

THE CHEAPEST MODE OF INTRODUCING INVENTIONS.

INVENTORS AND CONSTRUCTORS OF NEW AND Useful Contrivances or Machines, of whatever kind, can have their inventions illustrated and described in the columns of the SCIENTIFIC AMERICAN on payment of a reasonable charge for the engraving.

No charge is made for the publication, and the cuts are furnished to the party for whom they are executed as soon as they have been used.

SCOTCH GLASS TUBES, STEAM AND WATER Gages for sale. E. BROWN, 311 Walnut street, Philadelphia.

WANTED.—15,000 OR 20,000 CAST-STEEL PUNCH Tubes for Belt Punches, etc. Parties having facilities for manufacturing a superior article please address NASH & DOLAN, Watertown, N. Y.

HANCOCK'S PATENT STEAM BLOWER COMBINES all the advantages of the Fan Blower, and requires very little power to operate it.

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RUFUS CHANDLER & CO. (SPRINGFIELD, MASS.), manufacturers of all kinds of MACHINE SCREWS, also STEEL SLIDE GAGES, other machinists' tools, and small machinery generally.

FOR SALE.—A SHAFTING LATHE, 20 FEET HEAD. True and accurate in every respect. Price \$550.

PORTER'S FOOT-REST AND BLACKING-BOX.—Illustrated in Vol. XI, No. 21 (new series). Rights for sale.

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ANDREWS' PATENT OSCILLATING ENGINES ARE compact, strong, light, durable, simple and economical.

WANTED.—A PARTNER, EITHER ACTIVE OR silent, with a cash capital of about \$20,000, to take the place of a retiring partner in a large and profitable Agricultural Implement Manufactory.

BLAST MACHINERY FOR SALE.—TWO VERTICAL Blowing Cylinders, 40 inches diameter, 35 inches stroke, in fair order.

LEATHER BELTING FOR SALE.—ONE SECOND-hand 20-inch double belt, 75 feet long; also one 16-inch double belt, 83 feet long.

AMES'S IRON WORKS, OSWEGO, N. Y.—WE ARE now manufacturing a superior article of eight and twelve horse-power Portable Engines.

MACHINISTS' TOOLS, ENGINE LATHES, HAND Lathes, Planers, Upright Drills, etc., of best material and superior workmanship.

OIL WELLS.—"HOBBS' PATENT APPARATUS FOR increasing flow of Wells and separating Gas from Petroleum."

INSTRUCTION GIVEN FOR BRINGING TO THE utmost perfection by malting and conversion of Indian corn to Molasses or Sugar.

\$2,000 A YEAR MADE BY ANY ONE WITH \$15. Stencil Tools. No experience necessary.

FOR SALE.—3 NEW 8-FOOT ENGINE LATHES, screw cutting, weight 1,000 lbs., \$450; two second-hand 12-foot ditto.

BUTLER'S DUTCH GAP CANAL! THIS WORK IS nearly completed, and persons in the North who wish to keep a memento of the Rebellion will be supplied with specimens of the peculiar geological formations there discovered.

OIL! OIL! OIL!

For Railroads, Steamers, and for machinery and Burning, KEROSENE Improved Engine Signal and Car Oils, imported and recommended by the highest authority in the United States and Europe.

FOR SALE.—ONE MULEY SAW MILL, WITH A 20 foot carriage and 7-foot saw, \$300; one Resaw Machine, 4 rolls, 5-foot saw, \$400; one Axe Handle and Spoke Lathe, \$225.

FREIGHT CONDUCTORS AND BRAKEMEN WANTED.—The BALTIMORE & OHIO RAILROAD COMPANY want a number of experienced RAILROAD MEN to run upon its numerous freight trains.

FOR THE HOLIDAYS AND WINTER EVENINGS. Innocent Moral Fireside Games have become a necessity in every family.

WANTED.—TWO YOUNG MEN (BROTHERS), with a number of years' experience in the Hardware trade in this city.

150 HORSE STEAM ENGINE, 26-INCH CYLINDER, 5 foot stroke, 28 foot fly wheel, with three 42-inch boilers, 30 feet long.

MACHINERY.—ONE 16-FOOT LATHE, 60-INCH swing; Slide Lathes, 4, 6, 8, 12 and 18 feet bed; Iron Planers, 3, 5, 7 and 9 feet; Bolt Cutters; Upright Drills; Compound Planers; Universal Chucks, etc., on hand, at Machinery Depot, 25 North 3d street, Philadelphia.

WANTED.—\$125 A MONTH! AGENTS EVERYWHERE, to introduce the new Shaw & Clark \$16 Family Sewing Machine, the only low price machine in the country which is licensed by Grover & Baker, Wheeler & Wilson, Howe, Singer & Co., and Bachelier.

GALVANIZED IRON.—GALVANIZING DONE WITH dispatch and castings furnished if desired, either Malleable or Gray Iron.

WANTED.—A PORTABLE STEAM ENGINE AND Saw Mill of 12 or more horse-power. Address, with terms, A. LEIZE & CO., Reading, Pa.

WAIT'S IMPROVED JONVAL TURBINE WATER Wheel is the most powerful, durable and economical wheel ever offered to the public.

PLATINA.—WHOLESALE AND RETAIL, FOR ALL purposes. H.M. RAYNOR, Importer, 748 Broadway, N. Y.

MACHINISTS WHO ARE DESIROUS OF IMPROVING their condition in life by entering the United States Navy as Engineers, at \$1,108 per year, can do so without failure.

FOR SALE.—FOUR VALUABLE PATENT RIGHTS. The inventor has realized over twelve thousand dollars out of one of them in the last twelve months.

THE PATENT OUNCE BOOT JACK.—SEND FOR my circular. EGBERT P. WATSON, Box 773, New York P. O.

FOR SASH, BLIND, AND DOOR MACHINERY, address J. A. FAY & CO., or E. C. TAINTER, Succeeding Partner, Worcester, Mass.

WOODWORTH PLANERS.—IRON FRAMES TO Plane 18 to 24 inches wide, \$120 to \$150. For sale by S. C. HILL, No. 12 Platt street, New York.

OLSKJE & KNEELAND, MODEL MAKERS. PATENT Office Models, Working Models, and Experimental Machinery made to order at 528 Water street, near Johnson street, New York.

SOLID EMERY WHEELS, SILICATE OR VULCANITE, of every size, promptly made or shipped from stock.

INVENTORS IN WANT OF CASH CAPITAL TO introduce their inventions can hear of a party who will furnish any reasonable amount, by addressing W. B. G., Box 5,722, New York.

A MESSEURS LES INVENTEURS.—AVIS IMPORTANT. Les inventeurs non familiers avec la langue Anglaise, et qui préféraient nous communiquer leurs inventions en Français, peuvent nous adresser dans leur langue natale.

A VALUABLE WORK FOR INVENTORS PATENTEES AND MANUFACTURERS.

The publishers of the SCIENTIFIC AMERICAN have just prepared with much care, a pamphlet of information about Patents and the Patent Laws, which ought to be in the hands of every inventor and patentee, and also of manufacturers who use patented inventions.

It has been the design of the publishers to not only furnish, in convenient form for preservation, a synopsis of the PATENT LAW and PRACTICE, but to answer a great variety of questions which have been put to them from time to time during their practice of upwards of seventeen years.

SPOKE MACHINES, OF AN IMPROVED PATTERN, made by J. GLEASON, No. 1, 130 Germantown avenue, Philadelphia, Pa.

TWIST DRILLS.—ALL SIZES OF STUB'S WIRE Drills; also Twist Drills for machinists' use, varying in diameter by 3/32nds from 1/4 inch to 1 1/2 inch.

IRON PLANERS, ENGINE LATHES, DRILLS AND other machinists' tools, of superior quality, on hand and finishing, for sale low.

CAVALRY HORSES WANTED. CAVALRY BUREAU, OFFICE OF ASSIST. QUARTERMASTER, No. 18 State street, New York, June 10, 1864.

I WILL PURCHASE IN OPEN MARKET ALL THE Calves, Horses that may be presented and pass inspection at the Government Stables, corner of 10th avenue and 25th street, in this city, until further notice.

REYNOLDS' TURBINE WATER WHEELS.—COM-PETENT men are employed to measure streams, make plans, and put in flumes, wheels, and gearing.

BAILEY'S PATENT ICE CREEPER.—CREEPERS or Patent Right for sale. See illustration, page 192, Vol. VIII, new series, SCIENTIFIC AMERICAN.

SAVING OF FUEL TO PARTIES USING STEAM-DAMPERS REGULATORS. Guaranteed to effect a great saving in fuel and give the most perfect regularity of power.

\$70 A MONTH! I WANT AGENTS EVERYWHERE, at \$70 a month, expenses paid, to sell Fifteen Articles, the best selling ever offered.

GROVER & BAKER'S HIGHEST PREMIUM ELASTIC Stitch Sewing Machines, 495 Broadway, New York.

GUN AND PISTOL SCREWS.—COMSTOCK, LYON & CO., Manufacturers (Office, 74 Beekman street, New York), are always prepared to furnish Gun and Pistol Screws to save the Screws to fit the U. S. Musket, Sewing Machine Screws, and Metal Screws generally, of the best quality, at short notice.

PECK'S PATENT DROP PRESS MANUFACTURED in all its varieties, by M. & C. PECK & CO., Founders and Machinists, New Haven, Conn.

WROUGHT IRON PIPE, LAP WELDED BOILER Flues, Brass Cocks, Stop Valves, Water Gages, Steam Whistles, Gas and Steam Fitters' Tools, Steam Boilers, Steam Pumps, Feed Pumps, Galvanized Iron Pipe for water, etc., etc.

BELKNAP & BURNHAM, MANUFACTURERS OF Globe and Check Valves, also steam and Gas Cocks, Bridge port, Conn.

FOR SALE.—REED & PACKARD'S SPRING CATCH Button. A new and valuable invention for fastening side and back curtains to carriages.

PATENT RIGHTS FOR SALE.—CONSISTING OF Mining Machinery—Steam Boiler, Forging heavy guns, shafting and turnsets—with others of less note.

FOR SALE.—ONE FLUE BOILER, 30 FEET LONG by 45 inches diameter, with two 14-inch return flues, including boiler front, bonnet, pipes, valves, etc., all complete; has been in use about five years, and is in good condition.

PLANNER CENTERS THAT WILL SWING 12, 18, and 24 inches, for sale by THOMAS & CO., Worcester, Mass.

Zur Beachtung für deutsche Erfinder. Die Unterzeichneten haben eine Entdeckung, die Erfindern das Ver-halten angibt, um sich ihre Patente zu sichern, herauszugeben, und verabfolgen solche gratis an dieselben.

Munn & Co., 37 Park Row, New York.

Die Patent-Gesetze der Vereinigten Staaten, nebst den Regeln und der Geschäftsordnung der Patent Office und Anleitungen für den Erfinder, um sich seine Patente zu sichern, in den V. S. Staaten sowohl als in Europa.

Munn & Co., 37 Park Row, New York.

Improved Ohio Corn Husker.

The accompanying engraving represents one of the simplest, most durable and efficient devices for husking corn we have seen. This husker can be worn over a mitten or glove as easily as upon the naked hand, and, therefore, enables a man to husk corn as comfortably in cold weather as to perform any other work.

This husker also saves the hands from becoming sore, and greatly facilitates the operation. It is applied around the center of the ear of corn, not at the point, and with its hooking tooth, A, a single pass will remove the husk in the most perfect manner much better than can be done with a peg. It is made wholly of brass, and will last for years.

This invention has now been in use for two years



BRINKERHOFF'S OHIO CORN HUSKER.

and has given perfect satisfaction. The inventors say they have not been able thus far to supply the great demand for them.

This invention was patented by A. W. Brinkerhoff, of Upper Sandusky, Ohio, Sept. 2, 1862, and is manufactured by Messrs. Wood, Fowler & Beery, of the same place. They are sold for fifty cents each, with discount to dealers.

For further particulars apply to either of the above parties, at Upper Sandusky, Ohio.

No territory for sale.

Preparation and Properties of Rubidium.

In the *Annalen der Chemie und Pharmacie*, Prof. Runsen gives an account of his last experiments on rubidium. The latter may be reduced from carbonated acidiferous tartrate of oxide of rubidium (in a manner similar to the reduction of potassium). 75 grains of that salt will yield 5 grains of pure metal melted to a compact mass. It is very light, like silver; its color is white, with a yellowish nuance hardly perceptible. In contact with air it covers itself immediately with a bluish gray coating of suboxide, and is inflamed (even when in large lumps) after a few seconds, much quicker than potassium. At a temperature of 14° Fah., it is still as soft as wax; it becomes liquid at 101.3° Fah., and in red heat it is transformed into a greenish-blue vapor. The specific gravity of rubidium is about 1.52. It is much more electropositive than potassium, if combined with the latter to a galvanic chain by acidiferous water. The rubidium, thrown on water, will burn and show a flame of the same appearance as that exhibited by potassium.

Preserving Flowers.

Mr. C. R. Tichborne states that, being desirous of preserving a vegetable *lusus naturæ* for some time, he submerged it in some weak glycerine, considering that that fluid would be less likely to destroy the tender organism, and also remembering that it had been found most efficient in the preservation of animal tissues. The glycerine answered its purpose most ad-

mirably, preserving the delicate parts of the plant and preventing decomposition. He immediately saw that this property of glycerine might be made available for certain pharmaceutical purposes, where it was desired to preserve or extract the aromata of vegetable products, such as elder, orange, or rose flowers, and also might be substituted for the oils and fats used in the purest process termed enfleurage. The glycerine need not be especially pure, but should be devoid of odor. The elder-flowers should be gathered when the corolla is fully expanded, but not too far gone; they should then be plucked from the stem, and packed firmly in wide-mouthed bottles or jars, without crushing them; and the whole should then be covered with glycerine. Mr. Tichborne says that he has thus preserved flowers for two years, and, on

distilling them, procured a water, the perfume of which has equalled the most recent product. For the preservation of the flowers he considers the employment of glycerine far superior to the system termed enfleurage, in which heat is used.

PORTER'S SIFTER SHOVEL.

Every economical housekeeper sifts the ashes and refuse coal left after the fire has been turned out at



night. By so doing a very marked saving occurs, fully equal to one-third of the whole ash heap.

A shovel which combines a sifter with its other qualities is a very convenient article for the purpose referred to; the one here illustrated is well designed for the object in view. It is made of cast-iron and has a grating at the back part for the ashes to fall

through. This shovel is also useful for carrying fire from one place to another, for by the introduction of the grate a draft is maintained which keeps the coals alive much longer than ordinary shovels. A patent was issued to J. H. Porter on the 3d of December, 1864, through the Scientific American Patent Agency. For further information address him at 15 Hudson street, New York.

SILK WORMS FOR FRANCE.—The San Francisco *Bulletin* says: "Macondray & Co. will ship by the *Constitution*, 64 cases of silk worms, which were recently received from Japan, on an order for parties in France. They will be conveyed to New York and thence to Havre. The French silk worms have become diseased, and it is proposed to try the experiment of restoring them to health by admixture with a new stock, or by substituting the latter for them entirely. The Japanese worms produce a very good quality of silk. It may not be generally known in this connection that Provost, the California silk culturist, has for a considerable time been forwarding his healthy larvæ to France."

TO
INVENTORS, MECHANICS, AGRICULTURALISTS,
THE ANNUAL
PROSPECTUS
OF THE
Scientific American,
THE CHEAPEST AND BEST
MECHANICAL JOURNAL IN THE WORLD,
A NEW VOLUME OF WHICH COMMENCES
JANUARY 1, 1865.

This valuable journal has been published nineteen years, and during all that time it has been the firm and steady advocate of the interests of the Inventor, Mechanic, Manufacturer and Farmer, and the faithful chronicler of the

PROGRESS OF ART, SCIENCE AND INDUSTRY.

The *SCIENTIFIC AMERICAN* is the largest, the only reliable, and most widely-circulated journal of the kind now published in the United States. It has witnessed the beginning and growth of nearly all the great inventions and discoveries of the day, most of which have been illustrated and described in its columns. It also contains a WEEKLY OFFICIAL LIST OF ALL THE PATENT CLAIMS, a feature of great value to all Inventors and Patentees. In the

MECHANICAL DEPARTMENT

a full account of all improvements in machinery will be given. Also, practical articles upon the various Tools used in Workshops and Manufactories.

STEAM AND MECHANICAL ENGINEERING

will continue to receive careful attention, and all experiments and practical results will be fully recorded.

WOOLEN, COTTON AND OTHER MANUFACTURING INTERESTS will have special attention. Also, Fire-arms, War Implements, Ordnance, War Vessels, Railway Machinery, Mechanics' Tools, Electric, Chemical and Mathematical Apparatus, Wood and Lumber Machines, Hydraulics, Pumps, Water Wheels, etc.

HOUSEHOLD AND FARM IMPLEMENTS,

this latter department being very full and of great value to Farmers and Gardeners; articles embracing every department of Popular Science, which everybody can understand.

PATENT LAW DECISIONS AND DISCUSSIONS

will, as heretofore, form a prominent feature. Owing to the very large experience of the publishers, Messrs. MUNN & Co., as SOLICITORS OF PATENTS, this department of the paper will possess great interest to PATENTEES AND INVENTORS.

The Publishers feel warranted in saying that no other journal now published contains an equal amount of useful information, while it is their aim to present all subjects in the most popular and attractive manner.

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of all the latest and best inventions of the day. This feature of the journal is worthy of special notice. Every number contains from five to ten original engravings of mechanical inventions, relating to every department of the arts. These engravings are executed by artists specially employed on the paper, and are universally acknowledged to be superior to anything of the kind produced in this country.

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