

COATING METALS AND METALLIC COMPOUNDS.—Messrs. Morewood and Rogers have secured their patent for improvements in the manufacture, shaping, and coating of metals, and in the means of applying heat. These improvements consist of a method of coating zinc with lead; a mode of coating zinc, or hard alloys of that metal, with lead, tin, or alloys thereof; the extension into sheets of zinc coated with lead, &c. by immersion; the use of sand, mixed with sal ammoniac or other suitable chloride, as a flux, when coating metals such as iron with zinc; the use of a lighter metal floating on the surface of a heavier one for coating purposes; the coating of wire, wire chains, &c.; the manufacture of tubes from black iron, and coating the same with zinc or other metal; the forming of grooves, or indentations, in the ends of eave and other gutters, by which they will be strengthened, and the facility of uniting lengths of them together increased; and the producing of a flute or flutes, across the ends of plates of corrugated iron, in order to facilitate the formation of joints when several such plates are employed for covering roofs and other similar purposes; and lastly, the fixing or employing a fan or blower in the flue of a furnace for melting metals for coating purposes, at a point after or behind the fire, in order to draw away the smoke and products of combustion.

SINGULAR ACCIDENT ON THE NORTH KENT RAILWAY.—On Saturday last what is considered to have been a waterspout passed over, or rather poured down, a deep shaft communicating with the two-mile tunnel cut through the chalk hills extending from Frindsbury to Higham, and not only flooded the line of railway now laid down in the old line of the canal for which the tunnel was cut, but washed down both the brickwork and chalk in such quantities as completely to choke up the line, through which a passenger-train was running at the moment. Having an attentive driver, the engine was stopped just in time, and the motion reversed, so that most fortunately no one was injured.

ST. LUKE'S, CHELSEA.—BATING OF CREMORNE GARDENS.—On Saturday a meeting of magistrates was held at the board-room for the purpose of hearing appeals against the new assessment made by Mr. Payne, the surveyor, under the direction of the Poor-law Commissioners. Mr. Simpson, the proprietor of Cremorne Gardens, appealed against his assessment, which had been increased from 1884 to 740l. At the last sitting the appeal was adjourned by direction of the magistrates, with a view of the surveyor coming to an amicable arrangement with Mr. Simpson. The surveyor now proved the data from which he took his valuation of 740l. Mr. Simpson agreed to be assessed at 450l. but submitted that the tap ought to be separated in the assessment from the gardens, the latter being open not more than from four to five months during the season; and as the rates in Chelsea were made twice a year, that it was hardly fair to saddle him with a twelve-month's rate upon the whole of the property. The bench, after some consideration, settled the assessment at 400l.

COUCH'S PATENT ROCK-DRILLING MACHINE.—A rock-drilling machine, now at work on Taylor's Lodge, Somerville, United States, is thus described by a Boston paper:—"The machine consists of a small upright boiler, placed on wheels so as to be easily moved from place to place; to which is attached a small steam-engine, so contrived that it can be set in any required position. The piston-rod of the engine is made hollow, and through this and the cross-head the drill passes perfectly free. In the cross-head of the engine is placed a simple apparatus for seizing, turning, and throwing the drill. The motion given to the drill is the same as in hand drilling, where the 'churn-drill' or 'runner' is used. The machine strikes from 150 to 200 blows per minute, according to the activity of the steam power; and in the peculiarly hard rock of the ledge on which it was at work, it settled a 3-inch perfectly round hole at the rate of about half an inch a minute. By computation

this machine, it is said, will do from sixteen to twenty men's work, at an expense of from three to six dollars per day. The probable cost will be short of a thousand dollars. It is said to drill a horizontal hole as easily as a vertical one. Indeed, this is one material advantage of the machine, that it can drill at any angle, from horizontal to vertical.

AN ARCHITECT, like a poet, is a public character. His works are published for the world, and the world is his critic. No one receives praise more universal when it is merited; and he who labours for praise must, if he misses it, learn to endure censure. Let him who may shrink under criticism, recollect that he is thus ranked among the finer spirits of the world, and that he has thrown his lot, not as an artisan, but for the chance of lasting reproach or permanent fame. The public at large has a claim over the architecture of a country. It is common property, inasmuch as it involves the national taste and character; and no man has a right to pass himself and his own barbarous inventions as a national taste, and to hand down to posterity his own ignorance and disgrace, to be a satire and a libel on the knowledge and taste of his age.—*Highlands of Scotland.*

DEATH OF MR. J. W. ALLEN.—Our readers will have heard with regret of the death of this able artist, whose works must be well known to all who visit the Suffolk-street gallery. He died at his residence in Hammer-smith, on Thursday last week, and leaves, we are sorry to say, a wife and young family wholly unprovided for.

A NEW APPLICATION OF SCIENCE.—It is no long time since the public press of this town had to call attention to the discovery of our townsmen, Mr. Spencer, namely, the deposit of metals by electricity. Much interest was expressed at the time by the scientific and curious, for it was seen that a new power was developed; but few, if any, realised even in their own minds the extent and diversity of its commercial application. We have now become familiar with the freedom it has given to the designs of silver-plated wares; but it was little expected that, through its agency, cast-iron could be invested with the beauty of rich antique bronze. Such, however, is the fact. This invention must prove an era in the iron trade, as it opens out a field for its use in articles of ornament which it has never hitherto had.—*Liverpool Mercury.*

THE NEW HOUSE-DUTY.—A return to Parliament has just been issued showing the number of houses valued at 20l. and upwards, the number of those which pay house-tax at sixpence and ninepence in the pound, with other information on the same subject. In England and Wales there are 179,234 houses charged at sixpence; and in Scotland, 6,377. The amount of duty in England and Wales is 200,182l. 19s. 2d.; and in Scotland 5,288l. 11s. 9d.; making 205,471l. 10s. 11d. at sixpence; while at ninepence in the pound there are 252,213 houses in England and Wales producing 463,204l. 4s. 8d.; and in Scotland, 24,095 houses at 38,340l. 17s. 1d.; making the ninepence duty 501,545l. 1s. 9d. The total amount of duty is stated at 707,016l. 12s. 6d. The return, which was obtained by Mr. Goulburn, contains the number of houses in some of the principal towns rated at 10l. and other sums.

TENDERS

For a public-house and two houses for Mr. Brown. Mr. T. Mansford, architect:—

Millington	22,153	0	0
Ashdon	2,140	0	0
Colby	2,084	0	0
Langridge	2,081	0	0
Frown	2,043	0	0
Wood	2,000	0	0
Hudon (accepted)	1,989	0	0

For houses, at Winkfield, near Windsor. Mr. F. Stent, architect:—

Brown, London	23,914	6	8
Wilshire, London	2,480	13	0
Snowball, Slough	2,394	10	3
Holls, Windsor	2,381	10	0
Manning, London	2,310	0	0
Tilcombe, Windsor	2,174	4	6

The Contract No. 1, for Birmingham sewers, has been taken by Mr. William Hill of London.
The Contract No. 2, for Birmingham sewers, has been taken by Mr. Hanbecow, of Wolverhampton.

TO CORRESPONDENTS.

"J.C." "H.B." "W.P." "D.B." "O.B." (forwarded), "W.E." (publication seems simply to have the effect of benefiting the under-writer), "E.B." (we do not understand the inquiry sufficiently to answer it), "W.P.G." "P." "F.E." (we cannot allow such instances to weigh. It is not our custom to give reasons), "Reader." "Demom." (we are unable to advise without examination), "O.B." "R.A." (M.H. has been destroyed; we cannot undertake to return such communications), "G.B." (we have no reason to doubt our reporter's accuracy), "R.O." (under our mark), "P.Q." (ditto), "L.T." "L.P." "Mr. Q." "G.H.S." "T.M.F." "Borona," "B.L.T." (not advisable), "A.H.G." "H.J.D." "Q.E.D." (we are not in a position to comply at this moment, but shall return to the building hereafter. The subject suggested is a good one, and the paper would doubtless be acceptable.)

"Books and Addresses."—We have not time to point out books or find addresses.
NOTICE.—All communications respecting advertisements should be addressed to the "Publisher," and not to the "Editor;" all other communications should be addressed to the Editor, and not to the Publisher.

ADVERTISEMENTS.

LIGHTNING CONDUCTORS.
R. S. NEWALL and Co's PATENT COPPER ROPE.
3-6ths diameter, 7½ per 100 feet.
Office, 110, Strand, London.
Manufactory, Gosham-son-Tyne.

SIR W. S. HARRIS'S LIGHTNING CONDUCTORS.
THE public attention, as well as that of Church Buildings and those interested in the preservation of churches and all ecclesiastical buildings, is called to the very numerous recent disastrous effects of the heavy thunder-storm which prevailed. THOS. W. GHAY, 79, King William-street, City, London, respectfully announces that he is the only person authorised by Sir W. Harris to apply his Lightning Conductors, and who will not be responsible for their application by any other persons. The peculiar form and independence of these Conductors is such as to enable every of any amount of electric fluid, as excited in every unobstructed immensity of sea, both in the navy and mercantile service as well as in buildings; and to show the importance of these Conductors. It may be stated that the First General Meeting of the Great Exhibition was awarded for them.
Mr. T. W. GHAY will be happy to supply any information that may be desired, and to furnish estimates of the cost for fitting the Conductors.

PATENT PAPER-HANGINGS, from the Original French Designs. All the Machine Papers of Latest-style Fines.
SATINS, FLOCKS, GOLD, MARBLE, OAKS, AND GRANITE.
Large Elegant Borders and Fillings for Decorations, equally new.
LINING-PAPER at HILL PRICES.
Builders and the Trade, Country Dealers, and Exporters, will find the LARGEST MANUFACTURED STOCK of the LOWEST PRICES in the Kingdom, at
L. HARRIS and Co's Manufactory and Importers, 2, Great Queen-street, St. Paul's Church-yard, London, and Coaches of the principal Parisian Manufacturers.
ESTABLISHED 1834.

PAPER-HANGINGS, by E. T. ARCHER'S
patented Machine, Blocks, Cylinders, and Artificial Labour, at his Manufactory for all kinds of papers adapted for interior decorations. **PANELLED DECORATIONS** fitted up on the walls of houses, extensive Show Rooms, in every latest style, and for all purposes, by articles of known merit.
Always on hand a CHOICE and EXTENSIVE SELECTION of FRENCH PAPERS from the best manufacturers in Paris.
Attached to the paper-hanging factory there is the elegant assortment of CABINET FURNITURE in London, of the best and most superior goods of the best fabric, Brummie, mahogany, &c. per yard; flower glass, the best that can be made, cut to any dimensions, 1s. 6d. per yard; silk and wood cuttings of the finest fabric, 6 feet wide, 6s. per yard.
E. T. ARCHER, 41, Oxford-street.

PAPER-HANGINGS.—E. HORNE, PAPER-HANGING MANUFACTURER, at Grosvenor-street, City, London, and builders and trades to inspect his extensive stock of NEW DESIGNS in PAPER-HANGINGS, which, by the aid of powerful machinery, he is enabled to offer at the following prices, in such quantities, for cash only, viz.:—

Finest lining paper	6d. and 7d. per roll
Superior dyes	6d. and 7d. per roll
Bed-room papers	6d. and 7d. per roll
An excellent oak paper	6d. per roll
Flower glass in blank ground	1s. 6d. to 1s. 8d. per yard
Flower glass in various patterns	1s. 6d. to 1s. 8d. per yard
Wood cuttings	6s. 6d. to 6s. 10d. per yard
Flower glass	6s. 6d. to 6s. 10d. per yard
Hand-made granite	6s. 6d. to 6s. 10d. per yard

Every variety in French and English panelled decoration always on hand; also excellent imitation of heavy woods.
N.B. Patterns sent into the country, by post, showing the style and quality of the above, on receipt of two stamps, and the costs despatched with promptitude on receipt of a remittance to the amount of the order given.

ROYAL COLOSSUM (every MONDAY at 1/2 HALF PRICE.)—The Pantheon of London, Saloon of Sculpture, Conservatory, Gothic Aviary, Bayes Colonnade, &c. Open daily from half-past Four till Five o'clock. In the Evening, Open from 10 till Ten. Early Notice, that the whole establishment brilliantly illuminated on Monday and Tuesday evenings. Children and Schools half-price.

CRYSTAL PALACE (Admission 1s.)
At the CRYSTAL PALACE, Albany-street, daily at Three, Evening at Eight o'clock. Seven steamboats Tableaux of the Great Exhibition and the collection of the Great Exhibition, from original studies, and on a scale nearly equal to the original. Reserved seats, 1s.

PATRON.—H. R. H. PRINCE ALBERT
ROYAL POLYTECHNIC INSTITUTION.
By J. J. GARDNER, Esq. Gold, and on the Australian Gold Districts.—By Dr. Buchanan, on the Patent Polytechnic Gas Fire; and on the Mode of Preserving Fruit Provisionally Illustrated by Experiments from Gases. Exhibited in Metal, and Samples of Textures of Solidified Preserved Milk, and Moore's Patent Concentrated Milk.—By Mr. Cropper, on Mineral Water Necessity, by George Buchanan, Esq. on the Utility of the National Varieties, with Vocal Illustrations from Mrs. St. John. The Great Exhibition of 1851. The Diamond Ring, &c. &c.—Admission, 1s. Schools, and Children under 10 years of age half-price. Full hours on Programme.