# Scientific American.

#### TO CORRESPONDENTS.

Unsigned Communications are rejected unless there is abundant reason to believe that the writer is ignorant of his duty in this respect. It is not at all likely that we shall make an unwarrantable use of the names of our correspondents, therefore why withhold

A. C. R. of N. Y.—You say you do not understand how we can oppose the extension of any patent. Perhaps if you had made a valuable improvement upon a machine or process, but could not useit until some already existing patent had expired, you could see some reason for the limitation which is placed upon this species of property. Many an honest and hard working mechanic has been compelled to lick the dust before these powerful combinations, who awe down all opposition. cases are indeed hard, and we shall defend the rights of the many against the encroachments of a few whose interests are turned into tyranical uses.

N. G. B., of Ill.-In Vol. 4, page 244, you will find an illustration of a mowing machine identical in principle with the drawing of the one you submit to us.

J. D. W., of Miss.—You will find an engraving of Du-Bois' Cotton Gin on page 404, Vol. 4, Sci. Am. Mr. Du Bois' post-office address was formerly Greensboro, Tenn. and for aught we know he resides there yet.

D. B. C., of Ga.—We are afraid your patience will be exhaustedbeforeyour order for a Hot-Air Engine is filled. We have not heard that the "Evening Post" have got their engine yet, which was promised them nearly

year ago.

M. P. N., of N. H.—We do not discoverany patentable novelty in either of the improvements which you submit for examination. The coupling is essentially the same as some others we have seen, and the arrangement of seats presents, in our opinion, no patentable features.

W. McB., of Ohio-Your views in regard to the Sciences'being taught more generally in schools, are correct more attention should be paid to this subject than has been done heretofore. It is really surprising to notice the great amount of superficial science which exists among the people generally. The simplest questions of philosophy are not familiar to hundreds of men who ought to know them well. We do not think you are justified in making application for the mortising machine the novelty is very slight indeed.

J. H. P., of N. Y.-The scale is removed from castings of iron by steeping in warm water slightly acidulated with oil of vitroil for about two hours, then rub them down and wash well in clean water. The scale from cast steel can be removed in the same manner. You must steep the castings a longer or shorter period according

to the thickness of scale.

A. S. T., of Va.—There is no good work with which we are acquainted on taxidermy. We will try and publish

J. E. H., of New York City-Yours will meet with at tention in our next.

J. M., of N. Y. City—We thank you for your attention:

we will review J. McPherson's experiments in our next

R. B. G., of Pa.-If you write to the Brooklyn Glass Co., No. 30 William st, this city, they may be able to give you the proper information.

A. M. of Ky -The device described in your letter of the 28th ult. does not appear to have novelty sufficient

to justify an application for a patent.

T. P. K. of Pa.—The ball seating we think is new: it appears to be a good improvement in journal boxes.

C. C., of Mass.—The Hayward patent is one of the most important improvements connected with the india rub-ber business; it is a sort of key upon which the whole is turned, hence the desire for its extension. Commissioner Hodges acted in obedience to the law in refusing to extend it. How can Congress justly set aside the law of their own making, in special cases? Let the law be re-pealed at once if it is odious, but don't endeavor to violate it, the necessity does not exist.

A. B., of Ct.-We do not know about the machine for splitting felt tapering. Your experiment for conducting the electricity by induction, was just as good as any we could recommend: but remember that you should conduct the fluid away to a moist part of the earth or to running stream.

E. C., of Ohio-You can make good soap from any kind

of oil, if you employ the proper materials. Use caustic lye made from soda, with some quick lime. If you use lard for making soap, you will find it very difficult to harden, even though you use resin.

G. J., of Mo.-You can make a very good varnish for iron by boiling pitch, red lead, and some oil together, with a little lampblack, and stirring some turpentine in the mixture after it gets cool: about two hours' boiling

J. M. B., of Tenn. - We certainly would like to see an atmospheric railway constructed for Broadway, but there is no prospect of this being attained. We understand you as working the piston by the exhaustion of

J. O., of N. Y.-Yours about the ear tube and plan of reporting, we do not think can be made serviceable, according to the practice of performing such work: our good reporters find no difficulty in taking down every

R. C. B., of Mich.-Yours has been received and we will give it attention

B. B. H., of Ct.—We have instructed the Commissioner to return your model to you for repairs, and after you have put it in good condition please return it direct to the Patent Office, not forgetting to pre-pay Express charges.

H.H.W. of Mage you will cease to experi ment upon such an unphilosophical project; hot-air, from its very nature, can never be employed as a substitute for steam in propelling machinery; its great bulk excludes it from competition, except by those who do not seem to comprehend this difficulty.

R. R. H., of Me.-Youcan easily measure the power of your lever by calculating the difference between the time of motion at the place where the effect is produced, and the end of the lever where the power is applied.

A. McA., of Texas-The oil made from cotton seed, we believe, burns with a clear and beautiful fiame

H. A. H., of Mich.—A telegraph wire can be enclosed in a non conductor and laid in a groove in the rail . but it would be better to enclose it in a glass tube, and lay it at one side of the rail. If anything were to go wrong with the rail or with the wire, by your plan, both the te legraph and railroad would have to suspend operations until the break was repaired. For what purpose do you want the globes described in your letter? They can be

S. K. O., of N. Y.—Such a balloon as that which you PATENT CLAIMS—Persons desiring the claim of any invenhave described was illustrated in Vol. 1, Scientific Amer ican.

J. B., of Canada--It seems a hard matter; it is true that an inventor cannot have the privilege of using HIS OWN INVENTION, but it is so sometimes, and it will not be safe for you to introduce the article into Canada, even if a patent was not taken out until since vou invented it.

W. W. P., of Va.-Morse's Air Distributor is construct ed upon the same plan as you describe. Several unimportant modifications involving no patentable novelty have been made in devices for the same purpose We do not think you stand any chance of pro patent

C. E. T., of Me.—We do not think your pendulous ar rangement for opening and closing doors could be secured by patent. We judge only from your description which is not very full. If you wish more information you may send us a model for examination.

B. W. S., of Pa.-The concern to which you refer as being engaged in the manufacture of reeds for melode

ons is Carhart & Needham, 13th street, this city. W. R. H., of Geo.—The use of springs for propelling cars or any other machinery used in transportation is

impracticable,
J. R. L., of Fla.—We cannot see how the oat meal can effect such an object as that which you inform us. How can it excite rapid evaporation, without which ice can not be produced. We do not seehow theheat of fluidity can be extracted by your machine, and unless you can do this you cannot make ice.

H. McN., of N. C.-The quantity of fuel required for a horse power per hour depends greatly on your boiler, and the way you work your steam-expansively or full pressure during the whole stroke. Seven pounds of coal per hour would be a fair estimate for each horse power of your boiler.

J. J. L., of La.-A revolving cannon is not a newinvention. It has not been adopted for some cause un-

W. E., of N. Y.-We think your improvement in hollow mandrels for turning is new and patentable. Send on a model.

L. W. T., of Mass.-Do not trouble yourself about such phantoms as perpetual motion. It is singular that any person should devote any attention to such a question after what we have said on the subject.

E. J., of N. Y.-At five hundred and eighty degrees of heat steelbecomes a deep blue.

R. M., of Conn.—As the length of an inclined plane is

to its height, so is the weight to the power.

M. McD., of Pa.—One gallon of coal tar boiled with

two and a half pounds of the sulphate of zinc makes an excellent paint for outhouses, &c.

T. W., of Va.-A very good cement for turners is made by melting one pound of rosin, and four ounces of pitch together, then thickening the same with brick dust.

R. S., of N. B.—In eighteen years there are usually about seventy eclipses, twenty-nine of the moon and forty one of the sun.

J. J. T., of Me. - One part of lead and one of tin makes good plumbers' solder.

Money received on account of Patent Office business

for the week ending Saturday, Jan. 7:—
T. R. & G. B., of N. Y., \$30; G. W. F., of O., \$35; E. H.
S., of O., \$55; J. H., of N. Y., \$20; F. & R., of Pa., \$55; C. F. P., of N. Y., \$100; J. D., of N. Y., \$28.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Jan. 7:

T. R. & G. B., of N. Y.; D. A. F., of Pa.; J. D., of N. Y. A. M., of Pa.

### LITERARY NOTICES.

LITTELL'S LIVING AGE.—This excellent weekly magazine begins a new volume with the New Year, and has added a new and attractive feature to its other incomparable good qualities, namely a beautiful steel plate—one of which will accompany every number, and make 52 in the year. This magazine is a reprint of the very cream of foreign literature, selected with great judgment from all the foreign Magazines and Reviews. It is the best work of the kind in the world, as the articles are of the first quality: the genuine coin. The steel plate accompanying the first number for 1854, is a view of Sloperton Cottage the residence of Sir Thomas Moore, the poet. Littell Son & Co. of Boston are 4the publishers.

THE PARLOR MAGAZINE.—Conducted by Jethro Jackson and Alice Carey of Cincinnati, Ohio, is one of the most agreeable publications which we have met with. We should think the great and grow ng western country wonld extend to it a hearty support. No. I vol. 2 has a beautiful engraving of Mill Creek Valley at high water.

PATENT LAW DOCUMENTS.—Rail Road Cars.—We are obliged to W. Hubbel of Philadelphia for printed copies of his arguments and those of Mr. Whiting of Boston, in the patent case of Ross Winans on "eight wheel cars," before Justice Nelson at Cooperstown N. Y. in August 1853.

TELEGRAPH.—We are obliged to George Gifford, of this city, for a printed copy of his argument delivered before the Supreme Court U. S. in the telegraph case of H. O'Reilly et al vs. S. F. B. Morse, F. O. J. Smith et al in the appeal from the decision of the U. S. Court for the district of Kentucky.

### A Chapter of Suggestions, &c

PATENT LAWS, AND GUIDE TO INVENTORS-We publish and have for sale, the Patent Laws of the United States -the pamphlet contains not only the laws but all infor. mation touching the rules and regulations of the Patent office. Price 12 1-2 cents per copy.

RECEIPTS-When money is paid at the office for subscriptions, a receipt for it will always be given, but when subscribers remit their money by mail, they sider the arrival of the first paper a bonafide acknow ledgment of the receipt of their funds.

BACK NUMBERS AND VOLUMES—In reply to many interro gatories as to what back numbers and volumes of the Scientific American can be furnished, we make the following statement: Of Vols. 1, 2, 3, and 4-none. Of Vol. 5, all but six numbers, price, in sheets, \$1; bound, \$1,75. Of Vol. 6, all; price in sheets, \$2; bound, \$2,75. Of Vol. 7, all; price, in sheets, \$2; bound, \$2,75. Of Vol. 8, none comple, but about 30 numbers in sheets which will be sold at 50 cents per set; of Vol. 9, none previous to Jan. 1st, 1854.

GIVE INTELLIGIBLE DIRECTIONS—We often receive letters with money enclosed, requesting the paper sent for the amount of the enclosure, but no name of State given. nd often with the name of the post-office also on Persons should be careful to write their names plainly when they address publishers, and to name the post, office at which they wish to receive their paper, and the State in which the post-office is located.

tion which has been patented within fourteen years can obtain a copy by addressing a letter to this office stating the name of the patentee, and enclosing \$1 for fees for copying.

PATENTEES-Remember we are always willing to exe and publish engravings of your inventions, providing they are on interesting subjects, and have never ap peared in anyother publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permitted to have the engravings executed to suit our own columns in size and style. Barely the expense of the engraving is charged by us, and the wood-cuts may be claimed by the inventor, and subsequently used to ad vantage in other journals.

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IMPORTANT TO INVENTURES. The undersigned having for several years been extensively engaged in procuring Letters Patent for new mechanical and chemical inventions, offer their services to inventors upon the most reasonable terms. All business entrusted to their charge is strictly confidential. Private consultations are held with inventors at their office from 9 A. M., until 4 P. M. Inventors, however, need not incur the expense of attending in person, as the preliminaries can all be arranged by letter. Models can be sent with safety by express, or any other convenient medium. They should not be over 1 foot square in size, if possible.

Having Agents located in the chief cities of Europe, our facilities for obtaining Foreign Patents are unequalled. This branch of our business receives the especial attention of one of the members of the firm, who is prepared to advise with inventors and manufacturers at all times, relating to Foreign Patents.

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with a vertical boiler will require only 4 feet by 8 feet.

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TO MACHINISTS.—Wanted, a thoroughly practical machinist, well acquainted with the most approved cotton machinery, to take charge of that department, in a large machine establishment near New York. No one need apply except he is a good manager of workmen, and can produce the best testimony as to character and ability. Address Box 181, Post Office, New York, giving name, present employment, and references. January, 1854.

WOOL AND CO'ITON PICKER.—Reuben Daniels, of Woodstock. Vt., and E. Kellogg & Co., of Pine Meadow, Ct., have the exclusive right to build and sell Daniels & Kellogg's Wool and Cotton Picker, which was illustrated in No. 13, Vol. 9, Scientific American. 1\*

OCOMOTIVES FOR SALE—Two Locometives, a Engines, and Tenders, made to order for five foot gauge (but which are not required at present as the road is not ready to receive them); if hich cylinder by 20in, stroke; two pair drivers: one engine 6 feetdiameter and the other 5 1-2 feet dia, outsider cylinders—have a large proportion of boiler, and are expected to be economical working engines. Will, be sold on very favorable terms and are now mady for delivery. For further particulars apply to CHAS. W. COPELAND, No. 64 Broadway, N. Y.

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payespecial attention to the procuring of Patents in foreign countries, and are prepared to secure patents in all nations where Patent Laws exist. We have our own special agents in the chief European cities; this enables us to communicate directly with Patent Departments, and to save much time and expense to applicants LOCK'S FOR CHURCHES. COURT HOUSES, & &c.—Regulators for Astronomical purposes, Jewellers: also Time Pieces for Session Rooms, Railroad Stations, Offices, &c., which for accuracy of time and durability have proved (it is believed) equal to any made in Europe or this country. Glass Dials for illumination, and other kinds furnished. Address SHERRY & BY. RAM, Oakland Works, Sag Harbor, N. Y. 10eowtf

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Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's
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WOODWORTH'S PATENT PLANing, Tonguing, Grooving, Rubeting, and Mondding matchine. Ninety-time hundredths of all the planed lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines. Price from \$150 to \$800. Two machines are at the Crystal Palace. For rights in all parts of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y.

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New Haven, Conn., having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territories, for the term of five years, are now prepared to furnish said mills at short notice. These mills are unequalled by any other mill in use, and will grind from 20 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-cooling. They weightfrom 1400 to 1500 lbs. of the best French burr stone, 30 inches in diameter; snugles, the best French burr stone, 30 inches in diameter; snugles, as the best French burr stone, 30 inches in diameter; snugles, addressing as a shove, post paid, or to S. C. HILLS, agent N. H. M. Co., 12 Plattst., N. Y.

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B. ELY, Counsellor at Law, 52 Washington street.

Boston, will give particular attention to Patent
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