### TO CORRESPONDENTS

"P. F. of C. W."-An electro magnetic engine 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.

is received with contents. We are about maengage in the sale of your mills but as yet our treasury of knowledge. plans are not fully consummated. We will write you by mail soon, and then inform you what we will do, and how much commissions periodical published at Toronto, Canada West, we shall be obliged to charge you.

"C R of Mass."-We have wrote twice for ble work, containing much information for the claim but have not got it yet, but will in farmers especially. 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 thousands 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 of zinc by a feather, and the brazing iron then applied. You had better glect to make their remittances as early as sent, if you wish to keep the mill going.

"C. D. R. and N. M of Ms." " T. & 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 printed dailies. gum that preserves them from moisture—is- Advertisement following rates : inglass is better however, but still nothing is a perfect proot against the damp.

"E. C. of P."-You will see by last Scientific 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 i 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 length. A m17 lt\* time the amount of sales would at once pay the expence of a patent-send on your model PATENT LUBRICATING OIL FOR MAand your business shall be promptly attended to. The cost of making the application after you furnish us with a 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 Monday.

"I. F. B. of Ga."-Your model has come to hand and your business shall receive immediate attention.

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