TO CORRESPONDENTS.

J. P. N., of N. Y.—We never saw a rudder hung as you have described, nor have we ever heard of it being used; but we cannot see what advantage you would gain by it. The line described by the outer edge of both blades is always equi-distant from the centre; there is no short curve in either case.

S. M., of New York.—You have been anticipated, both the central wheel and a long revolving set of buckets on an endless chain, have been proposed and tried. On some canals in England, railroads are built along the tow-paths, and locomotives are employed to drag the boats. The propeller is the best device for canal boats.

L. C., of N. Y.—The best work upon Architecture is Ranlett's: price $10, in numbers; $12, bound.

J. E., of R. I.—The work upon carpet looms has not been issued, and will not be for the present, as the author is now in Europe.

A. A. D., of Ala.—The machine you refer to is the best one in use that we know of; we have seen it operate satisfactorily on several occasions, and think it adapted to cutting all kinds of timber, although we have never seen it cut oak. There are three sizes, No. 1, $100; No. 2, $110; No. 3, $120.

E. J. U., of Ohio.—Your plan for constructing patterns for mould boards is, so far as we have been able to examine, sufficiently novel to warrant a trial for a patent; you had better dispatch a model to us for that purpose.

F. W. C., of La.—It would cost you $10 to have us get up a fine descriptive engraving of your machine and publish it in detail in the "Scientific American," which would be the best mode for you to pursue if you desire to dispose of rights. The regular weekly circulation of the Scientific American exceeds 16,000 copies, most of which circulate among the manufacturers and those having a taste for mechanical matters.

H. D. P., of N. J.—Diagrams of the various kinds of sewing machines which have been patented, you will find in the 4th and 5th volumes of the Scientific American; or by perusing the back numbers of the present volume you will find engravings of two or three of the most improved. Hubbell's Magnetic Engine was published in No. 48, Vol. 5, illustrated with 10 engravings. Prof. Page's Magnetic Engine we hope to be able to present to our readers, by diagrams, in a few weeks.

M. D., of Savannah.—By turning to page 137, Vol. 5, you will see an engraving of the machinery used in boring artesian wells, but we shall present engravings of other plans soon.

H. H. P., of Pa.—A furnace for the manufacture of cast steel, was illustrated on page 169, Vol. 3. Vols. 1, 2, 3, and 4 are out of print; Vol. 5 we can send you by mail in sheets, price $2; bound, $2,75.

L. & R., of N. Y.—The engravings of your carriage wheel were forwarded by Wells & Co.'s Express, on the 16th inst.

W. D. H., of Miner Sluice.—If you will have the kindness to inform us in what "State" Miner Sluice is located, you will hear from us by Mail.

T. P. S., of Pa.—Your eliptic wheel rotary would not be of any benefit, and could not be patented:—don't waste time nor money on it.

A. H., of Pa.—Your plan is certainly neither so simple nor so quick in its operation as the telegraph we published.

W. P., of Mich.—The principle of applying the power of water, either by re-action, percussion, or gravity, is well understood. No patent could be obtained for any application of these principles. No increase of power can be obtained beyond the actual weight and velocity of the water; weight and velocity is the golden rule of mechanics. We cannot advise you in any way to expend money on your invention.

W. W. J., of New York.—We do not believe your car handle is patentable.

D. E., of Ohio.—The mere application of a pump to a bath could not be patented; it has been applied to this purpose before. We do not discover anything new or patentable in your arrangement, and you are advised not to make an application for a patent.

A. W., of Ind.—There appears to be some originality in your contrivance, sufficient to warrant an application for a patent. You had better send us a complete model for further attention.

J. T., of N. Y.—You could probably obtain a patent for your improvement in cars, but the advantages do not appear. The expense must certainly be increased, inasmuch as supplementary wheels and rails would be required, and the necessity of a double track would not be obviated; if you can show any real advantage, we should like to hear it.

W. F., of Mass.—Yours next week.

J. W. N., of Phila.—The engraving will answer. You must give a description to correspond with the curves and figures on it. Let it be simple and clear. Our memorandum is lost.

G. C. B., of Ark.—You speak of obtaining hydrogen from the atmosphere. We should like to have you explain how this is done, as it is beyond our comprehension. We had always supposed that the properties of air were oxygen and nitrogen. It is from the aqueous vapor, we suppose, you derive it.

T. A., of Mass.—The reason why ornamental steel of a purple or lilac color, rusts more readily than polished or white steel, is because the lilac tinge is produced by partial oxidation, and the process which forms rusts has, therefore already commenced. It can be kept free from rust by keeping it in a dry place.

H. B., of Mo.—Engravings illustrative of Paine's apparatus for producing illuminating gas from water, will appear in the "Sci. Am." in a week or two: have patience.

A. O., of N. Y.—Yes; the two names which you sent will be considered as part of the club, when you forward the balance of the names, with funds. It will be necessary that you remind us of the circumstance of having forwarded names previously when you forward the other names.

J. E. W., of St. Louis—Your favor of the 24th ult., containing $13, came duly to hand: the subscriptions we have entered as you directed.

J. W. R., of Pa.—Many thanks for your fine club of subscribers, all of whom have been entered upon our subscription books, as you directed. Your proposals were satisfactory.

D. H., of Ill.—The curve line which a ball describes, if the resistance of the air be taken into consideration, is called a "parabola;" but when the ball is thrown perpendicularly upwards, it will descend perpendicularly, because the force of projection and that of gravity are in the same line of direction.

B. E., of Ohio.—The real discoverer of the magnetic properties of electric currents, was M. Oersted, Professor of Natural Philosophy, and Secretary of the Royal Society of Copenhagen. In a work which he published about the year 1813, on the identity of chemical and electrical forces he had thrown out conjectures concerning the relations subsisting between the electric, galvanic, and magnetic fluids, which he conceived might differ from each other only in their respective degrees of tension.

W. C., of Miss.—There is an error somewhere, in the calculations. The principle is correct.

E. E., of S. C.—The main rope by which a diving bell is supported, ought to be soaked in water before it is used; or it would perhaps be better if a chain were substituted; an instance occurred in the Bay of Dublin, where the rope, in undergoing the contraction water always occasions, caused the diving bell to turn round, by which means the signal strings were entangled, and two men contained in it were suffocated for the want of fresh air.

A. E. B., of N. Y.—We do not think, in fact we know, that the device is not new. See Commissioner's Report for 1848, page 960.

J. A., of Pa.—We know of no machine to raise water above the ground, on a constant stream, by the power of the water itself; we mean where there is no fall. The artesian wells, are an exception to this statement.

A. J., of Wis.—Your plan of the self-regulating sails has been extensively known for a long time.

V. L., of Pa.—We have seen plenty of fruit baskets made of wire. We do not believe you could obtain a patent for making the chair of wire: it is only an application to a different purpose, and is not patentable, but common property. Cast-iron, chilled, cannot be touched by the best files. We have never seen nor heard of such a wheel as you describe. The spiral streaks on gun barrels are put on by using weak acid for the light color, and stronger acid for the dark streaking, with a brush.

W. B. B., of O.—Single bands, rivetted, 6 inches wide, sell at 36c. per foot; best quality, double bands, 82c.—20 per cent less for hemlock tanned.

W. D. S., of Cal.—You had better keep your attention turned to the digging of the precious metal, than to inventing. No doubt but your idea of the best form for a paddle wheel are correct, but unless you improve upon the details of it, it will be no go—it is too complicated.

K. E. R., of Ala.—Impure phosphoretted hydrogen bursts spontaneously into flame whenever it mixes with air or pure oxygen gas. The luminous appearance which haunts meadows, etc., arises from putrifying animal and vegetable substances.

E. W., of New York.—We have never heard of an electric light for a watch: we do not know how you could do it: it would be valuable, if practicable.

E. A., of Pa.—A most excellent varnish to prevent rust is made of 1 pint of fat oil varnish mixed with 5 pints of highly rectified spirits of turpentine, rubbed on the iron or steel with a piece of sponge. This varnish may be applied to bright stoves and even mathematical instruments without injuring their delicate polish.

E. C., of Tenn —The carbon of the burning charcoal unites with the oxygen of the air, and forms carbonic acid gas, which is a narcotic poison. This is the reason why persons are killed by having charcoal fires in their rooms.

Money received on account of Patent Office business since April 9:—

B. & B., of Vt., $20; D. W. E., of N. Y., $20; G. W. P., of Ct., $55; E. S. C., of Mass., $15; G. S., of ——, $5; R. W. A., of Ct., $30; H. & E., of N. Y., $20; J. V. S., of O., $30; W. H., of Wis., $1.0.

Specifications and drawings of inventions belonging to parties with the following initials, have been forwarded to the Patent Office since April 9:

D. A., of N. Y.; C. L., of Phila.; C. W. Van V., of N. Y.; G. C. B., of Ark.

New Edition of the Patent Laws.

We have just issued another edition of the American Patent Laws, which was delayed until after the adjournment of the last Congress, on account of an expected modification in them. The pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office We shall continue to furnish them for 12 1-2 cts. per copy.

Patent Claims.

Persons desiring the claims of any invention 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 one dollar as fee for copying.