

fifty thousand dollars, to be paid out of the Patent fund." It was supposed at the time by the Committee on Patents, and the then Commissioner of Patents, Mr. Burke, that that sum would be sufficient to cover the amount of work which could be done by the next session, when Congress would of course make further appropriations—this sum being used up, we hope that Congress will make the appropriation at once and let the work go on—the money belongs to the inventors.

TO CORRESPONDENTS.

"Subscriber."—We published Roche's Receipt for baking, in Vol. 4, and spoke of it as you now do, at the time.

"J. C., of Baltimore."—It may be as well for you to wait until we get through with our history of Propellers. An oblique paddle is to be found patented by a Mr. Biron, in 1844.—You are right about improvements—we are not at the end. We like every correspondent to state clearly the object he designs to accomplish by his invention.

"E. S. H., of N. C."—We could not tell you about the price of the Sewing Machine to which you refer, (Wilson's.) It would no doubt answer well for the purpose mentioned by you. Mr. Wilson resides in North Adams, Mass.

"J. A. F., of Ala."—Your idea is correct about the rifle, only you must take into consideration the whole weight of the rifle. The principles are clearly illustrated and explained in the work on Mechanics, published by the Society for the Diffusion of Useful Knowledge. Your idea about the Re-action Water Wheel is just and correct, but is understood by Mr. Parker. Your views about the tube and elastic fluid are original to us.

"J. B., of Ind."—The part about the saw mills should have read "like ours." We have seen the ones you allude to in operation. Your idea about the Queen's Ware is correct, but it would never do, you see, to sell it as "King's Ware." We have seen the hydraulic blow-pipe, but prefer the one that is in No. 3, Vol. 5, Sci. Am., to any other.

"C. B. H., of N. Y."—Your manner of constructing and combining the boiler, with the engine, to render it portable, appears to us to be new and useful; we know of no other having been constructed like it. We are of opinion that it is patentable.

"J. P., of Ct."—Six cubic feet per second will, on a 30 feet diameter overshot, give thirteen and a little more than a half horse power. For the purpose you desire, you cannot do with less than 14 cubic feet per second.

"J. K., of Pa."—Mr. Bishop, of Ovid, N. Y., patented a wheel which has two sets of buckets, to act as percussion and re-action, but they are placed above one another, and do not discharge at the centre, like yours, but as there are 30 patents on such wheels, it is doubtful if a patent could be secured.

"F. G. W., of Mass."—You will see that the answer has been given about the crank.

"J. A. G., of N. H."—The idea, but not the same way of carrying it out, has been presented to us before. We are of opinion that the plan would be difficult to carry out.

"J. M. H., of N. Y."—Your plan for the cider press could not be patented, because the same arrangement is used for like purposes in other kinds of presses.

"A. G., of Ohio."—We do not see how you could be refused a patent, for your idea is new, and it certainly is useful—the two essentials requisite to secure a patent.

"M. S., of Ohio."—We have examined your pump and our opinion is not favorable. In all cases we have never seen cog and rack gearing operate well in pumps.

"D. U., of Pa."—We are afraid that no patent except for an improvement on Lull's, could be granted, and then you could not use it except with the consent of the original patentee.

"D. Regr., of Pa."—Mr. Charles Pontez, of No. 71 Cedar street, N. Y., has an apparatus for boring wells, and will soon publish an advertisement. We could not give you the exact information. We do not think he has applied.

"E. C. J., of Mass."—We believe that a patent was applied for the same kind of venti-

lator, about ten years ago. We saw the model and are sure that the ideas embraced were the same as yours. We advise you not to spend any money on a patent.

"Mattewan."—You are right—the Franklin Journal copied it from the Century of Inventions. We shall refer to the work where there is a good treatise on the subject.

"A. C. J., of Me."—Your proposition is untenable; instead of gaining power by such a device there will be a serious loss. Experiments have demonstrated this point fully.

"F. K. B., of Ill."—In answer to yours of the 13th ult., we are sorry to say that Nos. 1 and 2, of Vol. 4, cannot be furnished; we have been out of these numbers for a long time. We make no charge for missing numbers when furnished to subscribers.

"S. H. J., of Mass."—We trust you may realize good results from your experiments, and hope to hear from you regarding them.

"H. D. S., of N. J."—Is informed that his plan for a city railway is not new: Mr. Meigs exhibited the same plan before the N. Y. Legislature at Albany, in 1840, since that time we have heard nothing of it.

"W. N., of Ill."—An engine of 8 horse power, complete, with cylinder boiler, will cost you about \$800. \$1 received and credited.

"E. V., of N. H."—The principles of your rotary are well understood by us, but they are not new. Some time last year a gentleman from New Jersey exhibited a drawing to us embracing the same ideas, and nearly the same in mechanical construction. We had no great confidence in its success, although it may be made to work.

"J. C. of Ky."—Mr. E. Barlow, of Marietta, Ohio, did obtain a patent for a pump on the 20th of Feb., 1848. Cannot now say whether such a gas as you speak of has been patented or not. Our opinion is that it has not. \$2 received.

"F. H., of Boston."—We do not know that any varnish has ever been made, such as you speak of, to resist 200° degrees of heat; but should think that alum mixed with copal varnish could answer—phosphate of magnesia ought also to be good—both substances are good non-conductors, but of the two we should prefer alum, as it is more transparent.

"J. H. H., of Ala."—A small sized force and lifting pump would cost about \$6, and lead pipe 20 cts. per foot. The smallest size made by B., are worth \$25. We have sent you the back numbers called for.

"D. W. E., of N. Y."—The buckets of Mr. M.'s wheels were not governed by a rack and pinion, but changed their position by their own weight. There would be many objections to laying rails ten feet apart—six feet is sufficient for all purposes of speed, comfort, &c.

"A. W. D., of Ct."—Your plans for a horse power is very simple and practicable—but very old, no patent could be obtained for it; the only point of difference between yours and many others, is simply the application of the extra wheel and a change in form, showing no novel combination.

"J. L. of Ill."—Your favor was very acceptable; accept many thanks for the same. Each subscriber has been entered as you request.

"S. J. L., of Ala."—We cannot furnish Vol. 3 of the Sci. Am., sorry to say so. Please thank the Editor of the Monitor, for his interest in circulating our Journal—accept the same also for yourself.

"N. A., of Me."—If you have a new improvement, you had better make a direct application for Letters Patent instead of applying for it as an improvement; we advise thus in consequence of the long time since your patent was granted. Gutta Percha has been used in this city between fabrics, to render them water proof. You may have a different way of effecting this result.

"J. D., of Va."—There was no mistake in regard to Ranlett's Architect, as you will see from the numbers sent, on the 3d inst. We enclosed them in two separate parcels, 5 numbers in each, and hope you will receive them in good time, condition etc.

"H. V., of N. Y."—If we hear of any such opportunity to purchase a boiler as you represent, we will inform you.

"J. J., of N. Y."—It does not appear that you have discovered any new principle in atmospheric churns. The same dash has been shown us within a few weeks, independent of this, the modifications are not patentable as we view them.

"J. S. D., of N. H."—Your Sci. Am., is sent from this office and will be enclosed with the club, when received, which we hope will be in a few days.

"W. B., of Mass."—We cannot express an opinion in relation to the practicability of your perpetual motion without the opportunity of examining one of them in operation. The combination is new to us; our curiosity is aroused in some measure to learn the result of your experiments although we have little confidence in such contrivances.

"H. K., of R. I."—We cannot object to your views in reference to "Alarms," but should like to hear the result of your experiments before expressing an opinion.

"D. G. S., of Pa."—The drawing of your Paddle Wheel has been examined. For one containing the same principles see No. 36 Vol. 4, "Sci. Am.," page 284.

H. T. B., of St. Louis; W. T. C., of N. C.; M. S., of Ohio; G. K., of Pa.; J. A. C., of Pa.; W. D. M., of Miss.; M. L. S., of Pa.—Shall write you as soon as possible.

Money received on account of Patent Office business, since Dec. 27, 1849:—

S. K. G., of N. Y. \$30; T. J., of Mass., \$30; F. H. C., and others, of Me., \$50; G. S., of Pa., \$35; N. S. T., of N. J., \$26; R. N. G., of Ill., \$30; F. H. T., of Texas, \$70, and 3 oz. of Gold Dust from F. G. U. H., of San Francisco—value \$48.

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NOTICE TO INVENTORS.—Inventors and others requiring protection by United States Letters Patent, are informed that all business relating to the procurement of letters patent, or filing caveats, is transacted at the Scientific American Office, with the utmost economy and despatch. Drawings of all kinds executed on the most reasonable terms. Messrs. Munn & Co. can be consulted at all times in regard to Patent business, at their office, and such advice rendered as will enable inventors to adopt the safest means for securing their rights.
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 128 FULTON STREET, NEW YORK.

THE RAMBLER FOR 1850.—The Boston SATURDAY RAMBLER will commence its Fifth Yearly Volume on Saturday, Jan. 5th, 1850, on which occasion it will appear in an entire new and elegant suit of type, printed on fine paper, and in all respects equal to the handsomest journal of the day. Several other important improvements and new features will be introduced, and it is intended that the paper shall in every respect present higher claims to the patronage of the public than it has yet pretended to. The volume will open with a splendid original romance by C. W. Webber, Esq., author of "Old Hicks the Guide," "The Gold Mines of the Gila," "Shot in the Eye," &c. It is entitled "The Bravo Ranger," or "The Scalp-Hunter of Chihuahua, and will probably extend through eight or ten numbers of the paper. Mr. Webber is known throughout the country from his daring excursions into comparatively unknown portions of the continent, as well as from the fresh and entertaining account of his adventures which he has given to the world in "Old Hicks" and the "Gold Mines of the Gila."

Among other features of our paper, worthy of note, may be mentioned the department for Farmers, in which original articles appear weekly from the best agricultural writers in New England; the Financial and Business department, under the direction of an accomplished financial writer; the Markets, which we report with more than usual fullness; the Shipping List, into which we condense with great care, all marine intelligence of interest, to New England readers; the News Department, to which careful attention is devoted; besides which is given early intelligence of all new inventions, and discoveries, sketches of travel, historical, biographical and scientific articles, Sunday readings, puzzles, enigmas and problems, humorous sketches, and everything else that can benefit or interest the ordinary reader. The Illustrations will be continued weekly, and an entirely new field of embellishments will be entered upon.
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BRUSH'S IMPROVED DOUBLE ACTING LIFT AND FORCE PUMP.—The subscriber is now manufacturing and has constantly on hand, an extensive assortment of Lift and Force Pumps, to which he would call the attention of owners of factories, breweries, ships, steamships, or for railroad stations and farmers, as one of the most powerful pumps ever invented. Persons in want of a good article (the price is within the reach of all) are invited to call on the subscriber at his manufactory.
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TO IRON FOUNDERS.—Fine Ground Sea Coal, an approved article to make the sand come off the Castings easily; fine bolted Charcoal Blacking; Lehigh fine Dust, and Soapstone Dust for facing stove plates, &c. &c.; also, Black Lead Dust and Fire Clay, for sale in Barrels, by GEORGE O. ROBERTSON, 303 West 17th street, or 4 Liberty Place, between Liberty st. and Maiden Lane, N. Y. 9 14*

ADEE'S AMERICAN CAST STEEL Works, (at the foot of 24th st., E. River, N. Y.) The above works are now in successful operation, and the proprietor would respectfully call the attention of machinists and all consumers of the article to an examination of his Steel, which he is warranted by the testimony of the principal machinists and edge tool makers of this city, in recommending as fully equal in every respect to any ever used in this country.
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