

TO CORRESPONDENTS.

"M. R., of Maine."—Wait till our history of propellers is published, and you will see that your plan is not entirely new. \$2 received.

"W. F., of Boston."—The air chamber of the Rifle, as you remark, allowed more time for the complete ignition of the powder, but also for the purpose stated, as the priming in the bottom of the cartridge answers the very purpose of the globe you speak of, it being converted in to a gas, very expansive, and the great heat of it rarifies the air in the chamber to perform the office stated. The reason of the cannon ball rising after leaving the gun, is not owing to the cause you state. The reason is, that the range of vision must be elevated according to the distance from the mark, although the cannon and mark, may be on the same level; stand by thesea shore and try the experiment.

"J. A. R., of Pa."—Do not know of a reliable work upon the subject referred to in your communication of the 5th inst.

"N. F. E., of Vt."—We have not been able to learn whether the "Pegging Machines" work well or not. We think Mr. J. Robinson of Lawrence, Mass., has a patent for one.

"A. G., of Ind."—We do not see how such a claim could have been granted, as the principle appears common, and in extensive use. Upon due consideration we are of the opinion that you cannot obtain a patent for the grate and inclined board, as it appears to be the substitution of one common device for another. If we misunderstand your views you had better forward a drawing described by letters of reference. We do not countenance any attempts to infringe a patentee's just rights.

"J. S. P., of Geo."—Your request must have been overlooked. If you have any information to ask, you are at liberty to do so. No. 2 sent; \$1 received and credited.

"J. F. B., of Louisville."—We are informed by the publisher of "Chapman's Drawing Book," that Part 4 will not be issued until late in the Spring. We have given you credit for \$1, and will send it as soon as issued. The Camera was shipped on the 11th inst., by Express,—and your name entered for one year's subscription.

"A. S., of N. Y."—We are so much hurried with business that we cannot undertake your case. You had better accept of the claim suggested by the Patent Office, it will save you much trouble, and we think it sufficiently strong.

"C. S. H., of Pa."—We shall retain your bridle bits until your order—do not know any thing against the A. U., at present, but you may rest assured that if we discover foul play they will hear from us. No. 48 sent.

"J. B. W., of N. C."—We do not think your plan for preventing boiler explosions to be new. By reference to Lyman's Safety Gauge you will find that he employs glass tubes in which the mercury rises. It would make no difference whether the tubes were made to convey water or mercury. In this case they are employed for the same purpose.

"E. M., of Ind."—You can obtain a patent just as soon by staying at home, and it would save you much expense. By sending a drawing and full description, we can advise you in regard to its novelty \$2 received.

"A. P. K., of R. I."—Neither the top nor bottom can be said to move one point faster than the other, the whole circumference moves in unison.

"E. V., of Geo."—Minifies Drawing Book was forwarded on the 12th inst. The sliding scale is worth \$2.

"F. S. T., of N. H."—All that you need do now in order to make a fortune out of your invention, is to get the machine before the public. An engraving in the Sci. Am., would reach 25,000 at least, half of whom the invention would particularly interest. An engraving we will prepare and publish for the paltry sum of \$8, and we will warrant it to bring you 50 persons at least, who will willingly pay you a reasonable sum for all the territory you have to dispose of.

"G. Vt., of N. Y."—It would be a long job to give you a full description of the various wind mills in use. Should be glad to do so but cannot spare the time.

"H. M., of N. Y."—By reference to the last number of the Sci. Am., you will perceive that Mr. Jones was answered, in regard to his churn. You ask information and charge us for the trouble of giving it—this is not fair by any means. Our correspondents are requested to pay postage on all communications addressed to this office, or no attention can be paid to them.

"Curiosity."—According to Dr. Dick, the ancient Greeks and Romans were ignorant of many articles in diet which we now hold in much esteem. They used no alcoholic liquor, nor coffee, tea, chocolate, sugar, or even butter, many of the tropical spices were also unknown to them. They were fond of the flesh of wild asses, puppies, mice, foxes, bears, and lizards, using asafetida and rue, for seasoning. It is not fashionable to chew, but to eschew such articles at the present day.

"W. H. L., of Miss."—Such a fair as you refer to is to be held in London next year—but the minutia of arrangements have not yet been concluded. We shall notice it in due time. You cannot obtain the last half of vol. 4, in sheets. \$3 received and credited.

"J. E. B., of N. C."—We have handed your letter to several saw makers, and they seem not to comprehend its meaning. You had better address, R. Hoe & Co., of this city, giving the full particulars.

"A. J., of N. Y."—A machine has been invented in England, to register the speed of railway trains. It operates by means of an eccentric, geared to the axis of the cars. Your plan may be very different from this.

"W. C. S., of N. Y."—To render your paper hangings washable, give the paper two or three coats of size, and then, varnish it over with good spirit varnish, and you can wash it with soap suds without injuring the colors in the least.

"J. D., of Vt."—Your subscription expires with No. 26 Vol. 6 or March 11 1851.

O. W. S., of Conn., A. L., of Me., T. J. of Mass., and H. S. T., of Mass.—

The specifications and drawings of your several inventions have been forwarded to the Patent Office since our last issue.

Money received on account of Patent Office business, since Jan. 7, 1850:—

O. W. S., of Conn., \$20; A. L., of Me., \$20; T. & Co., of N. Y., \$50; S. H. S., of O., \$30; A. O., of N. Y., \$30; C. N. S., of Va., \$47; and W. F. P., of Mass., \$30.

Cultivation of the Castor Bean in Ohio. A company of manufacturers have recently put up a castor oil mill in Cincinnati, Ohio, and in order to encourage the growth of the castor bean in that State, propose to furnish all farmers wishing to cultivate them with seed, and contract with them for all they raise, at the market price. The present price is \$2 a bushel. The bean is planted and cultivated the same as Indian corn, and will produce from 30 to 50 bushels an acre. The market is now supplied to a considerable extent from Illinois.

Arctic Bears.

Sir James Ross narrates some remarkable incidents connected with his recent voyage to the Arctic regions. A bear walked into Captain Ross's party, and surveyed them with cool inquisitiveness; guns were levelled, and the bear was wounded in the head; he scratched his ear, and walked off with an air of superior contempt. Another bear was seen to slide on his haunches down a cliff of seven hundred feet high, steadying himself with his fore paws most "judgmatically," as the sailors said.

The Parkman murder in Boston is a singular affair, and bears about it some mysterious connection, for one day a paragraph appears in one paper, to throw suspicions on the accused and then on the next day, there is sure to be a paragraph of the opposite tendency, in another paper.

Notice.

Whenever any of our friends order numbers they have missed—we shall always send them, if we have them on hand. We make this statement to save much time and trouble, to which we are subjected in replying, when the numbers called for cannot be supplied.

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A LIST OF VALUABLE SCIENTIFIC AND MECHANICAL BOOKS,

Table listing scientific and mechanical books for sale at the Scientific American Office, including titles like 'Ranlett's Architecture' and 'Scribner's Mechanics' with prices.

Patent Office.

128 FULTON ST. NOTICE TO INVENTORS.—Inventors and others requiring protection by United States Letters Patent, are informed that all business relating to the procurement of letters patent, or filing caveats, is transacted at the Scientific American Office, with the utmost economy and despatch.

TO RAILROAD COMPANIES, ETC.—The undersigned has at last succeeded in constructing and securing by letters patent, a Spring Pad-lock which is secure, and cannot be knocked open with a stick, like other Spring locks, and therefore particularly useful for locking Cars, and Switches, etc.

PUMPS, FIRE ENGINES, FOUNTAINS, &c.—Double Acting lift and force pumps, cistern and well pumps, ship and fire engines, (stationary or moveable) cast iron fountains, copper rivetted hose, garden engines, etc.

ECCENTRIC & CONCENTRIC LATHE. We have on hand a few of Alcott's celebrated Eccentric and Concentric Lathes, which the inventor informs us will execute superior work at the following rates:— Windsor Chairs, Legs and Pillars, 1000 per 11 hours.

LAP WELDED WROUGHT IRON Tubes, for Tubular Boilers, from 1-4 to 7 inches in diameter.—The only Tubes of the same quality and manufacture as those so extensively used in England, Scotland, France, and Germany, for Locomotive, Marine and other Steam Engine Boilers.

Z. C. ROBBINS, CONSULTING ENGINEER AND COUNSELLOR FOR PATENTEES. Office on F street, opposite Patent Office, Washington, D. C.

THE WATER CURE JOURNAL FOR 1850.—The Water-Cure Journal is published monthly, at One Dollar a year, in advance, containing thirty-two large octavo pages, illustrated with engravings exhibiting the Structure and Anatomy of the entire Human Body; with familiar explanations, easily to be understood by all classes.

THE PHRENOLOGICAL JOURNAL.—This Journal is a monthly publication, containing thirty-six octavo pages, at One Dollar a year, in advance. To reform and perfect ourselves and our race is the most exalted of all works.

LAW'S NEW PLANING MACHINE.—For boards and plank, is now in operation in this city—planing, tonguing and grooving at the same time, with rapidity and beauty. It is believed to be superior to any other machine, as it will do the work of two or three rotary machines, and for all Southern, and the majority of Northern lumber, the execution is much better.

BRITISH PATENTS.—Messrs. Robertson & Co., Patent Solicitors, (of which firm Mr. J. C. Robertson, the Editor of the Mechanics Magazine from its commencement in 1833, is principal partner,) undertake THE PROSECUTION OF PATENTS, for England, Scotland, Ireland, and all other European Countries, and the transaction, generally, of all business relating to patents.

BRUSH'S IMPROVED DOUBLE ACTING LIFT AND FORCE PUMP.—The subscriber is now manufacturing and has constantly on hand, an extensive assortment of Lift and Force Pumps, to which he would call the attention of owners of factories, breweries, ships, steamships, or for railroad stations and farmers, as one of the most powerful pumps ever yet invented.

FOREIGN PATENTS.—PATENTS procured in GREAT BRITAIN and her colonies, also France, Belgium, Holland, &c., &c., with certainty and dispatch through special and responsible agents appointed, by, and connected only with this establishment.

TO IRON FOUNDERS.—Fine Ground Sea Coal, an approved article to make the sand come off the Castings easily; fine bolted Charcoal Blacking; Lehigh fine Dust, and Soapstone Dust for facing stove Plates, &c. &c.; also, Black Lead Dust and Fire Clay, for sale in Barrels, by GEORGE O. ROBERTSON, 303 West 17th street, or 4 Liberty Place, between Liberty st. and Maiden Lane, N. Y. 914*

A DEE'S AMERICAN CAST STEEL Works, (at the foot of 24th st., E. River, N. Y.) The above works are now in successful operation, and the proprietor would respectfully call the attention of machinists and all consumers of the article to an examination of his Steel, which he is warranted by the testimony of the principal machinists and edge tool makers of this city, in recommending as fully equal in every respect to any ever used in this country.

STEAM ENGINES, second hand, one each 11-2 and 5 horse, on hand, and orders taken for any size. Lathes new 5, 7, 8, 10, and 12 feet, the 8 feet lathe is a beautiful article, has back and screw gear, drill chuck, centre and follow rest, overhead reversing pulleys, swings 19 inches and price only \$200.

CAMERA LUCIDA.—Notwithstanding the demand for these useful instruments has been so great, we are yet able to supply orders for them. Every draughtsman and every person that desires to foster a taste for the beautiful art of sketching should surely have one.

PREMIUM STOVE POLISH, &c.—Quarterman's Chemical Oil Stove Polish, American Atomic Drier, Electro Chemical graining colors, and gold size. The stove polish is put up in tin boxes of 12-1 to 31-1 cts. Sold wholesale and retail at 114 John st., New York, by QUARTEMAN & SON, Painters and Chemists.

THOMAS E. DANIELS' PLANING MACHINES.—Manufactured by HOWE, CHENEY & CO., Worcester, Mass. All orders for the above machines executed at short notice and satisfactory prices.

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