion.
 Copaiba.
 Sulphate of eopper.
 Aleoholic extract of belladonna.
 Fluid-extract of cinchona, (aromatic.)
 Fluid-extract of ginger.
 Mereury with ehalk.
 Oil of turpentine.
 Croton oil.
 Permanganate of potassa.
 Solution of arsenite of potassa, (Fowler's
 solution.)
 Chlorinated solution of soda.
 Solution of ehloride of zine.
 Resin eerate.
 Simple cerate.

Solution of the subsulphate of iron.
 Pure glycerin.
 Chlorate of potassa.
 Iodide of potassium.
 Bicarbonate of soda.
 Whiskey.
 Syrup of squill.
 Pills of mercury, (blue-mass.)
 Ointment of the nitrate of mereury, (cit-
 rine ointment.)
 Powdered squill.

In Left-Hand Side.

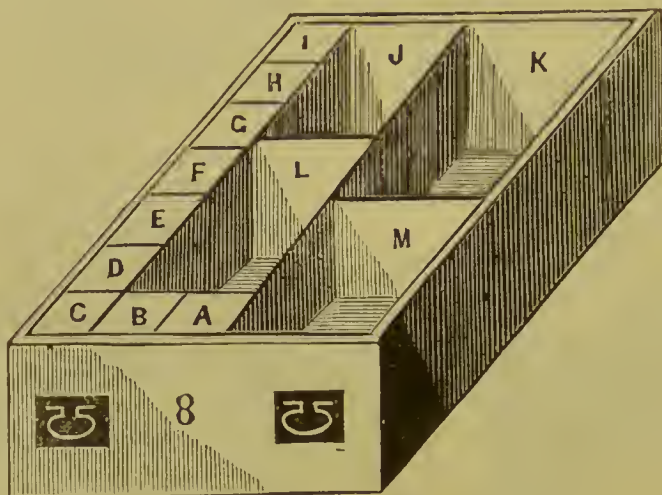
Powdered gum-arabic.
 Nitrate of silver, in crystals.
 Fused nitrate of silver.
 Sulphate of cinchona.
 Citrate of iron and quinia.
 Powder of subsulphate of iron.
 Iodide of iron.
 Powdered ipecacuanha.
 Powdered opium.
 Pills of eamphor (2 grains) and opium
 (1 grain.)
 Compound eathartic pills.
 Opium pills.
 Pills of sulphate of quinia, (3 grains.)
 Sulphate of quinia.
 Powdered Roehelle salt.
 Sulphate of zine.
 Blistering eerate.
 Powdered eomound extract of colo-
 eynth.

FRONT VIEW OF MEDICAL WAGON.



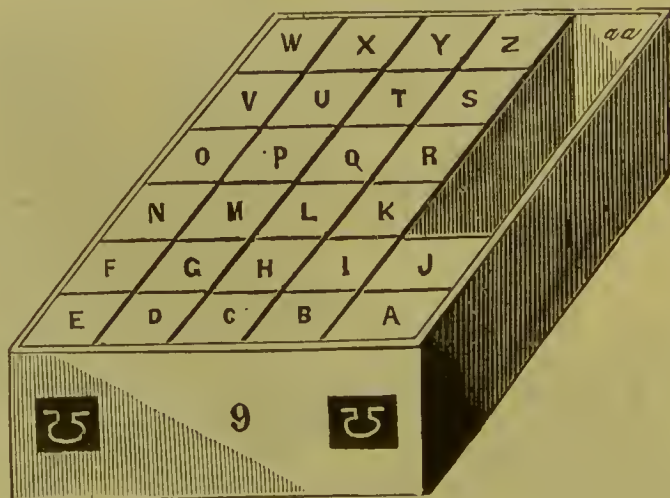
The preceding ent represents a front view of the wagon. Inside of the wagon, attached to the second bow, hang from the top three box-lanterns, always ready for use. Of the two front boxes the lower is large and contains no drawers or partitions, and is used for holding the bed-covers, pillow-ticks, and such articles. The lid of this box forms the driver's seat; the upper box recedes about 14 inches and forms a back for the driver. This box contains four drawers, as follows:

No. 8.—DRAWER.

*Contents of Drawer No. 8.*

- | | |
|--|-----------------------------------|
| A. Eight oz. solution of arsenite of potassa, (Fowler's solution.) | F. Eight oz. pure glycerin. |
| B. Eight oz. aromatic sulphuric acid. | G. Pill of mercury, (blue-mass.) |
| C. Eight oz. fluid-extract of ipecacuanha. | H and I. <i>Empty bottles.</i> |
| D. Eight oz. fluid-extract of seneka. | J. Eight lb sulphate of magnesia. |
| E. Eight oz. tincture of the chloride of iron. | K. Eight lb flaxseed meal. |
| | L. Ten lb farina. |
| | M. Twelve lb white crushed sugar. |

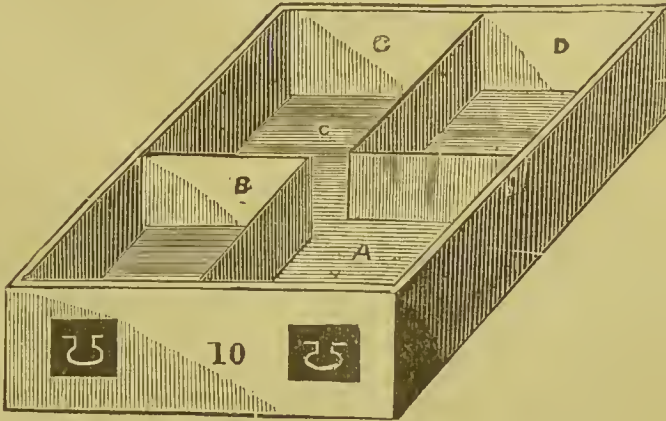
No. 9.—DRAWER.

*Contents of Drawer No. 9.*

- | | |
|--|---|
| A. Sixteen oz. compound spirits of ether. (Hoffman's anodyne.) | C. Sixteen oz. tincture of opium, (laudanum). |
| B. Sixteen oz. fluid extract of ginger. | D. Sixteen oz. camphorated tincture of opium. |

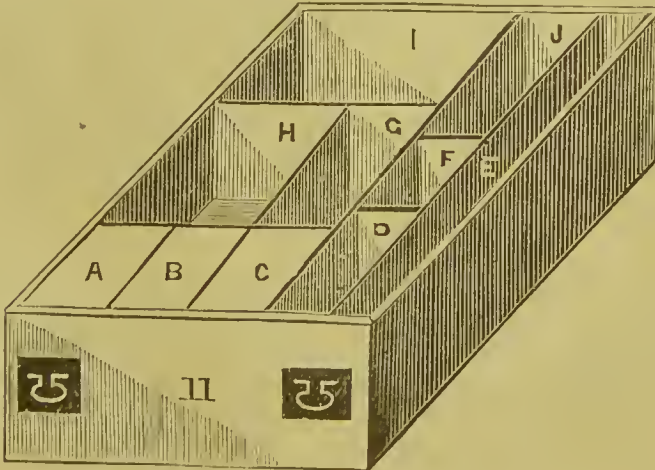
- E. Sixteen oz. chlorinated solut'n of soda.
 F. Sixteen oz. solution of chloride of zinc.
 G. Four lb. syrup of squill, (part in drawer No. 2).
 H. Eight oz. tartarie acid, powdered.
 I. Sixteen oz. subnitrate of bismuth.
 J. Eight oz. ground cayenne pepper.
 K. Sixteen oz. powdered Rochelle salt.
 L. Eight oz. sulphate of alumina and potassa.
 M. Eight oz. mercury with chalk.
 N. Eight oz. powdered ipeecacuanha.
 O. Eight oz. compound powder of opium, (Dover's powder.)
- P. Eight oz. acetate of lead.
 Q. Eight oz. bicarbonate of potassa.
 R. Eight oz. chlorate of potassa.
 S. Eight oz. iodide of potassium.
 T. Eight oz. bicarbonate of soda.
 U. Eight oz. nutmegs.
 V. Eight oz. powdered gum-arabic.
 W. Eight oz. carbonate of ammonia.
 X. Eight oz. camphor.
 Y. Eight oz. powdered opium.
 Z *Empty bottles.*
- A. A. Eight lb. Castile soap.

No. 10.—DRAWER.

*Contents of Drawer No. 10.*

- A. Two tin basins, small, for dressers.
 A. Three wash-hand basins.
 B. *Vacant for sundries.*
 C. One metal bed-pan.
 D. *Vacant for sundries.*

No. 11.—DRAWER.

*Contents of Drawer No. 11.*

- A. Three lb. simple cerate.
 B. Twenty-four oz. sulphate of cinchona.
 C. Sixteen oz. mercurial ointment.
 D. One smoothing plane.
 E. One saw.
 E. One hatchet.
- E. One nutmeg grater.
 F. Four oz. white wax.
 G. Six lb. ground black mustard seed.
 H. Five lb. black tea.
 I. *Vacant for sundries.*
 J. Two lb. candles, half length.

No. 12.

Box used as the driver's seat, and contains :

Two doz. planed splints.	Fifteen bed-sacks.
Twenty gray blankets.	Fifteen pillow-cases, white.
Two blanket cases, canvas.	Two leather buckets.
Eight gutta-percha bed-covers.	One coffee mill.

Strapped on the inside of the wagon are two camp-stools. On hooks attached to one of the wagon-bows are three lanterns. On the outside are four hand-litters. Under the wagon is an amputating table.

LETTERS OF TESTIMONY.

It will be noticed that the few objections mentioned in the following letters have been removed in the improved wagon :

HEADQUARTERS 3D DIV, 3D CORPS, OFFICE OF SURGEON-IN-CHIEF, *March 14, 1864.*

SIR: Agreeably to your request for my opinion upon the "Perot Wagon," with reference to its adaptation to the wants of the army in the field &c., it gives me pleasure to say that I have used one for the last seven months, with entire satisfaction, for its strength, systematic arrangement of the medicines, hospital stores, &c., a place for every article, convenient and easily found when wanted. The packing is complete, and I have never found a broken bottle in it, notwithstanding the many and severe jars received whilst passing over rough roads.

It is not very liable to be upset, the only case coming to my notice was the "Perot" of the 1st brigade of this division, which was caused by the carelessness of the driver running the wagon over a stump on nearly level ground; nothing was broken connected with it but the bows in the top.

The simplicity of the running gear makes it an easy matter for a common mechanic to construct and supply the broken part when necessary.

It is drawn easily over muddy roads by six mules.

I am, respectfully, your obedient servant,

JOHN J. JAMISON,

Surgeon 86th N. Y. V., Surgeon-in-chief 3d Div., 3d Army Corps.

T. MORRIS PEROT, Esq., *Philadelphia.*

HOSPITAL 3D DIVISION, 3D CORPS, *March 7, 1864.*

DOCTOR: Having been asked my opinion in regard to the Army medical wagons furnished by T. Morris Perot & Co. I have to state that one of these has been under my charge for the last seven months, and I have had thorough opportunities of observing its fitness for service, and it gives me great pleasure to say that I have found it in every way safe, reliable, strong and convenient—in a word, entirely satisfactory as a means of transportation for medical supplies. As an instance of the manner in which the contents of their wagons are packed, I refer to an accident befalling mine in the Rapidan campaign, December 1. 1863. This wagon was upset by the carelessness of the driver running it over a stump upon a perfectly smooth road, thrown upon its side, and one of the boxes thrown completely out; but in spite of this none of the bottles were broken, and none of the contents of the wagon in the slightest degree injured.

I have had an opportunity of observing the Autenrieth wagon, and my opinion is that the "Perot" is in every way superior to any other medical wagon.

I have the honor to be, your obedient servant,

WILLARD A. CHILD.

Surgeon 10th Vt., Surgeon-in-chief 1st Brig., 3d Div., 3d Corps.

To JOHN J. JAMISON, *Surgeon U. S. V.*

CAMP NEAR BRANDY STATION, VA., *March 14, 1864.*

I do hereby certify that I have used "Perot & Co's. medical wagon" since July last, with much satisfaction. Its advantages over the Autenrieth are in my opinion very great; whereas, while using the latter, a march was never accomplished without the overturning of the medicine wagon, which accident caused its abandonment by the roadside; the Perot wagon I have, has never been upset or delayed, although it has been in use on some of the worst roads an army is ever called to move over. Although a little heavier than the Autenrieth, the Perot is easier for the horses to draw, since the load is more suitably arranged in the bottom of the wagon, which arrangement also secures safety from it being easily overturned. It is more convenient for the dispensing of medicines, and has spare room for the necessary forage for the horses, a consideration not provided for in the Autenrieth.

C. C. JEWITT,

Surgeon 16th Mass. Vols., Surgeon-in-chief 1st Brigade, 2d Div., 3d Army Corps.

CULPEPPER COURT-HOUSE, VA., *April 24, 1864.*

Messrs. T. MORRIS PEROT & Co.:

GENTLEMEN: I owe you an explanation for not answering your note sooner. I obtained a leave of absence in March, and on my return to the Army found many changes which have kept me and my subaltern very busy, so much so, that I have been unable to obtain written opinions on the subject mentioned in your note. But I have asked a number of the medical officers what they thought of the internal arrangement of your wagon, and as a general rule they have expressed themselves satisfied, but object to the size and weight of the wagon and the amount of supplies. I think myself that a light wagon, with your arrangement, might suit better than the present Autenrieth, but should like to see one tried on the march before giving a definite opinion.

I remain, gentlemen, very respectfully, your obedient servant,

JOHN J. MILHAU, *Surgeon, U. S. A.*

HEADQUARTERS 2D DIV., 6TH CORPS, *March 12, 1864.*

In my opinion the Perot wagon is the best for transportation of medical supplies in the service, it being less liable to upset and more readily repaired in case of accident than the Autenrieth. If the internal arrangements could be altered so as to allow more space for dispensing purposes, nothing better could be used for a field medical wagon. This division has the only Perot wagon in this corps.

Very respectfully, your obedient servant,

S. J. ALLEN,

Surgeon, 4th Vt. Vols., Surgeon-in-chief 2d Div., 6th Corps.

HEADQUARTERS 2D DIVISION, 3D CORPS, SURGEON'S OFFICE, *March 10, 1864.*

I certify that for the last seven months I have used a "Perot" wagon in 2d Brigade, 2d Division, 3d Corps. It has been drawn by four horses and gone through exceedingly rough and bad roads without injury; has not been troublesome by being *top heavy*, and has never been upset.

The internal arrangements are more complete than those of the "Autenrieth," and in my belief are of greater utility in field service.

If a larger space could be given inside for dispensing purposes, much advantage would be gained.

C. K. IRWIN,
Surgeon 72d N. Y. V., Acting Surgeon-in-chief, 2d Div., 3d Corps.

HEADQUARTERS 1ST ARMY CORPS,
MEDICAL DIRECTOR'S OFFICE, *March 12, 1864.*

MR. T. MORRIS PEROT :

SIR : One of your army medical wagons has been used nine months in the artillery brigade of this corps. I consider it the most perfect wagon of this kind now in use, the only weak point being the springs.

It never has overturned. The mode of packing appears perfect, and no bottles ever have broken in transportation.

Very respectfully, your obedient servant,

J. THEO. HEARD,
Surgeon U. S. Vols., Medical Director 1st Army Corps.

HEADQUARTERS 1ST DIV, 2D CORPS, SURGEON-IN-CHIEF'S OFFICE,
NEAR BRANDY STATION, VA, *March 30, 1864.*

T. MORRIS PEROT, Esq. :

SIR : I have been surgeon-in-chief of two brigades, beginning in October, 1862. I received an Autenrieth for the 3d Brigade, nearly new; I also received one for the 4th Brigade, second hand and badly used up. It broke down and was abandoned on our return from Gettysburg; but I sent back an ambulance and brought up the *box*, and it has been carried in an ambulance until condemned as unserviceable about a month ago, and one of your wagons ordered to be furnished in its place. The 1st and 2d Brigades of this division also have an Autenrieth each. The ambulance officer who had them in charge on the march complained that it was more trouble to get them through than all his ambulances; that they were always breaking down or upsetting. When we arrived at this camping-ground not one of them was in a condition for the road, and they would have to be abandoned if we moved before they could be repaired; the wagon and running gear was too weak for the load and the roads that we find in Virginia. This objection has been remedied I understand in the new and improved ones, but I have not seen them. No objection of this kind can be made to your wagon. It is as strong as any army wagon, and can go through any kind of rough usage; is not liable to upset; the whole load is in the *body* of the wagon, and not in the top, as in the Autenrieth. In this your wagon has decidedly the advantage. When on the march it is often necessary to go into the wagon for some article of medicine or dressing,—with the Autenrieth this is out of the question, unless it drives out of the train, thereby losing its place. In this respect your wagon also has the advantage, for it can be entered and a prescription put up without stopping a moment.

In the internal arrangement each has some advantages over the other; but even in that I think I would prefer yours. I am alluding to your old wagon, for the one we have has been in the corps ever since last summer. Improved as you describe I should unquestionably give it the preference over the improved Autenrieth for its general convenience while in camp, decided advantages while on the march, both as to convenience and capacity for transporting a large amount of supplies, therefore not requiring replenishing so often, and its strength and durability securing it against abandonment on a march.

My steward, who has been with the two brigades during the whole time I have had the two Autenrieth's and now has yours in charge, says he likes yours best, and he is better able to judge of the relative advantages of the two wagons, for he does all the work connected with them and travels with them on the march; in fact the wagon is his castle, office, workshop, &c, after we break camp, and his retail drug establishment while in camp.

I have the honor to be, very respectfully, your obedient servant,

D. H. HOUSTON,
Surgeon-in-chief, 1st Div., 2d Corps, Army of the Potomac.

HEADQUARTERS 2D CORPS, MEDICAL DIRECTOR'S OFFICE, *April 17, 1865.*

DEAR SIR : I have delayed answering till I could get the opinions of my division surgeons; they unite in thinking that on many accounts, and chiefly because it is the strongest and least likely to break down on the march, yours deserves the preference.

I am free to confess, however, to a kindly feeling towards the Autenrieths, as we were indebted to them for very timely and valuable assistance before yours came out.

I have not yet had an opportunity of examining the new Autenrieths, but if they have been hung low I fear there will be some difficulty in getting them through the stumpy fields of this part of Virginia. On the whole I should prefer yours as less likely to fail us in any emergency.

Very respectfully, your obedient servant,

A. N. DOUGHERTY,
Surg. U. S. A. Med. Dir. 2d Corps.

HEADQUARTERS 1ST DIV., 3D CORPS,
OFFICE OF SURGEON-IN-CHIEF, *March 14, 1864.*

This is to certify that I have examined the Perot medical wagon, though I am not qualified from use of it to certify to its intrinsic or comparative merits; with the advantages of large experience I have conceived that it is impracticably heavy and cumbersome for field service. I unhesitatingly subscribe to its admirable arrangement and convenience to the supplies. I am of the opinion that a reduction of

the articles carried and a larger open space for dispensing or other purposes allowed in the wagon would greatly improve its utility. With the objectionable features indicated remedied, I would regard it unsurpassed as a medical wagon for the army.

J. H. THOMPSON,
Surgeon 124 N. Y. V., and Acting Surgeon-in-chief 1st Div., 3d Corps.

HEADQUARTERS 3D ARMY CORPS,
OFFICE CHIEF AMBULANCE CORPS, *March 14, 1864.*

T. MORRIS PEROT, Esq.:

SIR: In reply to your request asking my opinion as to the fitness of the Perot medical wagon and the number of animals required to transport the same, I would state that I have ten of the medical wagons in question under my charge and have found them adapted for the purpose for which they were designed.

I have never known but one to upset; that ran off an exceedingly unsafe bridge and fell into the ravine below, (occasioned by the mules becoming ungovernable,) without injury to the wagon or the contents so far as I know.

Very respectfully, your obedient servant,
AMOS WEBSTER,
Captain and Chief of Ambulance Corps, 3d Corps, Army of the Potomac.

HEADQUARTERS SECOND ARMY CORPS,
OFFICE CHIEF OF AMBULANCE CORPS, *March 12, 1864.*

T. M. PEROT:

SIR: I have the honor to state the following in regard to the medical wagons now used in this corps: There have been used in this corps both Perot and Autenrieth wagons, of which in my opinion the Perot is far superior in every sense of the word; it is more durable and better supplied, and also not so liable to upset. I have as yet never known one to be turned over. My opinion is that as an army wagon it is superior to any wagon now in use, as it is more easily repaired, &c.

I have known Autenrieth's to upset frequently.

Very respectfully, your obedient servant,
JOHN G. PELTIN,
1st Lieut. and A. C. of A., 2d Army Corps.

HEADQUARTERS 1ST DIV., 3D CORPS, AMBULANCE OFFICE, *March 12, 1864.*

DEAR SIR: In answer to your request of the 11th inst., as to whether I have ever had or known a Perot medical wagon to upset, and if so, under what circumstances; I take pleasure in replying that I have had three Perot medical wagons in my command since August last. I have used them on all kinds of roads and under much difficulty in travelling, and do not find them any more liable to upset than the ordinary army wagon. I have never heard of one upsetting through any fault in the construction of the wagon.

The Autenrieth wagons used by me through the Gettysburg campaign were a source of constant trouble from their weakness, some one of them breaking down every two or three days. If the springs on your wagon could be made stronger, I should consider them as good as could be furnished for the uses for which they are designed.

Very respectfully,
JNO. R. PANCOST,
1st Lieut. and A. A. Quar. Amb. Corps, 1st Div., 3d Corps.

To T. MORRIS PEROT.

OFFICE OF REPAIRS, ARMY POTOMAC, INGLES SIDING, *March 14, 1864.*

Mr. PEROT:

DEAR SIR: In reply to yours of the 12th instant, requesting me to inform you how many wagons of the T. Morris Perot pattern had been repaired at the shops of Captains Pierce and Strang, I have the honor to inform you that I know of but five ever having been so repaired. In each of these cases the springs only were the parts needing repair, no wood-work being required.

I am, sir, very respectfully, your obedient servant.

H. R. ALLEN, *General Superintendent.*

AMBULANCE CORPS, 2D DIV., 6TH CORPS, *March 12, 1864.*

Mr. T. MORRIS PEROT:

SIR: In accordance with your request I would most respectfully state that the wagon of your make now in use in my train was drawn in May, 1863, and has been in use up to the present time. I consider it one of the best wagons of its nature now in use. There having been some complaint in reference to this wagon being top heavy, I would most respectfully say that on the night of our march through Massassas Gap, on account of darkness, the driver ran over a ledge six or eight feet in fall, without any injury to the wagon, except breaking two bottles of whiskey in the front chest, (where they did not belong.) I have never known of one of these wagons upsetting except in the above instance.

I am, sir, most respectfully, your obedient servant,

GEORGE E. WOOD,
1st Lieut. Commanding Ambulance Corps, 2d Div., 6th Corps, and A. A. Q. M.

HEADQUARTERS 3D DIV., 3D A. C., OFFICE CHIEF AMB. OFFICER, *March 11, 1864.*

Mr. PEROT: I have had four of your medical wagons in my train since July last, and have never known them to upset or found any difficulty in getting them along with six mules. I have never known them to upset in the corps.

Yours, very respectfully,
H. D. BOOKSTARER,
1st Lieut. and A. A. Q. M., Amb. Corps, 3d Div., 3d A. C.

HEADQUARTERS AMBULANCE CORPS, 1ST DIV., 2D CORPS, *March 12, 1864.*

Mr. PEROT:

SIR: I have had one of your medical wagons in my train from four to six months, and have never had any difficulty on the march. Never upset, or in any way difficult to transport with six horses.

Yours, &c., respectfully,
 T. C. CHASE,
2d Lieut., 26th Mich. Vols., Com'd'g Amb. Corps, 1st Division, 2d Army Corps.

HEADQUARTERS 3D BRIGADE, 2D DIVISION, 3D CORPS, *May 11, 1864.*

Mr. PEROT: I have been on the march with your Perot medical wagon since last August, and have never known it to upset or any difficulty in getting it along with four horses. It is certainly much better than the old ones on account of its strength and durability, and have never known one to upset in our corps.

Yours, very respectfully,

MERRITT BRUEN,
Lt, Amb. Officer, 3d Brigade.

