Scientific American.

TO CORRESPONDENTS.

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C. W. C., of Ind.-Faraday's Chemical Manipulations are good. It can be obtained of Appleton & Co., this city. But Graham's Elements of Chemistry is a most excellent work it can be obtained, we suppose, from any respectable book seller. Twenty cells of Groves' Battery will produce a fine light; forty cells a most brilliant one. A piece of burned chalk will answer for the Drummond light. Take a pieceof clean hard charcoal and make it into a point.

R. F. C., of Ala.-Your model is completed, and the ma ker has made a very good job of it. On the receipt of the government fees, we will proceed to preparing the applica tion

J. W., of Nova Scotia-The most simply-constructed ex cavator with which we are acquainted was patented by C. Williams last week. We are not informed whether he is ready to fill orders for machines, or not, but would recom mend you to address him at Jackson, Tenn.

C. A., of Pa.-You have been rightly informed that there are no vovernors in general use on steam vessels, the reason for which is that there never has been one suited for the pur pose, or at least successfully applied. You are right in supposing that the motion of the vessel renders the common governor inapplicable. It is not quick enough in its action, quickness being the greatest desideratum, for the reason that in a heavy sea, one or both wheels are one minute deer in the water, and the next almost or entirely out. A good marine governor is, as we have before said, very greatly needed.

G. B. A., of N. Y .- Copper kettles for boiling the clothe and cast iron kettles for heating the water-just as you have them—are very good, if they are properly built up, and sur rounded with brick; if not, they will consume a great deal of fuel. A very good portable steam apparatus for heating water with steam, used to be made by Mellen Battel, of Albany, N. Y.; they may be made there yet; we cannot tell you what is the best cooking range for one hundred people. The horse nower of an angle is he horse power of an engine is a very indefinite term the power is the steam, not the engine. The pressure of the steam on each square inch of piston, multiplied into its ve-locity per minute, divided by 33,000, will give the horse power. By using steam of different pressures the power of ust be in accordance with such pressure. One of Mr. Bogardus' Mills, we think, would answer for grind ing your herbs; we do not think the rollers would answer.

H. A. H., of Ind.-An endless belt arranged as you pro ose, on the steam cutter, would perhaps answer very well, but it is a very old device, and you cannot patent the same B. S., of Mass.-Why do you ask us if it is practicable to use rosin fluid, instead of wood, in locomotives ? It can be done, but the economy of its use is the grand question. India rubber has been used for door strips. The governo has been applied to windmills and water wheels, as well as steam engines

J. T. H., of Md.-It will not be necessary to makea n el of an entire melodeon : vouneed only show your improvements in such a way that their peculiarities may be readily comprehended. W. S. E., of N. Y.-The only process known to us for

bleaching ivor7, such as the keys of pianofortes, is to wet them and expose them a number of times to the sun. You could not do this very well with a piano. J. B. H., of R. I.-You have to study a great deal more

than you have yet done to convince us that you can gain power by a lever. You must dive a little deeper into the subject.

R. R., of N. Y .- When you write again let it be in a clear brief, and simple manner, and in a plain hand. We have no time to waste indecyphering hieroglyphics.

J. B. F., of Conn.-We give your request a candid con sideration.

W. B., of Pa.-Weanswered you on page 247. The in-vention, we think, is patentable by the addition which you have thrown upon it in your last letter.

J. B. C., of Pa.-Your ash sifter device presents patents ble features. Revolving screens for this purpose are not new. But your combination of the flanged dish for preventing the ashes from falling out when turned up vertically could be claimed, and perhaps some other part.

C. M., of Pa.-You can have dials made at almost any of the philosophical instrument makers. Eastman's gauge is patented : we shall make your claim as broad as possible.

D. T. S.-The exterior of gravel wall houses are now or namented by having designs cut in the mold boards, so that in building the gravel enters the designs, and when the boards are removed the figure remains on the building in relief. Pressing, as you propose, would be no better, while, we think it would add to the expense. You do not sufficient ly state the advantages of pressing : if it is quicker, cheap er, and better, it would probably be patentable. A print ing press with the form placed on a horizontally rotating bed, is very old : it never worked well. F. D., of Fice Island-We think it will be cheaper to cu

the grooves in the rifle barrel, than to obtain the spiral twist by inserting separate projecting bars. We believe, however, it is new and patentable.

I. & J. R., of Ind.-Property will not increase in value, you may depend, in the vicinity of gas works. We have never heard of gas works affecting the health of those in their vicinity one way or another. Gas works should be isolated from dwelling houses, and have a plentiful supply of water and good drainage.

J. R. A., Port Jervis-Your plan of conveying the milk from the pans to the churn, and of emptying the churn by means of a pump and flexible hose pipe is a useful one, but Your method of raising water by the feet instead of by the hands, may also be good, for a change, but it is not patentable.

H., of N. Y .- The movement you propose to give the slide valve is a desirable one. Some valve motions have mith a miam to such

James Collins, of Conklin, N. Y.-Wishes to purchase several of the best dry clay brick presses which are in use, with a view of establishing a large business in brick making in Jows Manufacturers of such machines will do well to address Mr. C., setting forth the advantages of their differ ent machines. But, gentlemen, a word of caution-don't exaggerate their merits too vividly.

T. B., of Mass.-A water-wheel or engine embracing the principles you describe is not new. The conversion of the same device into a steam engine which had been used for water, would be the mere substitution of our fluid for an other, as a motive agent, and not patentable.

J. B. C., of Tenn.-You know it has been denied, that ultures sail so long without flapping their wings, as you have asserted. Until it is proven conclusively that they do fly as you state, what good will it do to discuss the question upon disputed premises : we will retain your communica-tion until this point is settled ; for it would only be a waste of room to publish until it was

D. Z., of Pa.-It is impossible for us to say how long a boiler may be extended to get the most economy : we do not believe that long boilers are economical; we would prefer two boilers in preference to four, having the same heating surface

J. G. D., of N. J.-We are glad to hear that you have made such an improvement on reapers and mowers.

L. W. P., of Ind .- The beautiful gloss on the shirts purchase is due to the great pressure employed in the ironing process. Paper makers call it calendering, the gloss on

printing paper being produced by passing the dry sh ets through polished rollers. You can produce the same effectat nome if you use a heavy hot flat iron, pressed hard, and rubbed rapidly over the garment.

A. P. B., of Ga.-We cannot tell you the cost of appara tus for making blacking; it cannot be much. You can commence with an iron kettle. We can furnish the receipts both for blacking and black varnish. You can purchase the materials at any druggists. Try some experiments on a small scale first, and then let us know what receipts you

M. P., ofdisagreeable way of expressing your opinions. You are aware that in your previous communication you gave the extract from Siliimam's Journal, and the views of Prof. A john, to correct our opinions. In presenting them, you accepted their contradictions to correct us, without a single remark on the same. You do not seem to have given the subject sufficient attention, for what is not obvious to you, hasbeen endorsed by excellent authority, see page 186. Vol. 8, Sci. Am. We had thought that the question long ago, that the same bulk of vapor is produced from all liquids with the same expenditure of heat. N. P., of N. Y.-None of the telegraph arrangements,

Davy's or Morse's, use the local batteries, operated by breaking, but by closing the circuits. 'The wires being in the zinc in both sides, as stated, is also different from theirs. Your last letter explains the matter more fully, and points out its difference. If you can send a message twenty thousand miles as easy as fifty, and allow all way stations to write different messages, you have made a grand improve ment

H. S. B., of Onio.-Your's will meet with attention

-... of Washington-Your's is a very important inquiry, but you seem to forget that many persons are quite successful in ridding themselves of vermin by hat traps, there are also bug traps. -R. J., of Ky.-Latent heat is not a very proper term to

use, because it is more liable to confuse than instruct, owing to the manner in which you have used the term.

J D. B., of Ct.-A combined steam and ether engineway at work for some months in this city; it was a failure. S. L., of Pa.-We will give receipts for coloring black on

silk, cotton, and wool, in our series of articles on the Art of Dyeing. R. O. K., of Ohio-If you compress steam of atmospher

ic pressure into the space it occupied as water, all its latent will become sensible heat. The heat of steam is not exactly la ent when we view it in this light.

A. B., of Na.-We have not heard from you in a long time. Write soon.

J. McD., of Va.-Smoke may do very well for passing up the chimney, but not for propelling machinery.

Money received at the SCIENTIFIC AMERICAN on of Patent Office business for the week ending Saturday, April 21 :-

E. D. W., of Del., \$60; G. W. M., of Mich., \$30; F. C. L., of Pa., \$30; M. B., of Ind., \$17; J. S. M., of Ill., \$25; F. W., of N. J., \$30; W. H. M., of Cal., \$35; E. R. N., of Pa., \$30; C. F. B., of R. I., \$60; T. E., of Pa., \$55; M. C., of N. Y., \$20; R. K., of N. Y., \$30; E. W., of Mass., \$25; H. I. B., of Pa., \$25; M. B., of N. Y., \$20; F. C., of N. H., \$25; J. P. H., of €., \$30; L. S., of N. Y., \$20; H. W., of Wis., \$35; G. T., of N. Y., \$30; E. H. H., of Ind., \$55; J. H. G., of •., \$15; W. F., 2nd, of Mich., \$10; W. T., 10 Tenn., \$30; O. D B., of Mo., \$10; D. L. B., of Miss., \$29

L. B., of Ct., \$30 ; P. G. G., of N. Y., \$110. Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, April 21 :-

M. B., of Ind.; C. W., of N. Y.; J. M. P., of N. Y.; L. Y., of N. Y.; M. B., of N. Y.; E. W., of Mass.; F. C., of N. H.; H. I. B., of Pa.; J. H. W., of N. J.; J. McM., of Ky.; J. H. G., of N. Y.; C. M. D., of N. Y.; E. R. N., of Pa.; E. W. G., of Mass.; C. & H., of ●.; W. M., of N. Y.; S. H. M., of N. Y.; D. L. B., of Miss.; C. M., of Pa. : W. H. M., of Cal.

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THE ARTISAN JOURNAL—A Monthly Record of the Process of Civil and Mechanical Engineer-ing, Steam Navigation Shipbuilding, and the Indus-trial Arts, Chemistry. & Published in London. and forsale in numbers and volumes by CHAS. H. HAS WELL, Consulting and Superintending Engineer, Bowling Green, New York. Drawings and specifica-tions of Steam Machinery, in all its branches, furnished upon application. 14 1amtf

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been constructed with a view to such a movement, but as	
they have not been generally adopted, must in some way '	
have been defective : we cannot tell whether yours is new	
or patentable without a model or a sketch.	

J. R. S., of N. Y .- We do not know of any tinsmiths guide. The expense of publishing 3000 copies of a work of 200 pages, in good style, would be about \$1000. We do not know of a publisher who would buy your MSS.

M.B., of Pa.-Your letter of the 17th, covering \$20 for engravings of the furnace, was duly received. The cuts are in progress of preparation, and will be published in their n, probably in a bout three weeks

G. & M., of Pa.-Your petition of withdrawal was sent to the Patent Office on the 21st. The Commissioner will send you the \$20 by mail, addressed to Alleghany City, Pa. D. G. G., of Ia.-The idea of a burglar's alarm with con nect ions arranged for each door and window, is not new but your peculiar plan of the alarm and connections strikes us as novel, and is probably patentable. The SCIENTIFIC AMERICAN is published at \$2 a year.

A. F., of Mass.-Your marble polisher strikes us as new and patentable. If you desire to secure it by patent con-struct a model. We have sent a circular of information. 29

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to applications for patents, we have issued a new edition of the old laws, which may be had at our counter or sent by mail. This pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office Price 12% cents per copy.

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