# Scientific American.

#### TO CORRESPONDENTS

G. G. of Mass.-A balance-wheel will be of no service

F. R. B., of N. Y.-We are well aware of the facts re lative to obtaining the full power of the water. We do not know that we rightly understand your last question; how can each end of the partition of your tube, as you state, form an axis? If you use a spiral tube with two arms, it is the same as Whitelaw and Stirratt's wheels.

C. H. J., of S. C.—Large stoves, with drums to expose a great amount of radiating surface, are the best heaters when wood is used for fuel. Neither steam nor hot water will answer your purpose. Perhaps you would like to try a general "heater," in your basement for the purpose of heating with hot-air, this may answer very well in your climate. We have handed your letter to another party as requested.

R. McC., of N. Y.—Your steam engine should be about 10 horse-power, with 50 lbs. pressure on the square inch of piston. There is no positive rule for the horse-power of an engine now, that is, as it respects its dimensions. T. F., of Mass.-The best mode of preserving hams is to rub them well with the best quality of salt every dayfor a week, and also rub in some ground pepper and cloves

before you hang them up.
J. S., Jr., of Phila.—We cannot furnish the information sought about the furnace of Chance, but we can about well's. The coal was used in the latter furnace in conjunction with a blast, the furnace being lined with

fire-brick. Howell was a native of Philadelphia.

M. F., of Ind.—By the employment of your two wheels, an over and undershot you lose one half of the effect from the hight when the water is discharged from the overshot. One large overshot wheel is far better than your two; it requires just as much power to pump up the water as the effect obtained from it. Your plan is not a good one, we can assure you.

L. L. W.. of Mass.-A patent can be obtained for a use ful composition alone.

R. B. B., of Mo.—The extract to which you refer wa taken from a foreignpaper, and we have heard nothing more about it since.

C. B. K., of Ill.-As the pressure of steam incre doesits temperature. For tables of this increase and rate of expansion, consultany good work on steam and steam engines. The temperature will be increased by heating the steam apart from the water.

S. G. C., of Pa. - We do not discover the slightest nov elty in your device for feeding water to boilers without the aid of the force pump. We have seen essentially the same thing before.

Wm. Wood of Columbia. Tenn., wants a first-rate ma chine forturning spokes. Some manufacturer willplease communicate with Mr. Wood.

Oran Cole, of Detroit, Mich., wishes to purchase chine capable of turning axe and hammer handles. Mr Cole will be "thehumble servant of any one who will

H. S., of Va.-You can dissolve shellac in a strong so lution of soda or pearlash, but we prefer alcohol. The varnish thus made is useful formany purposes. E. H. Jr., of Ala.-We are not acquainted with Mr. A

You can obtain the oxyd of gold by following the direction on another page.

M. R., of Me.—We are fearful that your brake would not possess sufficient power to stop the speed of the train as soon as required. As auxiliary to a steam brake upon ever, be useful. We should think it possessed sufficient novelty to warrant an application if its utility were de

W. A. P., of Miss.-There never has been any difficulty in making the paddles dip and lift vertically: your plan, however, is new to us. We have never known of the steam being used directly, as is set forth in your description. We do not like your plan, as the radial paddle-wheel is far better than any other kind.

Money received on account of Patent Office business

for the week ending Saturday, Feb. 4:—
P. S., of Ct., \$55; D. B. H., of S. C., \$20; A. J., of Ind., 30: J.A. S., of N. Y., \$100; G. H., of R. I., \$30; W. H.H., of O., \$25; P. W., of Mass., \$30; J. S. S., of Md., \$30; W. H. A., of N, Y., \$55; J. C., of N. J., \$30; C. W., of Conn. \$25; T. R., of N. J., \$12; S. B. C., of Pa., \$55; S. M., of N. Y., \$15; J. C., of N. Y., \$30; J. W., of Mass., \$30; R. P. B., of N. Y., \$30; J. M. N., of Vt., \$30; G. S., of N. Y., \$30: A. E., of N. Y., \$35; H. T., of N. Y., \$12, W. H. S., of N. Y., \$20.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Feb. 4:-W.H.S., of N. Y.; T. B. S., of N. J.; T. R., of N. J.; C.

W., of Ct.; J. H., of N. Y.; W. H. H., of Ohio; H. T., of N. Y.; A. E., of N. Y.; G. S., of N. Y.; L. C. C., of Ct.

## A Chapter of Suggestions, &c

PATENT LAWS-The seventh edition of the American Patent Laws and Guide to the Patent Office, publish ed by us, having been exhausted, we shall not be able to furnish orders under ten days or two weeks, Those who have remitted money for copies will be supplied immediately on theissuing of a new edition.

PATENT CLAIMS-Persons desiring the claim of any inven 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.

-Remember we are always willing to ex and publish engravings of your inventions, providing they are on interesting subjects, and have never ap peared in any other publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permit ted 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

To Correspondents.—Condense your ideas into as brief space as possible, and write them out legibly, always remembering to add your name to the communication, anonymous letters receive no attention at this office If you have questions to ask, do it in as few words as possible, and if you have some invention to describe come right to the business at the commencement of your letter, and not fill up the best part of your sheet in makingapologies for having the presumption to ad dress us. We are always willing to impart information if we have the kind solicited.

BACK NUMBERS AND VOLUMES-In reply to many interrogatories 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, nonecomple, 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. and often with the name of the post-office also omitted. 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.

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16

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REWARD—For an Invention to Precipits and others. In order to prevent the loss and annovance occasioned by the ALTERATION of Bank Notes either by changing the name of the Bank, or the denomination of the Bill, as practiced by counterfeiters, and to procure an effectual barrier to such practices, by encouraging the invention of materials, such as ink and paper, or a nature to affordin either or in any combination of them the desired protection—the Executive Committee of the Association of Banks for the Suppression of Counterfeiting, will pay the sum of five flundred Bollars to any person who shall invent the best mode, in the opinion of the Committee, of accomplishing the object named. All plans to be submitted to the undersigned on or before the 25th day of March next, and to be accompanied with such explanations of the materials and processes as the party applying may be willing to disclose. Each applicant to lodge with the Treasurer of the Association, Henry M. Holbrock, Esq., for the term of three menths, the sum of one hundred dollars, which shall be paid to any person who shall, during that time, alter, by removing and printing anew, any material portion of a bill or note prepared in accordance with the plan submitted, in such a manner that the alteration would, in the judgment of the Committee, be likely to pass unsuspected. And if, at the end of said three months, no one has been able to effect such alteration, and the Committee are satisfied that the materials proposed will stand all the tests which the present knowledge of chemistry affords, then the hundred dollars will be returned, and the reward paid over to the successful applicant, and the hundred dollars deposited by each of the other applicants to be returned to them respectively. Per order of the Executive Committee, J. M. GORDON, Secretary.

Columbian Bank, Boston, Mass. Jan 24, 1854. 227

This is TO CERTIFY that I have hadin use one of Parson's Self-straining and Self-ranging Saw Frames, during the last year, and find the same to be an improvement upon the old fashioned Saw Gate; my mill had two English Gates. Wheels entirely similar and geared precisely in the samemanner, the only difference being that the water gate to one of the mills vented about 500 inches, and the other about 400 inches, the consequence was that the mill venting most water did a proportionably largeramount of work. The gate venting the least was changed for one of E. H. & S. E. Parson's saw frames; the result was highly satisfactory the mill containing said frame cutting aboutone-third more lumber than the English Cate, with the larger amount of water.

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Usited States Patent Office.

Washington, Jan. 26, 1884.

Onsthe Petition of allen & Win. A Crowell, of Salisbury, Conn., praying for the extension of a patent granted to them on the 20th day of June, 1840, for an improvement in Churns, for seven years from the expiration of said patent, which takes place on the 20th day of June, eighteen hundred and fifty-four—It is ordered that the said petition be heard at the Patent Office on Monday, the 29th day of May next, at 12 o'clock, M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not be granted.

Persons opposing the extension examination.

Persons opposing the extension are required to file in the Patent Office their objections, specially set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, D. C.; Pennsylvanian, Philadelphia, Pa.; Scientific American, New York; and Enquirer, Cincinnati, Ohio, once a week for three successive weeks previous to the 29th day of May next, the day of hearing.

CHARLES MASON,
Commissioner of Patents.

D. S. Feltres of the shove nearers will please copy and

P. S.—Editors of the above papers will please copy and send their bills to the Patent Office, with a paper containing this notice.

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B. ELY, Counsellor at Law, 52 Washington street,
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Refers to Messrs Munn & Co., Scientific American.

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