

Show them to your Friends.

With the present number we send to each of our subscribers a prospectus of the forthcoming volume, earnestly requesting their aid in extending the circulation of our paper. As well wishers of Art and Science, as subscribers to the Scientific American, we feel assured that they would, without further persuasion, do all in their power to help on our enterprise. But we are determined that those who exert themselves on our behalf shall receive a proper testimonial for their kindness. We have lately prepared for them a most valuable gift—a work containing the **PATENT LAWS OF THE UNITED STATES**, together with information upon *all Patent Office business*, including *full directions for taking out Patents*, method of making out the specifications, claims, drawings, models, buying and selling rights, caveats &c. &c. It is one of the most valuable works which have ever been published in this country, and will prove a treasure to its possessor. We propose to present a copy of this rare work to all who will obtain for us *three* subscribers, and as the gift will in a hundred fold repay for the trouble taken to obtain it, we expect to be obliged to give away a great many copies. The lucky ones will receive their presents by mail as soon as the three names with the subscription money reach us. It will be an easy matter for them to obtain two names besides their own, particularly, if they will show the prospectus among their friends and persuade them to subscribe.

TO CORRESPONDENTS.

"E. L. of Penn."—We could not tell whether you meant the tubes in the boiler or the pipe of draught, or the opening through the centre. You should have been more particular in language. If you mean the diameter of the boiler, have it narrow enough to be easily cleaned; if a water tube, let it be two and a half inches on the outside; if a draught tube or pipe have it ten inches in diameter. For the bituminous coal, recollect that it must be oftener cleaned than for anthracite, but the difference in diameter must not be much greater.

"A. H. of N. Y."—We know of no plan to close the pores of oak casks, that would not be injurious to the timber for such purposes. We have been informed that both saws and cutter wheels have been used for stave jointing, but cannot say which is most approved nor where they may be both seen in operation. The cutters must be of best.

"W. F. L. Esq. of Rochester."—Your valuable communications have come to hand and are under consideration for publishing. Many thanks for your kindness.

"W. B. S. of N. H."—We have never been in the small beer trade, consequently cannot inform you of all the particulars concerning its manufacture.

"E. R. of Mass."—The Mile Indicator, has been long known and plenty are made in this city.

"A. L. of Mass."—The published description explained the principal fully with the exception of the pattern revolving, and this could not be objected to if you chose to use it. You will perceive that we performed not a very easy task with the materials at command.

"J. L. P. of Mass."—At present we do not know the mode of producing the enamel on the paper you have sent, but we shall endeavor to get the information if possible.

"A. M. of Penn."—The grooved cylinders of hard wood look to us as something good for the breaking of hides, but at present we know of nothing better in use than the fulling stocks.

"S. B. of Md."—We are much obliged to you for the information.

"H. B. of N. Y."—Each application takes its turn. The mode of making cast iron into malleable iron is a process which will take some space and time to describe. We will try and send you the information. The mode is patented.

"A. H. of Maine."—Your model must be in the Patent Office by this title. It was forwarded when we sent the specification. Sometimes there is considerable delay at the Custom House Agent's Office.

"J. M. O'B.—Yours has just come to hand. We shall give it attention. See next number. You were not mistaken about an adequate force in the Patent Office.

"W. H. E. of Ky."—We cannot tell what length of boiler may be most suitable for your purpose, only that it is required to be one third longer than for coal. Build your chimney thick at the base with brick, if you use brick, to retain the heat. The proportion of the chimney to the flue must be equal in area. But we assure you there is no standard. We would prefer to construct one of one third less diameter than the flue, with a gentle increase of diameter to the top. You cannot go wrong to have a boiler a little larger than the amount of steam you need and by having a damper in the chimney, you can regulate the draught.

"D. E. S. S. of Penn."—The plan of the rotary engine is not new, but the water ram is. We know of none like it and have no doubts of a patent, for it must be a useful improvement.

"J. S. D. of Jaffrey."—On page 286 of this volume Scientific American, there is an account of an artificial hand made by Kratchmer and Kildea, Dock st., Philadelphia.

"J. F. C. of Conn."—When A, the inventor, puts up the improved part of the machinery by contract, he surely makes sale of the same, and no after patent will allow him or any other person to make a purchaser pay twice. If the assignment had been made to B, before A built for C, then he would be responsible to B.

"J. B. of Mass."—Gutta percha and linen threads have been combined in England and secured by Brooman in his patent for a new fabric. In our opinion it would make a very indifferent tape, for the pure gutta percha becomes as hard as horn and therefore it would not be sufficiently flexible. We know of no substance to equal good linen tape, although it has the fault which you mention.

"S. E. of Conn."—Your plan of a Dock is old. It is the same as all those built in Liverpool. In this city, considering the continued depth of water, our section docks are the best in all their adaptations.

"O. P. B. of Illinois."—Your plan of a spoke machine is similar in principle to one invented in Portland, Maine, and for which letters patent have been applied for, but in our opinion will not be granted, as the same principle has been known and applied in regular turning for a number of years.

"J. S. of Ky."—All your papers and model have been sent to Washington.

Advertisements.

This paper circulates in every State in the Union, and is seen principally by mechanics and manufacturers. Hence it may be considered the best medium of advertising, for those who import or manufacture machinery, mechanics tools, or such wares and materials as are generally used by those classes. The few advertisements in this paper are regarded with much more attention than those in closely printed dailies.

Advertisements are inserted in this paper at the following rates:

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TERMS:—CASH IN ADVANCE.

The Best Patent Agency in the United States.

The subscribers would respectfully give notice that they still continue to attend to Patent Office business as usual. The long experience they have had in securing patents, together with their unrivalled facilities, enables them to say that THE BEST PATENT AGENCY, in the United States, IS AT THE OFFICE OF THE SCIENTIFIC AMERICAN, New York. It is not necessary, as commonly supposed, for an inventor to make a journey to Washington in person, in order to secure a Patent, as he cannot in any manner hasten the Patent or make his invention more secure. Any business connected with the Patent Office may be done by letter, through the SCIENTIFIC AMERICAN OFFICE, with the same facility and certainty as though the inventor came in person. From a want of knowledge on this point, applicants for patents are often obliged to submit to great vexation, with loss of much money and time. They also frequently fall into the hands of designing persons, and lose their inventions as well as money. Those who wish to take out Patents or enter Caveats, should by all means have the business transacted through the SCIENTIFIC AMERICAN OFFICE, as they may then rely upon its being done in a straight forward and prompt manner, on the very lowest terms. All letters must be Post Paid and directed to MUNN & CO., Publishers of the Scientific American, 128 Fulton street, New York.

UNIVERSAL CHUCKS



A Two Horse Engine and Boiler For Sale.

JUST received from the manufactory and for sale, price \$250, a new and splendid two horse engine and boiler, made in the very best manner, complete in every respect. They are of the latest pattern, the engine attached to the boiler in order to occupy but little space. The necessary steam pipes are included and as the connections, which are stationary, are already made, it can be sent in running order, to any part of the United States. No mason work or soldering is required, and the purchaser, to put in operation would have only to make a fire in the furnace. MUNN & CO. Publishers Scientific American.

Judson's Stave Dressing Machine.

THIS Machine, on which Letters Patent were granted May 1st, 1847, has been in successful operation for the past year, and hundreds of thousands of staves have been dressed by it. It is warranted to dress the same quantity of staves with as little power as any that can be started, also leave the full thickness on thin edges and thin ends, and conform as near to the crooks and twists of the timbers as can be desired. The jointing of the machine which accompanies it, has been subjected to the severest test, and pronounced superior to that performed by hand. Application for a patent on the Jointer has been made. Large quantities of Hogheads and Shooks made with staves dressed and jointed with their machines have been sold and used to the entire satisfaction of the purchasers. For rights and machines address the proprietors at their Manufactory, Artizan street, New Haven, Connecticut, where machines in full operation may be seen. JUDSON & PARDEE. New Haven, July 17, 1748.

A Twelve Horse Steam Engine and Locomotive Boiler for one half their cost.

BOTH these are of the VERY BEST KIND, nearly new and in perfect running order. Their cost when new was \$1600. The engine is a horizontal one, of simple construction, and is a splendid piece of work. The boiler is of the heaviest wrought iron made in the very best manner, and with proper care will be warranted to last for 10 years. The cost of fuel is 40 cents per day. The above are now offered for sale to close a concern for \$800, cash. It is an opportunity seldom met with. They may be sent with perfect safety to any part of the United States, and if desired, an engineer will accompany and put them in operation. Apply to MUNN & CO., Scientific American Office, New York. Letters must be post paid.

To Cotton Manufacturers.

THE Subscriber will furnish Cotton Manufacturers with his improved Cotton Willow. The fact of its being introduced into most of the best mills in New England is the best proof of its excellence. It is extremely simple in its construction and will do more and BETTER work with a less expenditure of power than any other Willow; it prepares the cotton so much better than any other that there is much less power and repairs needed on the succeeding machinery. It is as safe from fire as a Card, and its form and action are such as to draw all the flyings and dirt from the journals; it will convey the cotton to any desirable distance short of 250 feet. It can be placed in the basement of a mill or other place nearly worthless for other manufacturing purposes, and will blow the cotton into the rooms above. All necessary information given for placing and operating the machine in any peculiar or difficult situation. EDMUND BACON, Superintendent Quinebaug Manufacturing Co. Norwich, Conn.

Patent Agency.

THE undersigned having established permanent agencies in England, Ireland, Scotland, France and Belgium (with the leading manufacturers and inventors of which countries he is personally acquainted), is enabled to transact all business entrusted to his care with perfect safety and dispatch; and such is the integrity, energy and legal ability of our agents, that the patentee is, in ninety-nine cases out of a hundred, sure to reap a rich harvest from any invention which passes through our hands. Since the first of March last we have sold three patents in Great Britain for \$17,500, and five in France for 38,000 francs. For integrity, the undersigned refers to:—Horace Greeley, Esq. Tribune Buildings, New York. CLINTON G. GILROY, All letters must be POST PAID, and addressed to Clinton G. Gilroy, 71 Nassau st. New York. jy13m*

Improved Electro Magnetic Machine for sale cheap.

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All tools made at this establishment are warranted to give perfect satisfaction, as no pains are spared to make them perfect in finish, style and workmanship, and having many and decided improvements are capable of doing more and better work than tools generally offered to the trade. J. S. HARTSON.

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BENTLEY'S Patent Tubular and other Boilers of any size, shape or power, made to order, by SAMUEL C. HILLS & CO. 43 Fulton st.

Lap welded Wrought Iron Tubes FOR TUBULAR BOILERS,

From 1 1/4 to 6 inches diameter, and any length, not exceeding 17 feet.

THESE Tubes are of the same quality and manufacture as those extensively used in England, Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers. THOMAS PROSSER, Patentee, d26 23 Platt street, New York

Johnson's Improved Shingle Machine.

THE Subscriber having received Letters Patent for an improvement in the Shingle Machine, is now ready to furnish them at short notice, and he would request all those who want a good machine for sawing shingles, to call on him and examine the improvements he has made, as one eighth more shingles can be sawed in the same given time than by any other machine now in use. Augusta, Maine, Oct. 1, 1847. J. G. JOHNSON.

GENERAL PATENT AGENCY. REMOVED.

THE SUBSCRIBER has removed his Patent Agency from 189 Water to 43 Fulton street. The object of this Agency is to enable Inventors to realize something for their inventions, either by the sale of Patent Goods or Patent Rights. Charges moderate, and no charge will be made until the inventor realizes something from his invention. Letters Patent will be secured upon moderate terms. Applications can be made to the undersigned, personally or by letter post paid. SAMUEL C. HILLS, Patent Agent.

Johnson & Robbins, Consulting Engineers and Counselors for Patentees.

Office on F street, opposite Patent Office, Washington, D. C. jy17tf



The above is prepared to execute all orders at the shortest notice and on the most reasonable terms.

To Mill Owners.

HAVILAND & TUTTLE'S Patent Centre Vent Pressure Water Wheel—These wheels are now in successful operation in many towns in Maine, Massachusetts, and Rhode Island, and are found to surpass in power and facility of adaptation any water wheel now in use. This wheel was awarded the silver medal at the Fair of the American Institute recently held in New York and a diploma at the Mechanics' Fair in Boston. The wheels are manufactured and for sale by the FULTON IRON FOUNDRY CO., South Boston, Mass.,—where the wheels can be seen and any information concerning them had. Patent Rights for different States, Counties, &c. for sale, as above. m25 6m*

Machinery.

PERSONS residing in any part of the United States who are in want of Machines, Engines, Lathes, or ANY DESCRIPTION OF MACHINERY, can have their orders promptly executed by addressing the Publishers of this paper. From an extensive acquaintance among the principal machinists and a long experience in mechanical matters they have uncommon facilities for the selection of the best machinery and will faithfully attend to any business entrusted to their care. MUNN & CO. a15

LAW'S STAVE DRESSER AND JOINTER.

THE undersigned has perfected and put into very successful operation his Stave Machine. It will Dress and Joint Staves of all shapes, kinds and dimensions, and of promiscuous widths, as they come from a mixed pile, at the rate of from 6 to 8 staves per minute, finishing them, before they leave the machine, ready for the truss hoop. They are both dressed and jointed very smoothly and handsomely, bringing each stave of equal width at the two ends without waste of stock and perfectly to correspond with every twist or crook, and with as little power in proportion to the work done, as any other machine. For rights (which are indisputable,) or machines address, post paid. H. LAW, Wilmington, N. C. N. B. A machine will be in operation in New York or vicinity, in the course of the ensuing month. jy15 2m

Coal.

THE Subscriber has constantly for sale by the cargo or ton all sizes of Coal for MANUFACTURERS and FAMILIES, from the best Schuylkill and Lehigh mines. Hazleton and Spring Mountain, lump and teamboat Coal. Tamaqua Chesnut for engines.—Peach Orchard and other red ash Coal. Midlothian, Virginia, a superior article for smith's use. Cumberland, Sidney and Liverpool Coal. For sale at the lowest market prices. J. P. OSTROM, au53m* corner 10th Avenue and 26th st.

Taft's Premium Letter Copying Press.

THE Subscriber continues to manufacture his Premium Letter Presses, at Worcester, Mass., and respectfully informs his friends and the trade generally, that he keeps constantly on hand a large assortment, which he offers for sale at reduced prices. Orders by mail will be promptly attended to. G. C. TAFT, Worcester, Mass., April 11, 1848. au5 tf

PREMIUM SLIDE LATHE.

THE subscriber is constantly building his Improved Lathes of all sizes, from 7 to 30 feet long, and can execute orders at short notice. JAMES T. PERKINS, Hudson Machine Shop and Iron Works, Hudson, N. Y.

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Inventors and Manufacturers of superior Agricultural Implements may find customers for their goods by applying at the Agricultural Warehouse of S. C. HILLS & CO. 43 Fulton st. au8