28,435.—J. P. Ellicott, of Washington, D. C., assignor to Phelan & Collender, of New York City, for an Improved Chalk-holder for Billiard Tables:

I claim the combination of the lower pivoted jaw, c g, constructed as described, with the stationary jaw, b b, for the purposes set forth.

28,436.—S. W. Brown, of Syracuse, N. Y., assignor to himself and Joel McComber, of Watertown, N. Y., for an Improved Printer's Composing Stick:

I claim the employment or use of the elastic plate, E, placed at the outer side of the side piece, C, provided with a tongue, d, passing through the side piece and part, b, of the slide, and having attached a lever, F, provided with an eccentric, G, arranged as shown, or in an equivalent way, for the purpose set forth.

I further claim, in connection with the plate, E, slide, B, lever, F, and its eccentric, the bridge or brace, G, attached to the slotted side-piece, C, substantially as and for the purpose set forth.

[This invention relates to an improved means for securing the slide at any desired point within the range of its movement in the stick, and it consists in the employment of an eccentric and elastic plate, connected with the slide and applied to the side of the stick, whereby the slide may be readily adjusted and secured at any point, without being liable to move casually; the stick, at the same time, being provided with a bridge or brace, one or more, so arranged or applied to the slotted side-piece as to render the same strong and durable.]

28,437.—A. J. Gibson (assignor to himself, John Boyden, J. P. Hale and Samuel Fisk), of Worcester, Mass., for an Improvement in Revolving Fire-arms:

I claim, first, Combining the barrel with the breech frame or stock by means of a pivot, b, two doubly-notched check-pieces, a a, and a sliding bolt, E; the whole arranged and operating substantially as and for the purpose specified.

Second, Combining the downwardly-movable barrel with the trigger or lever, I, or its equivalent, in such manner that the said barrel may lock the said trigger or lever, or its equivalent, when it (the said barrel) is in its downward position, to prevent the discharge, substantially as described.

28,438.—Adolphus Liebenroth (assignor to himself and Ivan Von Auw), of New York City, for an Improved Paper File:

I claim the combination of the elastic bands, c c e e, covers, a d, and tuck or attachment, f, for the purposes and as specified.

28,439.—G. H. Mills (assignor to Nathaniel McKay), of East Boston, Mass., for an Improvement in Pumps:

I claim the employment of the intermediate cylinder, H, in combination with the two stationary cylinders, A C, and piston, B, as and for the purpose shown and described.

28,440.—J. G. Putnam (assignor to himself and J. Schiefflein, Jr.), of Tioga, Pa., for an Improvement in Corn-shellers:

I claim the arrangement of the divided, yielding, pergorated concave, E, feeder, B, prongs, b, guard plate, J, guard, L, and shelling cylinder, D, as and for the purpose shown and described.

[This invention consists in an arrangement of a feeder for conducting the ear of corn properly into the machine, a toothed cylinder and concave for removing the corn from the cob, a series of curved guards for clearing the cylinder and throwing-off the cobs, and an arrangement of plates for conducting the shelled corn down through a spout, so that it will receive a blast of air which blows off the dust and other extraneous matter which are found more or less combined with it.

28,441.—Isaac Reckhow (assignor to John Griffith), of Brooklyn, N. Y., for an Improvement in Curing Prunes:

I claim the within-described method of curing prunes by exposing them to a current of steam, substantially in the manner specified.

28,442.—Mark Richardson (assignor to himself, T. Cort and H. Rowbotham), of Philadelphia, Pa., for an Improved Washing Machine:

I claim, first, The revolving beaters constructed substantially a described, in combination with the platforms, e f and h; the whole arranged within the trough and operating on the folds of the fabric as specified.

Second, The revolving shaft, K, with its elastic vanes, when arranged within the trough in respect to the roller, H, and the mouth of the inlet, y, substantially as and for the purpose herein set forth.

28,443.—D. M. Smith (assignor to himself, H. H. Mason and A. C. Mason), of Springfield, Vt., for an Improvement in Hooks and Eyes:

I claim, as an improved article of manufacture, a hook, A, having one of its legs, e, extended and bent up within the bill, a, so as to form a snap or spring guard, as shown and described.

28,444.—J. S. Vaughan (assignor to himself and S. R. Vaughan) of Alexandria, Va., for an Improvement in Car Couplings:

I claim the arrangement of the skeleton bumper, H, which surrounds the box with the box and with the tumbler, for the purpose of relieving the tumbler from sudden and violent concussions, substantially as specified.

28,445.—Samuel Wells, of Elmore, Ohio, assignor to Eliab Karr and Erastus Howland, of Elmore aforesaid, and E. F. Dickinson, of Tremont, Ohio, for an Improved Machine for Moving Buildings:

I claim, in combination with the carriage, A, and the drums B E, and their operating connections, the turning block, F, hinged to said frame, and loose block, H, and their rigging—the whole being arranged for the purpose of exerting great power in moving heavy bodies, and easy transportation, substantially as described.

RE-ISSUES.

The Wilson Manufacturing Company, of New York City, assignees of John P. Wilson, of Frankfort, N. Y. and John P. Thomas, of Ilion, N. Y., for an Improvement in Burglar's Alarms. Patented Feb. 8, 1859:

I claim, first, The employment, in connection with the within-described gun or alarm, of an adjustable gimlet screw, D, which is secured in the dovetailed groove in the body, while in use, and which is secured in the barrel or bore by a screw, when not in use, substantially as specified.

Second, The employment of the two sides, A' A', between which the hammer falls, which serve to prevent the particles of the cap from flying off, and at the same time forming a snug protection for the hammer and causing a louder report of the cap as is herein fully described.

Third, Securing the rear of the spring, F, to the body of the gun, by means of the nipple which passes through said spring and screws into the body, substantially as and for the purpose specified.

Lewis White, of Hartford, Conn., assignor to S. S. Putnam & Co., of Roxbury, Mass., for an Improvement in Curtain Fixtures. Patented Jan. 15, 1856:

I claim operating the lever, c, which arrests the curtain roll, by means of the cord which raises the curtain, whereby the curtain is held stationary when the cord hangs vertically and is set free to be raised or lowered, when the cord is drawn at an angle, as set forth.

C. B. Brinckerhoff, of Batavia, N. Y., for an Improvement in Harvesters. Patented May 24, 1859:

I claim, first, The combination of the crank operated by the main shaft, with the rake and sweep post to which it is attached, and the eighth arm, when arranged in the manner described.

Second, The wire-gauze divider or its equivalent, when arranged on the rake head as set forth, to divide the falling grain from that which is being removed by the rake, as described and for the purpose specified.

Third, The pivoted sweep post, with its eighth arm, in combination with the crank, H, and the mechanism connecting them, giving the reciprocating motion to the rake; the whole being constructed, arranged and operated substantially as described.

Fourth, The arrangement, substantially as described, of the connecting rods, O and N, sleeve, L, and slide, M, in advance of, and in relation to the main shaft and rake shank, as and for the purpose specified.

Fifth, The spring catch, C, and dog, a, in combination, and the location of said catch, to break the forward motion of the rake and aid its return by the spring, substantially as described.

Sixth, The projection on the lower side of the slot or notch in the dog, to arrest the catch with certainty in the manner described.

Seventh, The application and arrangement of the toothed rack connected with the spring by which the rake is caught and held after its descent upon the cut grain on the platform, and whereby its rebound is prevented, and the gavel is removed with greater certainty and regularity.

Eighth, The placing of a rake having spring teeth, in rear of the machine, for the purpose of gleaning and contracting the gavels into sheaf form, substantially as described.

Ninth, The combination of the cam attached to the main shaft with the arm of the rear rake, to cause it to pass over the gavels at the proper time, as described.

Tenth, The ratchet cam, J, and lever, in combination, substantially as described, for throwing both rakes into or out of action, as set forth.

EXTENSION.

Alfred Stillman, late of New York City (Elizabeth A. Harris, administratrix), for an Improvement in Sugar Pans. Patented May 16, 1846:

I claim dividing the main pipe into two parts by a cross partition, in combination with the bent branch tubes that connect each with the two divisions of the main pipe, as described, for the circulation of the steam.

I also claim connecting the main pipe with the sides of the pan, and with the induction and eduction pipes, by means of the double stuffing boxes on each end, as described, to admit of the turning of the main pipe, as described.

And, finally, I claim the method of connecting the branch pipes with the main pipe by means of socket joints, as described, in combination with the mode of securing them by means of screws passing through the main pipe and tapped into tubular nuts in, and connected with the ends of, the branch pipes, by wings, for the purpose and in the manner described.

Notes & Queries.

W. S. H., of Ohio.—You can remove stains from German silver with sweet oil and rottenstone. It may require considerable rubbing with a brush at first, and soft leather to polish up afterwards; but persevere, and you will accomplish the object. Your subscription expires with No. 10, Vol. III.

C. C. P., of Ohio.—We are not acquainted with any method of preserving skimmed milk, so as to retain it in its normal condition for your purposes; but it can be concentrated in vacuo by Gail Borden's process, and preserved in sealed cans, to be used in brine in the winter season.

S. L., of N. Y.—The greenish ink to which you refer, printed on the back of some envelopes, is made with the oxyd of chromium, and is very permanent. We cannot give you a recipe for extracting it from paper.

K. C. P., of N. J.—You request us to furnish you with the dimensions of one of our river steamboats, as you intend to make a model. The correct dimensions of new steamships and steamboats constructed at the port of New York are published regularly in our columns. You can adopt the proportions of any of these most suitable for your model.

J. S., of N. Y.—It is not stated on page 277, that Mr. Bogardus invented the ring and traveler, but that his "ring-traveler spindle has come into extensive use." His improvement rendered the ring-traveler more generally practical; but George Addison and Samuel H. Stevens, of New York, were, so far as we have investigated the subject, the inventors of the ring-traveler, per se; and it was a valuable improvement.

C. D., of Ohio.—The Australian boomerang is one of the most singular weapons that has ever been used, and the art of throwing it is perhaps as difficult an art as has ever been acquired by savage or civilized man. It is said that the native will throw it in a way so that it will dart forward some 60 feet, then rise up in the air, and return within a yard of the thrower. It is also said that they will throw it around a hill and hit a kangaroo's leg, which is out of sight, but the position of which they know. It is simply a piece of hard wood, 2 or 2¼ feet in length, 2¼ to 3 inches wide, and 1 inch thick in the middle; being flat on one side and rounded to edges on the other. It is bent edgewise, so as to preserve the plane of the flat side; the arc of its curve having a radius, perhaps, of 5 or 6 feet. We write from memory, and it is some four years since we saw the article. It is said that no civilized man ever learned to use one of these missiles.

W. G., of Md.—Common sheet iron will soon rust out, if employed to line the sides of a house, in order to prevent the entrance of rats. Galvanized sheets are much more durable. Sheet lead, being unaffected by air and moisture, will answer a better purpose; and yet there are some instances on record in which leaden water pipes have been cut through by rats. The whole area under the basement floors should be laid with a bed of hard concrete about four inches deep, so as to render it impervious to the rat tribe. Do not employ wood for any of your outside stairs or in the foundation walls, if you wish to make your house rat-proof, because an old "varmint" can cut through a plank or a sill nearly as fast as a Green Bay sawyer.

J. W., of N. Y.—In replying to your recent query (page 308, this volume), the figures 14.162 were erroneously written "24.162," and so printed in the third line of our comment on your letter.

F. B. W., of England.—Your plan of forcing air into a tight receiver, similar to a steam boiler, and then using this compressed air to drive a small engine, is not impracticable. The ordinary fan windmill is as simple and cheap as any.

J. H. W., of N. Y.—The articles on the expansion and contraction of cast iron in molds appeared in our columns several years ago, and referred to the expansion of the metal when poured into the mold: then contracting after it became cooler, and after it had hardened sufficiently, whereby it retained the clear impress of the pattern. The opinions then expressed related to both sand and metallic molds. Yours refer only to the former, and do not meet the whole case.

W. H., of N. Y.—A thin coating of boiled linseed oil, rendered quick-drying with the acetate of lead, will enamel the surface of leather, but that to which you refer as being used for artificial limbs must be made, we believe, by the regular manufacturers of enameled leather.

M. V., of Ga.—The specimens which you have sent us are the "common," not the "precious, garnet." The latter is of a beautiful deep-red color; yours are a brownish-red, imperfectly translucent.

T. McF., of Ala.—Heavy coal oil is used for lubricating machinery in England, and, although not equal to sperm, it is employed on account of being cheaper. Pure coal oil may be used in cotton factories in lamps, but it requires careful and intelligent management.

J. T. McD., of N. Y.—By cautiously adding litharge, acetate of lead, sulphate of zinc or oxyd of manganese to linseed oil, when boiling it, you will render it quick-drying when mixed with paint. We have never, however, seen paint that would dry almost as quickly as it is put on (which is the property you want) without considerable turpentine added, and this tends to injure its gloss and destroy its durability.

E. W., of Conn.—"Dick's Practica. Astronomer" will give you the information desired for the polishing of lenses.

J. R. A., of Conn.—An electric current will not pass through any length of wire. You will find solid information on this subject on pages 46 and 54, Vol. XIV. (old series), of the SCIENTIFIC AMERICAN.

D. G. M., of Mich.—We say that a second of time cannot be divided into spaces so that the aggregate of them will not make a full second. To say that the number would have to be infinite, is an improper use of the word infinite. In that connection, it conveys no meaning—expresses no idea.

J. M., of Kansas.—B. Pike & Sons, No. 518 Broadway, this city, are extensive dealers in optical instruments. The Patent Office reports are generally issued towards the close of the year. "Wells' Natural Philosophy" is a good elementary work, and "Newton's Principia" if you want to go into the subject profoundly. Book-binders' paste is made of flour and water, boiled. There is hardly any limit to the chemical apparatus which you may use; perhaps a retort and spirit lamp would be among the first things required.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, May 27, 1860:—

A. L., of Mich., $30; L. P. B., of Mich., $25; A. F. W., of L. I., $55; W. N. M., of Mass., $25; M. A. W., of Ga., $50; C. R. B., of Conn., $25; S. P., of Mass., $30; H. M., of Iowa, $30; J. W. D., of Tenn., $30; C. R., of Mich., $25; H. B., of Iowa, $25; D. F., of Miss., $30; A. S. W., of N. Y., $25; C. R. A., of Conn., $84; W. R., of N. Y., $30; H. M. J., of Conn., $35; J. T. S., of Va., $25; J. P. B., of S. C., $25; E. M. J., of Conn., $30; E. B., of Conn., $55; C. A. T., of Ill., $30; J. S. M., of Texas, $20; S. S. B., of R. I., $25; J. Y. H., of Pa., $25; J. L., of S. C., $30; T. H. Q., of N. Y., $30; C. A. R., of Ala., $60; E. C. C., of Mass., $30; L. & A., of N. Y., $250; H. P., of N. Y., $30; P. Y., of Iowa, $30; M. H., of Coun., $25; G. Van C., of N. J., $30; C. C., of N. Y., $30; T. C. H., of N. Y., $25; H. A. W., of N. Y., $10; G. H. G., Sr., of Miss., $31; B. T., of Ill., $30; C. H., of La., $30; J. A., of N. J., $15; M. D. of Minn., $55; S. T. V., of R. I., $30; S. & R., of Mo., $30; J. M. H., of Miss., $30; J. A. F., of Ala., $35; D. A. D., of Fla., $30; G. & B., of Mo., $30; A. DeW., of L. I., $30; S. R. B., of Pa., $25; J. G., of Ky., $300; O. H. W., of Miss., $30; J. H. L., of N. Y., $30; E. W. B., of N. J., $30; W. S. L., of Ohio, $30; J. A. C., of Conn. $35; B. & C., of Ohio, $15; L. P. H., of N. Y., $40; H. & P., of N. Y., $15; H. L. E., of N. Y., $55; I. A., of Conn., $33; F. M. R., of N. Y., $28; W. A. S., of L. I., $25; I. H. S., of N. Y., $20; G. W. W., of N. Y., $25; J. P. C., of N. Y., $50; A. S., of N. Y., $30; H. A. H., of N. Y., $25; J. B. A., of N. Y., $120; H. P., of N. Y., $30; L. B., of N. Y., $25.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 27, 1860:—

H. L. E., of N. Y.; E. B., of Conn.; J. Y. H., of Pa.; W. N. M., of Mass.; J. L., of S. C.; F. M. R., of N. Y.; E. W. B., of N. J.; S. R. B., of Pa; A. F. W., of L. I.; C. & F., of Cal.; J. P. B., of S. C.; W. A. S., of L. I.; L. B., of N. Y.; J. H. S., of N. Y.; I. A., of Conn.; S. S. B., of R. I.; A. C., of N. H.; E. M. C., of N. Y.; A. S., of N. Y.; C. W. W., of Iowa; W. E. D., of N. Y.; C. R. A., of Conn. (2 cases); H. M. J., of Conn.; S. T. S., of Va.; H. A. H., of N. Y.; J. P. C., of N. Y. (2 cases); L. P. R., of Mich.; G. W. W; of N. Y.; R. & S., of Mo.; C. R. B., of Conn.; E. F. W., of N. Y.; C. A. H., of Mich.; T. Y., of Iowa; T. C. H., of N. Y.; W. G., of Ala.; C. R., of Mich.; B. & C., of Ohio; H. P., of N. Y.; J. B. A., of N. Y. (2 cases).

VOL. I. OF THE NEW SERIES.

BOUND VOLUME I.—Covers for Binding, &c.—New subscribers who may desire the first volume of the New Series which contains the numbers from July 1, 1859, to January 1, 1860, can be supplied with it by mail or express, handsomely bound, in cloth, at the following prices:—At the office of publication, or by express, $1.50; by mail (which includes postage), $2; in sheets, complete, $1. Covers may also be had separately, which answer as portfolios for preserving the papers, or for binding. Price for covers at the office, or delivered by express, 40 cents; by mail (including postage), 50 cents. For the same investment no other work containing so much valuable information can be procured as is embraced in one volume of the SCIENTIFIC AMERICAN. Orders should be addressed to MUNN & CO., 37 Park-row, New York. Bound volumes may also be had of most all the periodical dealers throughout the country.