

O A., of Ind.—If you employ a half-inch or even a quarter-inch iron rod, extend it ten feet above your chimney, connect it perfectly by sockets, and carry it into the moist ground, you need not have any apprehensions of danger. If your house is large, use a rod at each end, and connect the two by a lateral branch. Be sure and allow no large mass of metal to be near the rods, and make them fast with cleats of dry varnished wood. Copper is the best conductor. Any mechanic or farmer can put up his own lighting rod by following the above directions, of course, the thicker the rod the better the conductor.

W. G. R., of Mass.—We have no reliable data as to the use of zinc-coated iron pipes being superior to lead pipe, for conveying water to be used for domestic purposes. Pure zinc is a very oxidizable metal and is more readily decomposed with water than iron; but when combined with iron by the galvanizing method, it may resist the action of water in a very superior manner. Experience alone can settle this question, and some of our readers may be able to solve it.

H. C. F., of Mass.—French polish is made by dissolving 5 pounds of pale shellac and 1/2 pound of mastic in alcohol.

F. T. W., of Ala.—Asphalt dissolved in hot linseed oil and thinned with turpentine makes a good cement for painting a leaky tin roof, without injuriously affecting the water that may fall upon it. White lead thinned with oil and made into the consistency of soft putty, with fine sand or ground glass, makes a most enduring cement for leaks in roofs, but before it becomes perfectly dry, it is liable to affect the rain-water injuriously, if used for coating.

W. B. G., of N. Y.—Be pleased to give us your ideas on the best form of ships. There are so many different opinions among nautical men on this point that it appears to us they have no recognized principles to guide them.

T. S. H., of N. C.—The article on balancing machinery was credited to the London "Journal of Arts." Pulleys may be balanced by removing the surplus metal from the heavy part. Although an iron or wooden pulley may be turned perfectly true, some parts of it may be more dense than others, and of course it will be unbalanced. All pulleys or wheels should be spun on a free spindle, to ascertain if they are truly balanced, before they are put on.

T. S. B., of N. Y.—There is an engine operated by compressed air which has been working in a coal mine near Glasgow, Scotland, for several years. The air is compressed by a steam engine at the top of the pit, and forced down through a tube. The object of this arrangement is to obviate the use of fire in the mine. If you can render your method of operating an Ericsson engine with compressed air economically practicable, you should do it as soon as possible.

T. F. C., of Mass.—We have frequently heard of sulphur being found on the surface of the ground in Virginia and other places after thunder-storms, but we cannot account for its presence. In the case at Amesbury, Mass., it seems to have been deposited from the rain; in other cases, it is supposed to have been brought from the interior of the earth to the surface of the ground by lightning.

F. S., of C. W.—A colored person might obtain a patent for his invention, but it is a matter of doubt about his being able to sustain it against infringers, in view of the Dred Scott decision. We are not prepared to answer the question fully, as there is no adjudicated case which settles this exact question. We suppose the Commissioner of Patents, if addressed upon the subject, would give the advice you seek.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, July 7, 1860:—

- S. B. L., of Pa., \$25; S. W. M., of N. Y., \$110; J. S. B. R. of N. J., \$25; J. H., of Mich., \$30; L. & L., of N. Y., \$25; A. J. K., of Iowa, \$30; F. M., of Miss., \$30; L. A. F. De C., of N. Y., \$35; C. B. M., of Wis., \$25; L. C. H., of N. Y., \$30; H. & S. of N. Y., \$30; H. P. C., of Mich., \$15; N. S., of Ill., \$30; J. W. of N. Y., \$25; M. L. C., of N. Y., \$25; J. L. N., of N. Y., \$30; J. H., of Pa., \$30; J. B. C., of Ohio, \$30; G. K. P., of Mass., \$25; E. D., of Mass., \$35; J. P. M., of Ill., \$25; F. Z. N., of Conn., \$30; T. H. B., of N. Y., \$15; J. S. S., of N. Y., \$30; J. W., of N. Y., \$25; R. C. B., of N. Y., \$43; W. T., of N. Y., \$25; J. C. G., of Mass., \$55; C. & B., of Mass., \$30; M. B., of N. Y., \$30; P. K., of R. I., \$30; J. B. T., of Ill., \$45; I. G., of Pa., \$30; O. F. B., of N. Y., \$10; W. H. R., of N. Y., \$20; W. E. McL., of Mass., \$25; B. R., of Ga., \$30; J. R. McD., of Mo., \$25; E. E., of Ill., \$35; W. & F., of Tenn., \$100; L. W. N., of N. Y., \$25; F. S. B., of N. Y., \$30 A. & J. L., of Va., \$30; M. B., of Ohio, \$25; J. R. H., of Maine, \$30; S. G., of Ill., \$25; L. S. & J. E., of N. Y., \$25; D. C. T., of N. Y., \$25; A. P. C., of Ill., \$30; D. & C. of N. Y., \$30; R. H., of N. Y., \$250; L. V. N., of N. Y., \$25; F. W., of N. Y., \$25; J. R., of N. J., \$30; J. W. T., of Vt., \$30; J. C. L., of Ill., \$30; J. S., of N. Y., \$25; H. P. F., of Maine, \$30; E. J. F., of Mo., \$30; J. B. D., of N. Y., \$50; C. D., of Mass., \$30; E. C., of La., \$30; G. L. T., of N. Y., \$10; J. C. R., of Pa., \$25; C. V. S., of Ill., \$25; W. S. L., of Ohio, \$14; W. T., of N. Y., \$25; J. H. W., of N. J., \$30; S. & O. P., of Mich., \$30; I. N., of N. Y., \$25; J. B. L., of Conn., \$35; W. W. S., of Iowa, \$25; F. G., of Mich., \$30; M. & C., of Ill., \$30; W. F. J., of Pa., \$40; W. H. R., of N. Y., \$12; D. S. H., 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, July 7, 1860:—

- J. W., of N. Y.; W. R., of N. Y.; C. B. M., of Wis.; W. T., of N. Y.; J. C. G., of Mass.; F. S. B., of N. Y.; H. P. C., of Mich.; J. C. R., of Pa.; H. N., of Ky.; E. D., of Mass.; J. P. M., of Ill.; W. H. P., of N. Y.; D. S. H., of N. Y.; S. B. L., of Pa.; J. S. B. R., of N. J.; C. D., of Mass.; J. S., of N. Y.; L. & L., of N. Y.; W. S. L., of Mich.; J. R. McD., of Mo.; L. S. & J. E., of N. Y.; J. B. L., of Conn.; W. W. S., of Iowa; R. C. B., of N. Y.; W. T., of N. Y.; L. W. N., of N. Y.; M. C., of Mass.; W. E. McL., of Mass.; M. L. C., of N. Y.; P. K., of R. I.; M. B., of Ohio; E. E., of Mich.; C. V. S., of Ill.; G. K. P., of Mass.; M. A. W., of Cal.; D. C. T., of Wis.; F. W., of N. Y.

NEW BOOKS AND PERIODICALS RECEIVED.

MILCH COWS AND DAIRY FARMING: Comprising the Breeds, Breeding and Management in health and disease of dairy and other stock, the selection of milch cows, with a full explanation of Guenou's Method, &c.; the production of milk, butter, and cheese. with a treatise upon the dairy husbandry of Holland; to which is added Horsfall's system of dairy management, by Charles L. Flint, &c. Liberally illustrated. Crosby, Nichols, Lee & Co., Boston; W. J. Pooley & Co., New York.

GRASSES AND FORAGE PLANTS: A Practical Treatise, comprising their Natural History, comparative value, methods of cultivating, cutting and curing, &c. By Charles L. Flint, Secretary of the Massachusetts Board of Agriculture, &c., with 170 illustrations. Fifth edition, revised and enlarged. Crosby, Nichols, Lee & Co., Boston; W. J. Pooley & Co., New York.

The above two works are thoroughly practical, and of high price. We heartily commend them to the attention of all those who feel interested in those subjects.

THE YOUNG FARMER'S MANUAL. Published by C. M. Sexton, Barker & Co., No. 25 Park-row, New York.

This volume details the manipulations of the farm in a plain and intelligible manner, with practical directions for laying out a farm and erecting buildings, fences, and farm gates; embracing also the "Young Farmer's Workshop," a division of the subject in which full directions are given for the selection of good farm and shop tools, their uses and manufacture; the whole work is adorned by numerous engravings of fences, gates and tools for performing nearly every branch of farming operations; and the volume forms a most excellent book of reference which we can earnestly recommend. The author is S. Edwards Todd.

USEFUL HINTS TO OUR READERS.

BOUND VOLUMES.—Persons desiring the first volume of the New Series of the SCIENTIFIC AMERICAN can be supplied at the office of publication, and by all the periodical dealers; price, \$1.50; by mail, \$2, which includes postage. The volume, in sheets, complete, can be furnished by mail; price \$1. Vol. II is now bound and ready for delivery. The price for this volume is the same as that charged for Vol. I.

BINDING.—We are prepared to bind volumes, in handsome covers, with illuminated sides, and to furnish covers for other binders. Price for binding, 50 cents. Price for covers by mail, 50 cents; by express, or delivered at the office, 40 cents.

SUBSCRIBERS TO THE SCIENTIFIC AMERICAN who fail to get their papers regularly will oblige the publishers by stating their complaints in writing. Those who may have missed certain numbers can have them supplied by addressing a note to the office of publication.

RATES OF ADVERTISING.

THIRTY CENTS per line for each and every insertion, payable in advance. To enable all to understand how to calculate the amount they must send when they wish advertisements published, we will explain that ten words average one line. Engravings will not be admitted into our advertising columns; and, as heretofore, the publishers reserve to themselves the right to reject any advertisement sent for publication.

IMPORTANT TO INVENTORS.

THE GREAT AMERICAN AND FOREIGN PATENT AGENCY.—Messrs. MUNN & CO., Proprietors of the SCIENTIFIC AMERICAN, are happy to announce the engagement of Hon. CHARLES MASON, formerly Commissioner of Patents, as associate counsel with them in the prosecution of their extensive patent business. This connection renders their facilities still more ample than they have ever previously been for procuring Letters Patent, and attending to the various other departments of business pertaining to patents, such as Extensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements, &c., &c. The long experience Messrs. MUNN & Co. have had in preparing Specifications and Drawings, extending over a period of fifteen years, has rendered them perfectly conversant with the mode of doing business at the United States Patent Office, and with the greater part of the inventions which have been patented. Information concerning the patentability of inventions is freely given, without charge, on sending a model or drawing and description to this office.

Consultation may be had with the firm, between nine and four o'clock, daily, at their Principal Office, No. 37 PARK ROW, NEW YORK. We have also established a BRANCH OFFICE in the CITY OF WASHINGTON, on the CORNER OF F AND SEVENTH STREETS, opposite the United States Patent Office. This office is under the general superintendence of one of the firm, and is in daily communication with the Principal Office in New York, and personal attention will be given at the Patent Office to all such cases as may require it. Inventors and others who may visit Washington, having business at the Patent Office, are cordially invited to call at their office. They are very extensively engaged in the preparation and securing of Patents in the various European countries. For the transaction of this business they have Offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we may safely say that three-fourths of all the European Patents secured to American citizens are procured through our Agency.

Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patent there.

A pamphlet of information concerning the proper course to be pursued in obtaining patents through their Agency, the requirements of the Patent Office, &c., may be had gratis upon application at the Principal Office or either of the Branches. They also furnish a Circular of Information about Foreign Patents.

The annexed letters, from the last three Commissioners of Patents, we commend to the perusal of all persons interested in obtaining Patents:—

Messrs. MUNN & Co.—I take pleasure in stating that while I held the office of Commissioner of Patents, MORE THAN ONE-FOURTH OF ALL THE BUSINESS OF THE OFFICE CAME THROUGH YOUR HANDS. I have no doubt that the public confidence thus indicated has been fully deserved as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill and fidelity to the interests of your employers. Yours, very truly,

CHAS. MASON.

Immediately after the appointment of Mr. Holt to the office of Postmaster-General of the United States, he addressed to us the following very gratifying testimonial:—

Messrs. MUNN & Co.—It affords me much pleasure to bear testimony to the able and efficient manner in which you have discharged your duties of Solicitors of Patents while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and, I doubt not, justly deserved) the reputation of energy, marked ability and uncompromising fidelity in performing your professional engagements. Very respectfully, Your obedient servant, J. HOLT.

Messrs. MUNN & Co.—Gentlemen: It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency, and that I have ever found you faithful and devoted to the interests of your clients, as well as eminently qualified to perform the duties of Patent Attorneys with skill and accuracy. Very respectfully, Your obedient servant, WM. D. BISHOP.

Communications and remittances should be addressed to MUNN & CO.

Publishers, No. 37 Park-row, New York.

STEAM HAMMERS — THE UNDERSIGNED,

Makers of the celebrated Nasmith hammers, having a full assortment of patterns, continue to furnish them at reduced prices, and of any size, from 5 cwt. upwards. The large number hitherto made by them, and in successful operation, precludes the necessity of presenting any recommendations. They are also patentees and exclusive makers, for this country, of what is generally known as the "Condie," or inverted hammer, one of which of six tons, falling six feet, has been in operation at the Franklin Forge, New York, since 1848. [1 cwt.] MERRICK & SONS, Philadelphia.

\$50.—SEVERAL STATE RIGHTS FOR A valuable (premium) patent for sale cheap. Address Box 87, Brooklyn, N. Y.

PATENT CORK-CUTTING MACHINES.—State rights for several States for sale to use our new patent machines. With one machine a gross of corks of different sizes can be made in one minute. Call and see them in successful operation at the Cork Factory, No. 43 Center-street, New York. S. W. SMITH & CO.

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TWO NEW INVENTIONS.—A CHEAP AND impervious covering, deodorizing and anti-putriferous patent compound for the better preservation of hams and other meats for home or exportation. Also a new drier for zinc paint and raw oil alone, that will receive a second coat on the following day. For purchase or interest in the above apply personally by appointment, or by letter, to T. HODGSON, No. 7 Beach-place, Brooklyn, N. Y. 1*

FOR SALE—TWO LARGE TRIP HAMMERS; one new and one second-hand (as good as new). For full description see advertisement in SCIENTIFIC AMERICAN. 3 12* J. C. HOADLEY, Lawrence, Mass.

FOR SALE—A STATIONARY STEAM ENGINE, 7x15, 10-horse power, with boiler and all appurtenances; has been in use three months; in perfect order. An excellent engine. Particulars on application. J. C. HOADLEY, Lawrence, Mass. 3 13*

FOR SALE—A SECOND-HAND SHOP CRANE; very convenient. J. C. HOADLEY, Lawrence, Mass. 3 3*

FOR SALE—SMALL VERTICAL HAND drillers to fasten to benches; very cheap and convenient. J. C. HOADLEY, Lawrence, Mass. 3 3*

FOR SALE—A GROOVING MACHINE FOR working wood; second-hand; in perfect order. J. C. HOADLEY, Lawrence, Mass. 3 3*

FOR SALE—STEEL TURNING AND PLANING tools; cheap and good as new. J. C. HOADLEY, Lawrence, Mass. 3 3*

FOR SALE—A DOUBLE HORIZONTAL STEAM engine, 18x35, 100-horse power; has been in use one year; in perfect order. Three boilers and all appurtenances. Particulars on application. [3 15*] J. C. HOADLEY, Lawrence, Mass.

FOR SALE—TWO LARGE TRIP HAMMERS; one new and one second-hand, as good as new; whole weight, 12,245 lbs.; weight of head, without die, 14,175 lbs.; weight of die, 12 lbs.; full speed, 200 strokes per minute; ordinary speed, 150 strokes per minute; four tappets; speed of tappet shaft, 50 revolutions per minute; lift of ordinary press, 9 to 10 inches; belt wheel, 42 inches diameter 1/2 inches face; length from center of tappet shaft to center of dies, 45 3/4 inches; length from center of fulcrum to center of die, 60 inches. [1*] J. C. HOADLEY, Lawrence, Mass.

FOR SALE—ONE SECOND-HAND NO. 3 punch press, Fowler pattern; one drop hammer, 1,200 lb. bed, Fowler pattern; a complete set of upright steam engine patterns, modern style; a complete set of Morse machine patterns (see SCIENTIFIC AMERICAN, Vol. III., page 202). One Smees' electro-plating battery; size of plates, 4x7; all the apparatus complete. All of the above, with various other useful patterns, will be sold very low, and will pay any one wanting either of the above articles for his journey in purchasing. Address J. W. B., Box 186, Hartford, Conn. 1*

MODELS—IN EITHER WOOD OR METAL, for the Patent Office. HENRY J. BEHRENS, No. 170 Chatham-street, in the rear. 3 5*

\$1 COPYING PRESS—WITH BOOK FOR copying business-letters instantly and perfectly, is sent postpaid by the manufacturer for \$1.27. Agents wanted. Address, with stamp—J. H. ATWATER, Manufacturer, Providence, R. I. 3 4*

TENNESSEE STATE FAIR OPENS AT NASHVILLE, Sept. 10, 1860.—\$500 each is offered for the best blood stallion, harness stallion, Durham bull and jack, besides large premiums on fat cattle and all other domestic animals, and on all manufactured articles in every useful department of human industry. Competition is invited from the whole Union, and no entry fee is charged. Programmes may be had free on application to L. P. Williams, Secretary, at Nashville. THOMAS B. JOHNSON, Treasurer Tennessee State Fair. 3 2*

SECOND-HAND MACHINE TOOLS.—ONE geared turning engine, 10 foot slides; one good gear-cutting engine; one iron planer, slides 6 feet 9 inches; one geared lathe, with screw chuck and slide rest—will swing 30 inches, and take in 14 feet shaft; for sale low at Arnold's machine-shop. Models—operating or for the Patent Office—made of either wood, glass or metal by BENJAMIN ARNOLD, East Greenwich, R. I. 1*

A NEW SCIENTIFIC CATALOGUE.—D. APPLETON & CO., Nos. 443 and 445 Broadway, New York, have just published a new catalogue of the latest works in every department of science and art, making 76 pages 8vo. It will be sent to any address on receipt of a 3-cent stamp.

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THE GRAEFENBERG THEORY AND PRACTICE OF MEDICINE.—On the 1st day of May, 1860, the Graefenberg Company's Sales-rooms, Consulting Offices and Medical Institute were removed from No. 34 Park-row to—

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One of the leading journals says of the Graefenberg Manual of Health:—"This is the only medical book for family and general use ever published. It is written in plain language, free from scientific terms, and condenses more practical medical information than can be obtained anywhere else, unless a regular medical course of education is undergone. The popularity of this admirable and compendious work is well shown by this being the twenty-fourth edition. It contains a number of colored anatomical plates, and is a complete family physician. It is at once simple, popular, plain and explicit; and the mother, with such an adviser, is prepared at once to apply the proper remedies in case of sudden sickness in the family. In the country, a copy of the "Manual of Health" is indispensable, and every family should possess one. It will save a hundred times its cost in doctors' bills, and, what is far better, will be the means of preserving many valuable lives to their families and relatives."

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THE SWEDISH MOVEMENT CURE—ITS HISTORY and Philosophy, with practical directions for the treatment of various diseases; illustrated with 70 engravings, forming a complete Manual of Exercises. By Geo. H. Taylor, M.D. 1 vol., 12mo, 400 pages. Price, prepaid by mail, \$1.25. Address FOWLER & WELLS, No. 308 Broadway, New York. This is the first complete work on this subject published in America. It will be found useful to all classes, in or out of the profession, and to all men, women and children.

E. D. & G. DRAPER, HOPEDALE, MILFORD, Mass., make and furnish to order Dutcher's Patent Temples, the best in use for all kinds of goods; Perry's Patent Parallel Shuttle Motions, Patent Let-off Motions for Looms, Stearns' Patent Shuttle Motions, Patent Weighting Apparatus for Top Rolls to Railway Heads and Drawing Frames, Robbin's Patent Shuttle Guides, Hayden & Wally's Patent Drawing Regulators, or Eversen, Thompson's Patent Oilers, Parker's Patent Spindle Steps, Houghton's Patent Brushes, Hussey's Patent Dresser Speed Regulator.

THE WATER CURE JOURNAL FOR JULY, now ready, contains:—Hygienic and Drug Medication Contested; Diseases of the Throat and Lungs; Home Practice of the Movement Cure—Treatment of the Croup; A Family Necessity; A Homoeopathic Dose; Dr. Winship's Experience; The Cattle Disease; Collision Between Doctors and Druggists; and much other matter useful to every reader. A NEW VOLUME commences with the present number, and now is the time to subscribe. Only \$1 a year. Address FOWLER & WELLS, No. 308 Broadway, New York.

THE PATENT RIGHT TO PUSEY'S GOVERNOR, for Railroad Horse-powers, for sale.—On account of engagements which prevent me from giving it proper attention, I will sell my right and title to this valuable little Governor, now generally introduced and selling throughout the United States.

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TO SEWING MACHINE MANUFACTURERS.—Rights for sale for Goodes & Miller's improved Button-hole and Over-seaming Machine, for working button-holes, eyelet-holes, ladies' embroidery, or for cording or braiding the edges of garments. It is just the thing for glove, stocking, bag, sail, awning-makers and tailors, as the sewing done on this Machine has all the appearance of a fine corded edge, or, with a change of tension, resembles braiding. It is extremely simple in construction, and not liable to get out of order. Full particulars and specimens of work sent, on application to GOODES & MILLER, No. 1,244 Olive-street, Philadelphia, Pa.

BOILER EXPLOSIONS.—NO BOILER SHOULD be without a good Steam and Water Gage. An excellent assortment of the above constantly on hand, at makers' lowest prices. All Gages accurately tested and warranted correct.

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WARREN'S TURBINE WATER WHEEL (Warren & Damon's patent), manufactured by the American Water Wheel Company, Boston.—This Wheel stands at the head for great economy in water. Over 600 are now operating with great success in cotton and woolen factories, &c., &c. With its modern improvements, it cannot be surpassed. Send for our 7th annual pamphlet of 1860 (inclose two stamps), containing a treatise on hydraulics, beautiful illustrations of the Warren Turbine, practical rules for computing water-power, prices, &c., &c. It is the Wheel for the North, because ice does not affect it; for the South, because it is compact and ready to attach and operate without great mechanical skill; for the world, because it generates more available power from the water used than any other Water Wheel in existence. Address A. WARREN, Agent, No. 31 Exchange-street, Boston, Mass.

DUDGEON'S PORTABLE HYDRAULIC JACKS for raising heavy weights, boilers, locomotives, cars, stone, stowing cotton, pulling, &c. Frames and platens for a stationary pressing, of different sizes, made to order. Dudgeon's portable hydraulic punches for punching or shearing iron, die-sinking and other purposes, where, with limited movement, great power is required. Send for a circular. DUDGEON & LYON, No. 466 Grand-street, New York.

PORTABLE STEAM ENGINES—6, 8 AND 10 horse, at \$500, \$635 and \$780. For sale by S. C. HILLS, No. 12 Platt-street, New York.

BACK NUMBERS.—IMPORTANT TO PATENTERS AND ADVERTISERS.—Back numbers of the SCIENTIFIC AMERICAN can be furnished to new subscribers who desire them. Every number of the paper is electrotyped, and therefore ANY QUANTITY of ANY NUMBER issued since the commencement of the "New Series" can be furnished at the office of publication, and at most of the periodical stores throughout the country. Patentees whose engravings have appeared in these columns cannot make their inventions known to the trade, in their respective line, better than by purchasing a large number of copies of the paper containing their engravings, and circulating them among their friends and the dealers. The wholesale price charged for one hundred copies of the SCIENTIFIC AMERICAN is but little more than the cost of as many handbills or circulars, while the benefit derived from circulating the paper containing the illustration will be found to far surpass the distribution of handbills or any other mode of advertising. Address MUNN & CO., Publishers, No. 37 Park-row, New York.

H. DAWSON & SON, MANUFACTURERS OF all kinds of spring knitting needles, Cohoes, N. Y.—Having lately increased our facilities for manufacturing, we shall be able to fill all orders with promptness, from the very best wire, made expressly for spring needles. Address H. DAWSON & SON, Cohoes, N. Y.

TO MANUFACTURERS.—CONANT'S PATENT let-off motion for looms or warp regulator is applicable to old and new looms, from the lightest to the heaviest fabric, perfectly reliable, and the only device known by which a uniform tension of the warp, irrespective of the diameter of beam, can be secured. Satisfaction guaranteed. Send for a circular to H. CONANT & CO., Willimantic, Conn.

SECOND-HAND SLIDE LATHES, UPRIGHT drills, iron planers, slotting machines, Dick's No. 1, power punching machine, suspension drills, scroll chucks, vices, &c.; also a Woodworth planer, Daniels' planers, power-motoring machine and tenoning machine. These tools are in good order, have been used in a large shop now giving up business, and will be sold at a bargain for cash or approved paper. For particulars, address CHAS. H. SMITH, No. 135 North Third-street, Philadelphia, Pa.

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