

## Scientific Museum.

## Our Sculptors--Patents for Designs.

"There are more oppressions among us than we stop to think of. While classes of artisans, under this government of equal rights, are substantially deprived of their rights, year after year, when a half hour on the part of Congress, at any time within the last half century, would have sufficed to correct the evil, and society would not have been injured. We refer particularly to the condition of authors and sculptors. True, authors are allowed to copyright their works at a moderate charge; but as publishers are also allowed to steal freely from all writers, not American, they prefer to do so instead of buying. Sculptors are still worse off. They are allowed, we believe, to enter their designs in the Patent Office, at an expense of thirty dollars and contingencies, and a vexatious loss of time. But this, in most cases, amounts to a total denial of the right of property. Heavy works do not need the shield of the Patent Office, and the lighter ones will not warrant the cost. Let us illustrate: in 1850, a meritorious artist came to this city, from a distance of several hundred miles. His errand was to model the features of a prominent citizen of the Republic, then temporarily a resident among us. Together with others, we watched the slow progress of the work, month after month, until the dead insensible clay had put on the habiliments of life, and stood forth the representative and likeness of one of the first military chieftains of the age. Six months' time, toil, skill, genius, hope, and bread, were all embodied and involved in the production. Why did he not secure it in the Patent Office? He could not wait, and he had no thirty dollars. Copies were produced and put into the market. Ten or fifteen were sold; when other copies made their appearance in the streets, at the mere price of casting, and the sales of the artist were at an end. As justice was administered among us, to sculptors there was no help. Any one was at liberty to make a mould, cast the busts, and sell them.

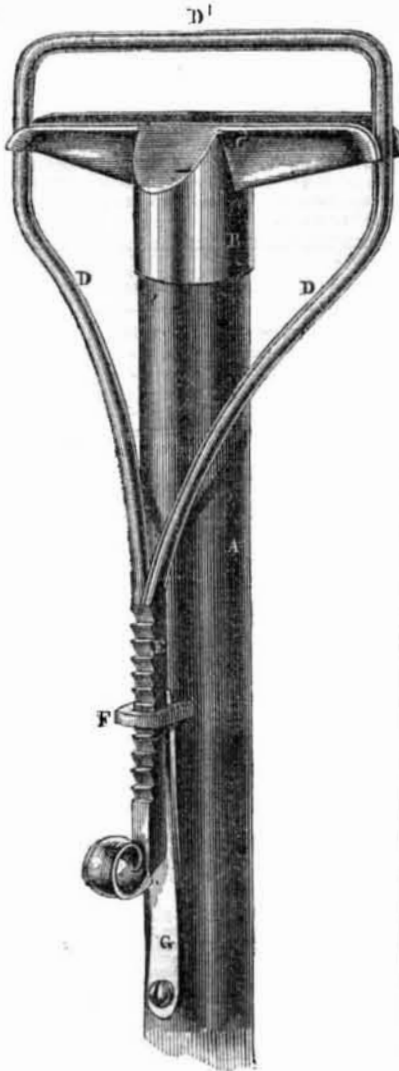
Again, this same artist is still with us, and about the time of the death of Webster, he produced a fine medallion likeness of the great man. A large number of copies were ordered for New Orleans. They were sent. Some accident delayed their arrival for a few days, and ere they reached their destination the plaster-workers of that city were hawking copies of the work about the streets.

We refer to these incidents in particular, because we happen to know them. Our other sculptors, no doubt, here and elsewhere, could furnish parallels. The question now is, how long is this state of things to continue? Another three-quarters of a century? Or will Congress spend a few minutes in setting it right? A convenient way would be to allow sculptors to register their productions, as books, and maps, and charts are registered."

[The above is taken from one of our city exchanges,—it is not copied by us for the purpose of criticism, but for the correction of error. If the artist spoken of had sent a copy of his bust, when completed, and a drawing of it, with his claims, in proper form, and a fee of \$15 (not \$30), to the Patent Office, his design would have been protected. There was no necessity to wait—not any; the law throws its protective claims around the work of the artist or inventor, from the date of his application; this is our understanding of the 7th section of the Act of March, 1839. In section 255 of "Curtis on Patents," this question is briefly discussed, but is not made clear. If this artist therefore, had made an application for a patent in season, those who copied, sold, and used his busts after his patent was granted, would have been liable to him for damages. It is a pity so many of our people are ignorant of our patent law, and our artists especially, who otherwise would oftener avail themselves of its advantages. Many men suffer from ignorance of the law, and the sculptor spoken of is one of these: this is evident from the language of the paper, through which his complaint has found its way to the public. The present mode provided by our patent laws, for protecting designs, is more convenient than that of registering books; no pro-

cess can be more simple to be effectual as a protective to stand the test of a trial at law. If our designers and artists were better acquainted with our patent laws, they would no doubt find their pockets somewhat heavier. What signifies the small amount of money required to get a patent, in comparison with the protection it affords against infringers?

Improved Mop Head.



The annexed engraving is a side view of an improved mop head, for which a patent was granted to Harvey Murch, of Lebanon, N. H., on the 14th of last June.

A is the mop handle; B is an iron socket of cast metal, the top or T part, C, being the under jaw of the mop head; it has a groove along its face, which also forms channel guides to the two branches, D D, of the upper jaw, D'. This upper jaw is formed of a stout piece of steel wire, formed like a stirrup, the two ends of it being welded together at the apex, forming a shank on which are a number of notches, E; this part passes through a catch eye, F. A small flat spring, G, presses on the under side of the shank or notched part, E, making it catch into a notch, and retaining the jaw, D', at any distance near to or remote from the movable jaw, C. By pressing on the knob of the rack part, E, the spring, G, is depressed, and the rack set free from the catch eye, F, to open or close the jaws, to put in or take out the mop. The construction and mode of operating this mop head is easily understood. The improvement is a very simple and good one.

The claim is for "the mop head, composed of the fixed cross-head or jaw, C, with a groove on its face and ends, in combination with its slider binder or movable jaw, D', which terminates in a notched shank, E, and passes through the loop or catch eye, F, on the handle, which serves as a detent, in consequence of the action of the spring, G, on the underside of it."

These mop heads are manufactured by H. & J. Murch, at Lebanon, N. H., from whom more information may be obtained by letter.

The vines in Portugal have been attacked with disease; port wine will be scarce next year; but then there is plenty of logwood, elder-berries, whiskey, and burnt sugar, and it can with these be easily counterfeited.

The great Turkey war has not yet commenced. The Muscovy Bear is equipped for the battle and growls fiercely on the Danube.

## Great Printing Project.

Many of our readers have no doubt seen the notices in some of our daily papers of a great reform in printing, invented by Major Beniowski, in London. We have received pamphlets and circulars from London, giving an account of his inventions, and of the great company which has been formed for the purpose of carrying them out, and completely reforming the whole art of letter press printing—type composing and impressing. We have long been aware of the inventive qualities of Beniowski, who is a Polish exile of great ingenuity of mind, and remarkable physical development of person, which, on one occasion, was the cause of his figuring before a London court for assault and battery on a recreant Pole, and but for the object of bringing out one of his inventions, he perhaps would have been laid "with his feet in the stocks."—The company formed to carry out his printing inventions, has for trustees and directors seven members of Parliament, and many other gentlemen of wealth and standing, and is incorporated with a capital of £130,000 (nearly \$650,000).

One feature of the scheme is the re-application of the Logotype, this is to have the type cast in words, instead of letters, as is now the case. This is an old invention, and laid aside more than once, but has been revived again with success in this city for two years by J. Tobbitt, printer; consequently he is ahead of Beniowski, in this particular; Beniowski's types, however, are peculiar. They are of two kinds, the choice between which will be determined by circumstances. One kind are single types; to them the inventor has added an arrangement to facilitate their use. This arrangement consists in forming the letter of the type upon its feet and sides, by which the composition can be read as soon as set up, without the necessity of taking a proof. The letter formed upon the type is so placed that when the type is inverted in the composing stick, with the embossed or printing letter removed from the eye of the compositor, it presents itself to his eye in the same relative position with regard to the other letters in the same line with itself as it occupies on the printed page. The back of the type presents letters to the eye in the proper succession for reading off, and if a mistake has been made, the foot letter instantly discloses the fact. The foot letter is always an intaglio, and the metallic surface formed by the feet of the type presents the appearance of an engraving of a page, identical, as regards matter, with what a proof would present. The spaces used in connection with these types are of steel, covered with a thin coating of silver to prevent oxidizing. The logotypes are made the same as the single types, only a word is cast for a letter. The compositor sits at a table, unless he prefers to stand, and the subdivision of the case, when the use of the logographic type renders classification necessary, will form a crescent around him, of which he will, as nearly as possible, occupy the centre of the concavity, and so be enabled to reach any part of the case with equal ease. Each subdivision of the case is a box about two feet high, the interior of which is formed with a number of rows of grooves, which slope forwards towards the compositor.—Each groove is lettered at the front and at the back end of the case; distribution takes place at the back, and composition from the front.—When types are distributed, they fall by their own weight along the sloping to its lower end, where a low ridge or combing prevents them from falling out, and at the same time admits of the compositor easily seizing them.

The printing machine in connection with this scheme has the following novel features:

The types are imposed on the interior surface of a cylinder, and therefore cannot fall out by their own gravity, nor can they be driven off by the centrifugal force, be the angular and the perimetral velocity ever so great. The feeding and receiving boards, the distributing, inking, and impression rollers, like all the other organs of this machine, are in the interior of a cylinder, and therefore the whole occupies but one-third of the space it would otherwise require. The distance between the feeding and receiving boards is reduced to a few inches. The receiving and depositing of the printed sheets is performed automatically. With this machine the

London papers boast that they will be able to beat the fastest American press; but it will take a great deal to *hoe* out Hoe's fastest; time will tell all. Another feature in these improvements is a new description of inking rollers, instead of the old molasses and glue kind. These are merely hollow cylinders, formed of strips of vulcanized india rubber, united in the ordinary manner without a seam. Into the elastic cylinder so formed, air is condensed by means of a pump, and according to the atmospheric pressure produced inside, the rigidity or elasticity of the roller may be made susceptible of the nicest adjustment.

Such rollers are not new in the United States, but we have not been informed of their working and enduring qualities; practice only can prove this. It appears to us that a great improvement has yet to be made in distributing and composing type, but although numerous plans have been brought forward from time to time, to accomplish these objects, no advance has been made for a hundred years.

## LITERARY NOTICES.

THE WORKS OF SHAKESPEARE—Containing nearly twenty thousand manuscript corrections, with a history of the Stage to the time, by J. Payne Collier, F. S. A. This is undoubtedly the most complete and valuable edition of Shakespeare's Works ever issued, hence it must become standard, and we have no doubt thousands of copies will be sold. Number 14 and 15 are issued; one more number completes the series. J. B. Reelfield, Publisher, 112 Nassau street, N. Y.

THE BOOK OF NATURE—This is a re-print of a German work, by F. Schoeller, Professor of Natural Sciences at Worms. It is published by Blanchard and Lea, Philadelphia: the printing, paper, and style of binding of the work are excellent. It treats of the Sciences of Physics, Astronomy, Chemistry, Mineralogy, Geology, Botany, Zoology, and Physiology. It is illustrated with nearly 700 engravings, and contains 700 pages of matter. This is an excellent work for young mechanics who wish to obtain a general knowledge of the above sciences, as the author of it appears to have the faculty of making himself clearly understood, and uses no superfluous language. It has gone through six editions in Germany, and two in England; this is the first American one. It is for sale by John Wiley, Broadway, this city.

PUTNUM'S MAGAZINE—The October number of this unrivalled monthly, has made its appearance brim full of sterling matter as usual. G. P. Putnum, Publisher, 10 Park Place.



## Manufacturers and Inventors.

The present Volume of the SCIENTIFIC AMERICAN commences under the most gratifying assurances, and appearances indicate a very marked increase to the subscription list. This we regard as a flattering testimonial of the usefulness and popularity of the publication so generously supported. We are greatly indebted to our readers for much valuable matter, which has found a permanent record on its pages. The aid thus contributed has been most important to our success, and we are grateful for it.

From our foreign and home exchanges—from the workshops, fields, and laboratories of our own country, we have supplied a volume of more than four hundred pages of useful information, touching every branch of art, science, and invention, besides hundreds of engravings executed by artists exclusively in our employ.

The present Volume will be greatly improved in the style and quantity of the Engravings, and in the character of the matter, original and selected. Having every facility for obtaining information from all parts of Europe, we shall lay before our readers, in advance of our cotemporaries, a full account of the most prominent novelties brought forward.

The opening of the Crystal Palace in this city, forms an interesting subject for attraction. We shall study it faithfully for the benefit of our readers, and illustrate such inventions as may be deemed interesting and worthy.

The Scientific American is the Repository of Patent Inventions: a volume, each complete in itself, forms an Encyclopedia of the useful and entertaining. The Patent Claims alone are worth ten times the subscription price to every inventor.

## PRIZES!! PRIZES!!

The following Splendid Prizes will be given for the largest list of mail subscribers sent in by the first of January next:

\$100 for the largest list.	\$50 for the 7th largest list.
\$75 for the 2d largest list.	\$25 for the 8th ditto
\$50 for the 3d ditto	\$20 for the 9th ditto
\$45 for the 4th ditto	\$15 for the 10th ditto
\$40 for the 5th ditto	\$10 for the 11th ditto
\$35 for the 6th ditto	\$5 for the 12th ditto

The cash will be paid to the order of the successful competitors immediately after January 1st, 1854.

These prizes are worthy of an honorable and energetic competition, and we hope our readers will not let an opportunity so favorable pass without attention.

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