## Zcientific American.

## TO CORRESPONDENTS.

W. P., of Ill.-You are well aware, we suppose, that the air engine, acting nearly on the principle you describe, is older than the steam engine; you have only looked to the pressure of the air to assist in one direction, while it resists to the same amount in the other direction, and nothing is gained, and nothing lost, to be sure. The air-tight cylinder was one of the grandest improvements ever made on the steam engine.

T. J. J., of N. Y.—A wedge rail and grooved wheel has been long known; they were used before the T rail. They do not answer at all. This same plan was proposed by Mr. French, of Va., for steep inclines. In your plan for engraving, the whole work would have to be done on the wax, as carefully as on the clean wood. This would take as long, as the wood is very easy to work. The plan is the same as that for etching copper-plates.

J. L. P., of Phila.-The galvanizing of the iron is to cover it with zinc. Clean the iron well, then have the zinc melted in an iron vessel, and put in some salamoniae and tallow, then dip in your plates. We do not know the establishment where the galvanizing

J. L. B., of --.-We do not know what would be the price of the agricultural analyzing apparatus to which you refer, nor where it could be found. The best works on the subject of Agricultural Chemistry, are those of Johnston, Norton, and Liebig. Get those and you can do all the rest. We will try and fulfil

your request at some future time.

W. P., of Mich —It is indeed true that you can destroy the equilibrium of pressure in a water box, by the inequality of the surface so as to produce motion on the side of the greatest pressure, but what amount of motion do you get? Any more than you give No. There is no new power called into existence and none but what is well known. We could not advise you to go to any more expense, for no ultimate benefit will result from the same.

C. J. M., of Ohio.-Yours next week.

V. K. of-...The depilatory powder to which you refer is not sold in this city. We could not speak per sonally of its merits. It does not at least remove the hair permanently.

J. E., of Ohio.-Its density is uniform throughout but for railroad purposes it has been tried—and faithfully tried—and found unfit for the purpose.

A.B.G., of Ct.-Euclid is the best work you can get W. S., of Pa.-Gun-flints are all made by hand : we could give you the description, but it is too long to give here. The process is described in Barlow's En cyclopedia.

H. &. W., of Andersonville.-We omitted to state in our letter, a few days since, that the \$1 bill enclosed in yours of the 10th, was good; it was passed to your credit.

S. S., of Phila.-Geo. Bruce resides in this city and carries on an extensive type foundry.

D. B., of Mass.-We do not understand the advantages likely to arise from your plan for propelling canal boats over some others; neither do we see any patentable novelty in it to justify an application.

J. P G., of Me.—The elements in your machine for governing the water in steam boilers seem to be good but this can never be satisfactorily determined with out the aid of experiments, which must be made to satisfy yourself and others interested. There ap pears to be novelty in the arrangement which could be made the subject of a patent.

C. R., of Ill.—There is nothing so durable for the purpose as Roman cement. \$1 received.

M. M., of Wis.-The proper way for you to obtain the desired information is to address a letter to the Commissioner of Patents, Washington, D. C., he will give you the information: no one else can.

X. Y. Z., of Mass.—We cannot give the information you ask for.

J. M J., of Me.-Such a machine as you refer to was patented some time since, by Joseph Graume, of Cincinnati, Ohio. The price, &c., we cannot give, but presume it can be obtained by addressing him as

T. B., of New Haven.—The price of Brewster's Optics, we think, is one dollar. It is the best work upon the subject up to this time.

R. B., F., of N. Y.—Pocket microscopes can be he for prices varying from \$1 to \$25; a good one can be obtained for \$12. John Roach, 79 Nassau st., has them for sale. \$1 received.

O. A. J., of Vt.-We have forwarded two copies of the Scalpel, as you directed.

H. E., of Cincinnati.-You could not obtain a patent for the sliding letters; they have been used before, and were made the subject of a patent some years since.

A. E. C., of page 418, Patent Office Report, for 1849, Dr. Page mentions the fact that a patent was granted for one spe cies of atmospheric churn, and before the fact could have been known far beyond the walls of the Patent Office, six inventors from different parts of the country were all pressing their claims before the Office for the same contrivance; cases of this kind have come

under our own personal observations.

E. C., of La.—We can scarcely imagine how you are to accomplish the object you propose; it is contrary to the laws of chemical affinity. We think you will be disappointed in the end.

F. V., of Mich.--Your method of attaching the sin. gle wheel to the Cultivator could not be patented; contrivances for this purpose have been used before, and in a manner substantially similar to yours. We cannot encourage you to spend money upon an application.

A. H., of Mo.—The arrangement of the brushes we do not think could be secured by a patent. Some machines have been brought forward for cleaning streets where the dirt was all taken up and placed in a receptacle—none seem to have been effectual up to this time. We entertain the opinion that yours would not obviate a single difficulty not attained by Bishop's machine; neither can we see how a valid claim to a natent could be based.

C. A. C., of Md.—It would cost you about \$300, by packet, to visit the World's Fair and remain three or four weeks, we should think; about two months would

be consumed in going and coming.

J. L. M., ef Ala.—The improved Corn Sheller belongs to Carter & Harris, of Yorkshire, N. Y., and is good, the price we cannot give. The "Refrigerator" is a good article, but as yet we have not heard of its being brought into the market. Messrs. Geo. Vail & Co. manufacture the horse power of Mr. Bogardus. Some improvements have been made whereby the friction is lessened, and is now, perhaps, as good for 4 horses as any in use : it is much used for cotton gins. James Stewart, of this city, makes good turning lathes at prices varying from \$25 to \$100. N. Hunt & Co., 110 Water street, Boston, are sole agents for Swingle's Patent Mortising and Boring Machine, price \$125. Small sized mortising machines for light work can be had for \$20.

W. L. L., of Pa.—The work to which you refer has been discontinued. Engineers and railroad companies would not support it.

M. S., of Ct.-Next week we will present to our eaders an engraving of the Wind Mill.

W. F., of Boston. There are a number of engravings required to illustrate the welding process: they are now in the hands of the engraver.

J. C. H., of Miss.-We do not know where or at what price, such springs could be had as you require; H. H. Day, of this city, could make an india rubber one we should think. If such an one would answer your purpose you could address him upon the subject.

Money received on account of Patent Office busi ess since March 26 :--

E. B, of N. Y., \$700; M. C. B., of N. H, \$15; W & B. D., of Ct., \$30; G. B. C., of N. Y., \$55; C. F. B., of R. I., \$40; G. H. R., of III., \$30; W. H. H., of N. Y., \$20; J. C. B., of Ark., \$30; A. G. D., of Ct., \$45; W. G., of N. Y., \$10; G. B. W., of N. Y., \$10; T. & G., of N. Y., \$30; H. & E., of N. Y., \$30; A S. B., of N. Y., \$55.

Specifications and drawings of inventions belonging to parties with the following initials, have been forwarded to the Patent Office since March 26:

W. & B. D., of Conn.; G. W., of Mass.; B. & M., of N. Y.; W. G., of N. Y.; I. B L., of Vt.; S. G. S., of Ga., and A. G. D., of Ct.

## Patent Claims.

Persons desiring the claims of any invention 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 one dollar as fee for copying.

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IMPORTANT TO INVENTORS.—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 most reasonable terms. All business entrusted to their charge is strictly confidential. Private consultation are held with inveutors 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.

Branches of our Agency have been established in London, under the charge of Messrs. Barlow, Payne & Parken, celebrated Attornies, and Editors of the "Patent Journal?" also in Paris, France, under the charge of M. Gardissal, Editor of the "Brevet d'Invention." We flatter ourselves that the facilities we possess for securing patents in all countries where the right is recognized, are not equalled by any other American house.

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CARD.—The undersigned beg leave to draw the attention of architects, engineers, machi-sts, opticians, watchmakers, jewellers, and manu-turers of all kinds of instruments, to his new and facturers of all kinds of instruments, to his new and extensive assortment of fine English (Stubs) and Swiss Files and Tools, also his imported and own manulactured Mathematical Drawing Instruments of Swiss and English style, which he offers at very reasonable prices. Orders for any kind of instruments will be promptly executed by F. A. SIBENMANN, Importer of Watchmakers' and Jewellers' Files and Tools, and manufacturer of Mathematical Instruments, 134 Fulton st. Tools, and manulas ments, 154 Fulton st.

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ATHES FOR BROOM HANDLES, Etc.
We continue to sell Alcott's Concentric Latie, which is adapted to turning Windsor Chair Legs, Pillars, Rods and Rounds; Hoe Handles, Fork Handles, and Broom Handles.

This Lathe is capable of turning under two inches diameter, with only the trouble of changing the dies and pattern to the size required. It will turn smooth over swells or depressions of 3-4 to the inch, and work as smoothly as on a straight line, and does excellent work. Sold without frames for the low price of \$25—boxed and shipped, with directions for setting up. Address, (post paid)

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SASH AND BLIND MACHINE—Patented by ASH AND BLIND MACHINE—Patented by Jesse Leavens, Springfield, Mass. The machine planes, molds, mortises, bores, tennons, copes, franks, cuts off, rips up the stuff, planes the blinds, shades, and sets out the sash. The machine is 4 by 5 feet, weighs 800 lbs., requires two horse-power to drive it, and cost \$300 cash—extra charge for the right to use. Shop, town, county, and Staterights for sale. Orders from abroad will be promptly attended to by addressing JESSE LEAVENS, Palmer Depot, Mass. 278\*

FELLY CUTTING MACHINE—Messrs. JO-SEPH ADAMS & SONS, Amherst, Mass., offer for sale town, county, and State rights, or single machines, with the right to use, of their unrivalled Felly Cutting Machine, illustrated in No. 5, Vol. 6, Scientific American. It is portable, easily kept in order, requires but little power to drive it, and will execute in the most rapid and perfect manner, cutting 60 good fellys in one hour.

27.8\*

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