

29,344.—N. C. Lewis, Jr. (assignor to himself and Edwin Bruce), of Boston, Mass., for an Improvement in Boots and Shoes:

I claim the arrangement and application of separate metallic guards with respect to the main leather outer sole of a shoe, and a gutta-percha or caoutchouc outer sole, substantially in manner as described.

29,345.—Martin Shirk (assignor to himself, S. B. Hartman and Wendel Martzell), of Lancaster county, Pa., for an Improvement in Machines for Dressing Millstones:

I claim the open pick-shaft, A, with its socket, R, adjusting screw, F, cog, B, and spring, S, in combination with the shouldered screw burr, D, D3, on the screw shafts, N1 N2, and their pinions, 5 and 7, operated by means of the pinion, I, on the cam shaft, and pinions, 2, 3 and 4, on the elbowed shifting lever, T, substantially as and for the purpose specified.

29,346.—E. D. Wilcox, of Billingham, Mass., assignor to himself and G. D. Nourse, of Cambridgeport, Mass., for an Improvement in Grain Cradles:

I claim the bent rod, h, projecting from the "snath" towards the fingers, G, substantially in the manner and for the purpose specified.

RE-ISSUES.

T. B. Blecker, of New York City, for an Improvement in Folding Bedsteads. Patented April 17, 1847:

I claim, first, The employment of a frame hinged in the center and connected to the two ends of a bedstead for the purpose of folding the whole bedstead together endways, in the manner described.

Second, In combination with said folding frame, I claim the hook-shaped ends to the side rails, taking bolts attached to the posts and forming hinges at these points for folding the hinged frame, or allowing said frame to be disconnected from the posts, as specified.

Third, In combination with said frame hinged to the center, I claim the pendant legs, Fig. 9, and the braces, k, for the purposes and as specified.

G. W. Rains, of Newburgh, N. Y., for an Improved Feed-water Apparatus for Steam Boilers. Patented April 24, 1860:

I claim the combination of the cylinder, A, connected with the boiler, as described, the piston, D, working in the said cylinder, and having an attached valve, whose movements to open and close the communication between the said cylinder and the boiler are effected by the said piston, or its rod, substantially as described, a lifting and disengaging apparatus for lifting and dropping the said piston and valve, and a connection between the piston and a cock or valve in the suction pipe, or its equivalent, the whole operating, substantially as described, to control the supply of water to the boiler.

And in combination with the above-specified apparatus, I claim the alarm cock, V, applied in connection with the piston, to operate substantially as set forth.

[The character of this invention was described in No. 20, Vol. II. (new series), of the SCIENTIFIC AMERICAN.]

ADDITIONAL IMPROVEMENTS.

W. F. Edson, of Philadelphia, Pa., for an Improved Machine for Cutting and Finishing Shoe Heels. Patented Sept. 6, 1859:

I claim the combination of the former, U, the rod, V, plates, W, arms and pins, X, lever, Y, and eccentric, Z, acting substantially as set forth, adjusting the boot or shoe in the machine for shaping, cutting and finishing heels after they are fastened to the shoe.

Anthony Overocker, of McHenry, Ill., for an Improvement in Clover Hullers. Patented July 5, 1859:

I claim constructing the hopper frame substantially in the manner specified, for the purpose of stopping the draft created by the cylinder and returning it to the screens, as is fully set forth.

DESIGN.

W. W. Stanard (assignor to S. S. Jewett and F. B. Root), of Buffalo, N. Y., for a Design for a Cook's Stove.



ROBERT SCOTT, of Montreal, C. E., desires to correspond with manufacturers of machinery for making horse-shoe nails and solid-head pins.

F. E., of N. Y.—We believe there is no work on the steam engine such as you want. We know of none better than those you have.

C. I. M., of Mass.—We have no idea that the last object on which the eye of the dying rests can be brought to another's view by the art of the daguerreotypist.

E. S. W., of Ill.—The exhaust steam from a high pressure engine will be sufficiently warm for drying corn.

J. A. T., of Pa.—The discovery is not patentable. If you will send us some of the rock unground, we will tell you what it is.

S. T. Jr., of Mass.—We think Professor Youmans the best popular lecturer on chemistry that we ever heard. Mr. Boynton, though he occasionally lays himself open to criticism, has certainly a most extraordinary faculty for making his lectures on geology both plain and interesting.

B. B., of N. Y.—The bisulphuret of carbon may be made by passing the vapor of sulphur over charcoal ignited in a tube, and receiving the product in a cold bottle.

J. McE., of Tenn.—As soon as we get a little time we will try to tell you all about the California yeast.

D. K. H., of Vt.—The best time to prune apple trees is while they are growing. However, if the wounds be coated with shellac dissolved in alcohol, the pruning may be done during the winter.

C. B. W., of Pa.—Gunpowder explodes at just 600° Fah., gun-cotton at 270°, if heated quickly; but by heating it very slowly, its temperature may be raised to 356°, and even 393°.

H. L. T., of Wis.—You have doubtless seen full accounts of the comet of which you speak before this time.

MECHANIC, of Mass.—The numerous and careful experiments of Morin entirely settle the point that the friction of journals is not affected by their size, except in the circumstance that the lubricating material is more readily expelled from small than from large axles. You will find the results of Morin's experiments in full on pages 839 and 855 of our last volume.

A READER, of Ala.—A cannon ball is not held up at all by the force of the powder, unless the cannon is pointed somewhat upward when it is fired. If the cannon is perfectly level, the ball falls just as fast as if it were dropped from the muzzle. When a cannon is pointed due east and fired, the velocity imparted by the powder is added to that already derived from the rotation of the earth, and the time occupied by the ball in passing over three miles of the earth's surface is the same as that occupied by the earth in rolling three miles of its surface under the ball, when the latter is projected due west.

E. S. B., of Ga.—It seems to us that your plan for a compensating pendulum is the best and simplest that has ever been invented. Experiment alone, however, could determine the matter.

J. E., of Texas.—The rocks of which you speak were doubtless formed, as you suppose, in the way that most of the rocks on the globe were, by being deposited at the bottom of the sea. As the whole interior of the earth is a molten mass, and as the highest mountains would be represented on a 12-inch globe by two thicknesses of this paper, it requires but a slight wrinkle in the crust of the earth to carry up the bottom of the sea and make it dry land. The shells and specimens which you send belong to the cretaceous or chalk formation.

R. A., of Ohio.—Pale lac or mastic varnish is suitable for transferring printed pictures from paper on wood. The wood receives a coat of varnish first, and before it is quite dry, the picture to be copied is laid on, face to the wood, to which it adheres. When dry, the paper is rubbed off with a little moisture on the finger, and the black lines and colors are found adhering perfectly to the wood.

P. S. P., of Mich.—Pure kaolin clay, dried, then reduced to powder and mixed with boiled linseed oil, makes a good cement for tombstones which are exposed to the weather. Cloth for sags is first prepared with a coating of good boiled size to prevent the paint from running.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, July 28, 1860:—

- S. M. S., of Conn., \$100; W. R., of Mass., \$25; J. C. C., of Conn., \$30; E. B., of Ga., \$35; C. G., of N. Y., \$30; J. D. T., of Mass., \$35; O. M. M., of N. Y., \$35; W. W., of Cal., \$50; W. H., Jr., of N. Y., \$25; A. S. L., of Mass., \$30; C. T. S., of Cal., \$50; S. I. P., of S. C., \$25; R. C., of Texas, \$100; W. T. O., of Ga., \$30; McN. & L., of N. Y., \$30; C. G. of Mich., \$25; D. B., of Mich., \$25; W. W. & D. B., of Iowa, \$30; J. D. A., of Conn., \$30; W. S., of Wis., \$30; W. C., of N. Y., \$50; S. B. D., of N. Y., \$350; T. E. C. B., of Ky., \$30; J. B. T., of N. Y., \$25; J. E. A., of Ill., \$10; J. W. K., of N. Y., \$130; C. H. D., of Vt., \$30; S. P., of Mass., \$25; S. P. G., of Wis., \$35; C. F., Jr., of Ohio, \$25; C. J. F., of N. J., \$30; J. A. J., of Ala., \$30; E. W. G., of Mass., \$40; C. G. G., of Ala., \$32; F. M., of Miss., \$25; J. J. M., of Conn., \$30; M. A. B., of Fla., \$25; J. T. P., of Mo., \$25; O. D., of Md., \$15; C. & Co., of N. Y., \$250; J. R., of N. Y., \$55; W. W. J., of Va., \$30; N. & H., of Pa., \$30; A. C., of N. Y., \$25; S. H., of Mich., \$25; A. A. H., of N. H., \$30; C. S., of Mass., \$30; L. & K., of Ill., \$10; J. S. S., of Ga., \$30; W. A. T., of Miss., \$25; J. M. H., of Miss., \$250; J. H. S., of N. Y., \$30; J. W. K., of N. Y., \$25; B. & B., of Iowa, \$12; B. H. W., of Mo., \$25; W. B. H., of Ga., \$45; D. A. B., of Ind., \$30; E. R. S., of Pa., \$10; M. M. C., of N. Y., \$25; A. J. G., of Mass., \$30; E. J. F., of Mo., \$25; M. L. C., of N. Y., \$25; F. C. K., of N. J., \$25; P. L., of N. Y., \$25; W. A. H., of R. I., \$250; J. W., of Ohio, \$10; J. D., of N. Y., \$25; W. C., of Conn., \$32; L. H. F., of Pa., \$30; A. M. M., of N. Y., \$55; J. W., of N. Y., \$30.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, July 28, 1860:—

- E. & B., of Ga.; J. G. R., of Maine; J. B. T., of N. Y.; N. F. M., of R. I.; W. S. S., of N. J.; E. W. G., of Mass.; F. M., of Miss.; A. G., of N. Y.; S. P. G., of Wis.; M. M. C., of N. Y.; T. G. E., of N. Y.; H. K., of N. Y.; R. G. H., of N. Y.; M. A. B., of Fla.; W. H., Jr., of N. Y.; C. C. G., of Ala.; J. W. K., of N. Y.; C. F., Jr., of Ohio; J. H. B., of N. Y.; J. H., of Pa.; J. L. B., of N. Y.; S. H., of Mich.; W. R., of Mass.; A. M. M., of N. Y.; B. & B., of Iowa; J. H., of Mich.; J. F. W., of La.; S. I. P., of S. C.; W. A. T., of Miss.; J. D. T., of Mass.; J. T. P., of Mo.; W. C., of N. Y. (2 cases); R. M. L., of Minn.; F. C. K., of N. J.; P. D., of R. I.; H. & F., of Pa.; J. K., of Mass.; D. B., of Mich.; E. J. F., of Mo.; O. D., of Md.; P. L., of N. Y.; A. M. M., of N. Y.; C. G., of Mich.; L. H. F., of Pa.; J. D., of N. Y.; B. H. W., of Mo.; F. N., of France.

NEW BOOKS AND PERIODICALS RECEIVED.

THE FIGURE OF THE EARTH; by Samuel Elliott Coues, of Washington, D. C. Published by Philip & Solomons, Washington.

We can give the best idea of this work by the following extract. "THE DISTANCE OF THE SUN AND OF THE MOON FROM THE EARTH.—The difference of longitude between the intersections of the tropics by the magnetic equator (at 19° 47' angle with the geographic equator), to wit 130°, contains as many times the excess of the equatorial regions as the mean distance of the moon from the earth contains the moon's diameter; and as many times as the mean distance of the sun from the earth contains the sun's diameter. Thus, by the measure of the extent of the terrestrial masses, and the angle of the magnetic equator, the distance of the sun or moon from the earth can be calculated."

HISTORY, THEORY AND PRACTICE OF THE ELECTRIC TELEGRAPH; by George B. Prescott, Superintendent of Electric Telegraph Lines. Published by Ticknor & Fields, Boston. A very readable and practical work on this subject of universal interest, which we shall more fully notice at an early period.

THE AMERICAN RAILWAY REVIEW. Published by the American Railroad Bureau, No. 23 Exchange-place, New York. This valuable weekly journal has just commenced its third volume; it furnishes a large amount of reliable reading matter about railroads and all collateral subjects, and also advocates reforms and improvements in an energetic, practical and common-sense manner.

BIBLIOTHECA SACRA. Published by Warren F. Draper, Andover, Mass. The July number of this learned and philosophical theological review contains a most beautiful essay on the "Messianic Spirit of the Psalms and Prophets," another on the "Deity of Christ," and several on other topics of interest to all men.

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SCIENTIFIC, PRACTICAL AND INTERESTING.—History, Theory and Practice of the Electric Telegraph; by George B. Prescott, of Boston, Superintendent of Electric Telegraph Lines. One large volume, with 100 illustrations; price, \$1.75. The publishers offer this volume to supply a want, long felt, of a complete manual of the Electric Telegraph. Its author adds to a complete theoretical knowledge of his subject the experience of 13 years as a practical operator and superintendent of Telegraphic lines; and the work itself, while prepared with careful adherence to scientific details, is so far divested of technicalities as to adapt it for use as a popular manual. It affords the most thorough information upon all points connected with the Electric Telegraph. Among its features are:—A description of all the instruments used in Telegraphing in every part of the world, with an engraving of each instrument; a full history of the construction and operation of the Atlantic Telegraph, with a full report of all the messages which passed over the Atlantic Cable; a view of the various uses to which the Telegraph is applied, including an interesting and curious description of the Electric Fire-alarm System, in operation in various cities; and a great amount of information of the highest value to Telegraphic contractors and superintendents, respecting the construction, maintenance and cost of working lines. For sale by all booksellers, or sent, post-paid, to any address by the publishers on receipt of the price. A circular, containing a synopsis of the contents, furnished on application. Liberal discounts to agents. TICKNOR & FIELDS, Publishers, Boston.

VALUABLE IMPROVEMENT IN PROPELLER SHIPS.—Patented March 27, 1860. For engraving and description, see SCIENTIFIC AMERICAN, Vol. II, No. 23 (June 2, 1860). The use of this patent right may be had, on very liberal terms, by an arrangement with the patentee. Address H. W. HERBERT, Norfolk, Va. 6*

INVENTORS' DEPOT AND SALESROOMS FOR Patent Rights, No. 30 Broadway, New York.—Patents possessing positive merits—and such only—have, in this depot, their headquarters, where they can be properly introduced to public notice and find purchasers. Constant opportunities for judicious and profitable investments in patents, embracing all departments in life, can here be found by parties of liberal as well as of limited means. Citizens and strangers, all, can find something to interest and profit them, and they are cordially invited to call at our depot, the latch-string being out. Circulars, descriptive of the objects of the agency, can be had on application. BUTLER, HOSFORD & CO., 6tf

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TO MANUFACTURERS AND WHOM IT MAY concern.—We deem Conant's Loom Warp Motion (as represented in the SCIENTIFIC AMERICAN of June 23, 1860) a clear infringement on Letters Patent granted to Snell & Bartlett's additional improvement, dated Sept. 1, 1857. Said patent having been assigned to us, parties building, selling or using the same will take notice, and govern themselves accordingly. E. D. & G. DRAPER. 6 2*

STEAM ENGINES FOR SALE.—(ONE OF 8-horse power (superior finish), and Fine Boiler, of 10-horse power, new; also, one second-hand Engine, of 10-horse power. Will be sold very cheap to close a concern. JOHN HOHEN, No. 363 West Twenty-ninth-street, New York. 1*

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