## TO CORRESPONDENTS

"P. F. of C. W."-An electro magnetic en ine is simple. It is simply a walking beam connected at one end to a shaft by a crank, and the other end attached upwards by an electro magnet-and the circuit broken to give it a reciprocating motion. You may use one or more electro magnets and arrange them differently-employing them to attract both ends, but the principle is the same. There is also the electro magnetic rotary engine; it is very common and can be purchased atany philosophical instrument maker's.
" J. G. J. of Me."-Your letter of the 7th is received with contents. We are about making such arrangements as will warrant us to engage in the sale of your mills but as yet our plans are not fully consummated. We will write you by mail soon, and then inform you what we will do, and how much commissions we shall be obliged to charge you.
"C R of Mass."-We have wrote twice for the claim but have not got it yet, but will in all likelihood in a few days. We are sorry for the delay, but cannot help it.
"T. S. of S. C."-You enquire, how you can braze cast iron. We should like to know how to do this ourselves, and so would thous. ands of others. You may fill up the holes of cast iron by molten metal in a certain way, and you can cement cast iron joints by a paste of iron filings and sal ammoniac. Copper and brass are brazed by spelter solder. The hard solder for brass or copper, is made with brass and one sixth of its weight of zinc. The surfaces to be soldered must be very clean and the solder laid upon the joint, it having been first wet with a solution of chloride ofzinc by a feather, and the brazing iron then applied. You had better not try to force water the distance you repre sent, if you wish to keep the mill going.
"C. D. R and N. M of Ms." " Г. \& E. B. of N. Y." "G. W. of Me." "L. B. W. of Vt" "A. J. of R. I." and " D. C. F. of Va."-Your specifications and drawings have been forwarded to the Patent office and certificates of deposit sent as full payment for the amount of fees.
"R S. C. of Mich."-Your Camera Lucida was forwarded by express last Tuesday.
"H. S. of N. Y." - You will see the receipt upon our last page. It is the readiest way we could send it. Use more of the chlorate and sulphur, as you want them good. It is the gum that preserves them from moisture-is inglass is better however, but still nothing a perfect proot against the damp.
"E. C. of P."-You will see by last Scien tific American that Electro Magnetic engines are not new. We know not wherein Mr. Page's differs from others.
"W. H. D. of Ms." -Your machine for gold washing seems very novel and is certainly worthy the application for letters patent. It is the best machine we have yet seen for the purpose which you design it and at the present time the amount of sales would at once the expence of a patent-send on your model and your business shall be promptly attended
to. The cost of making the application after youfurnish us witha model will be $\$ 50$ which amount pays all fees.
H. W. C. of Ms." - Your patent business is progressing and the papers will be sent to you for signing next Monda.
"I. F. B. of Ga."-Your model has come to hand and jou
attention.
of Ms."-We shall send your caveat for signatures in a few days.
"J. M. M, C. E. of Pa."-Thank you for the favor of the 7th. We shall be pleased to hear from you at any time ; those communica. tions are well received.

We have a number of communications which we shall answer next week.

Next week we shall present splendid engravings of a new machine for Morticing the frames of Blinds. It is a beautifuland ingenious machine.

Hints to Dyspeptics.
This is a very neat and usetul volume for 25 cents, by Joel H. Ross, M. D. of Amity st this city. It treats of diet, exercise, air tem. perature, \&n. and does so in a very pleasing and entertaining manner.

Bust of General Taylor
We have received from Thomas Blanchard, Esq. a small marble bust of he President, carved by his machine. Those who are desirous of seeing the perfection of machine labor, can see the old hero, by giving us a call. The idelity of the machine, far surpasses the hand. Its minute tracing defies all the skill of the artist.

Universal History of the Worid.
No. 4, vol. 2 of this splendid and able his tory by G. C. Hebbe, LL.D., has just been is sued by Dewitt \& Davenport, Tribune Buildings. This history is a very comprehensive ad profound one, and to the lover or Biblical reasury of knowledg

The "Farmer and Mechanic," a monthly periodical published at Toronto, Canada West, of Eastwood \& Co., is a very good and valua. ble work, containing much information for farmers especially.

## Publishers'Notice.

Those of our subscribers who have paid but one dollar on the present volume of the Scientific American, will please bear in mind that their subscriptions expire with this num oer. To those of our friends who have soliberally supported us during the past 6 months, we tender our heartfelt thanks, and those who have appreciated our efforts to furnish them with the latest and most important in. formation upon scientific and mechanical mat. ters, will, we are confident, renew their sub scriptions and consider themselves still members of our great family. We hope that those who wish their papers continued, will not neglect to make their remittances as early as possible, in order that they may not be disap. pointed by our being unabie to furnish the back numbers. MUNN \& CO. Publishers.

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