Scientific American.

TO CORRESPONDENTS.

I. C., of N. Y.—The proposition you suggest to us, to publish a volume embracing engravings and descriptions of all the machines that have appeared in the Sci. Am. since its commencement, could not be carried out without a vast expenditure of money. In proportion to the vast number of engravings that have been published, we have but a small portion of them on hand; besides this objection, a work containing them all would be very large and

J.G., of Ind.—Iron is chilled by being cast in iron molds; the chilling is caused by the surface being rapidly cooled—made into hard steel; the outside of the mold must be kept cool with water. The person who sold you the receipt described for preventing scale in steam boilers, obtained it from our columns. The water of the Niagara river will yet no doubt be used very extensively

Robert Barber, of Bridgewater, N. J., wishes to obtain he address of Messrs. Sandford & Wakefield, who have

patents on corn planters.
S. B. W., of Mass—We are not aware of the existence of any journal in this country devoted to the interests of gas lighting. Mr. Barlow, of London, publishes a journal on gas lighting, which, we believe, is very good,

J. M., of Cal.—The information you want about tallow candles is scattered through various publications and canbe furnished as you want it. You had much better detail to us as briefly as possible the result of your experiments and we will examine and give our opinion in regard to the novelty of your process.

R. D. B., of Nova Scotia-The sketch of your alleged improvements in rotary steam engines has been carefully considered: we do not discover much novelty in it, and should consider an application for a patent as unwise. It does not possess, in our opinion, any advantages over other plans which have been abandoned as impracticable.

J. H., of Pa.—A pistol ball should penetrate further into plank at one-sixteenth of an inch distant than into one at twenty yards distant.

J. S., Jr., of Mass.—Blanchard's claim is a peculiar one. but it does not cover the copying of all forms of patterns, but it does if the pattern and article to be turned rotate e are of opinion you cannot get a machine equal to the Blanchard lathe for turning axe handles,

We have foreign patents belonging to the following persons, which they will please to order, directing us, at the same time, how we shall forward them :-

Ephraim Brown; J. W. Hoard; William Elliott; G.H.
Talbot: Caleb Winegar; L. W. Boynton; J. C. Day; A. E. Burnside, and Ferdinand Davidson.

G. P., of Montreal-We have no information ab Wilmot's apparatus in addition to what is published in the last Vol. of the Sci. Am. We have not heard that he has as yet done anything with it. We cannot answer your in-

quiry about cutting wood.

J.L., of Pa.—The Minie rifle loads at the muzzle: there is no peculiarity in the breech. Your subscription

A Subscriberinforms us that Grier's "Mechanics' Calculator" was published in 1843, by Sumner & Goodman, of Hartford, Ct. For sale by Blackie & Sons.

J. F. N., of N. C .- You will not be able to find a work nototton manufacturing which embraces the latest and best improvements employed in the business.

H. K., and Son, of Ohio—We cannot give you any information in addition to what is contained in the articles to which you refer. We would be very glad to do so if it

U. B. V., of Pa.—Your ideas in regard to ruling bank bills so as to prevent their alteration are new so far as we know, and appear to be very good. We do not think there is any chance, however, for a patent upon the sys-

S. S., of N. Y.-In the construction of journals you propose to dispense with the cotton waste, and employin stead a roller placed underneath the journal, and in con tact with it, for carrying up the oil. This device is not The same thing essentially has been presented to us on former occasions.

C. C., of Pa. -We have not much doubt of the novelty of your trip hammer improvement. Send us on a model

J. C. of Florida-A machine for turning wooden bowls was patented in 1850, by Addison Everett, of Middlefield, Mass., an engraving of which appeared in No. 52, Vol. 5, Sci. Am. We are unable to give you any information in respect to its operation or cost of the machine. We would advise you to address Mr. Everett on the subject.

J. S. McC., of Md.—We co not know of any situation that suits your wishes.

H. C., of N. Y., & T. J. L., of Pa.—If you will reter to the history of Propellers and Steam Navigation published in the Sci. Am. You will find illustrations of endless chain propellers. This invention is very ancient, and es no advantages in comparison with the plan in

P. D., of N. Y.—It would not be new to construct a mowing machine having two sets of knives cutting in opposite directions. We have seen machines having knives

operating in this manner.

F. F. G., of Texas—Short stroke engines are used in sav mills, &c., because they are compact, and givea quick direct rotary motion to the main shaft. The flues of a boiler should never be carried above the water line. The boiler, however, may be enclosed with brick as safely as withfelt. The most cautious engineers are sometimes guilty of neglect, and this may have been the case with the one to which you allude, who had charge of the exploded boiler.

H. S., of Va.—Ure's Dictionary of Arts will give you You can obtain a patent on the new article of manufacture, but not the process for making it, which is not new.

D. T. O., of N. Y.—The long pitman is subject to greater vibration than a short one, and is more liable to heat on that account. We cannot give you a rule for calculating the exact length of pitman in your case.

Y. N., of N. Y.—Every bullet in passing through a rifle barrel is feathered by the grooves, the barrel performing the office of a swedge. It might prevent the leading up of the grooves to swedge the bullets of breech-loading rifles. If cartridges are well made and greased, the barrel will be kept pretty well lubricated.

R. R. W., of Pa.—If the wheel had a throat and pas-

sage to allow all the water to flow through it freely, it would not move, the water would simply flow through it. Your wheel will be of the same power, whether large or small—the fall and quantity of water being the same. Your turbine having a six foot head, and openings having an area of 500 inches, will be about ten-horse power!

tion of the brake you refer to. By addressing the inventor in this city you can no doubt procure a descriptive cir cular.

Moneyreceived at the Scientific American Office account of Patent Office business for the week ending Saturday, Dec. 29, 1855 :-

W.P., of Ct., \$25; E. S., of N. Y., \$55; L, R., of N. Y., \$45; W. & G.B., of Pa., \$25; M. S., of W., \$30; H. & \$30; G. C. H., of Mass., \$25; J. B., of Pa., \$45; J. S. G., of N. Y., \$50; W. A. B., of Mich., \$35; W. H. B., of Pa. \$30; J. P. S., of Tex., \$60; M. F., of N. Y., \$32; A. F. W., of N. Y., \$25; A. F. & C. M. H. W., of N. Y., \$55; J. W., of Mich., \$27.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Dec. 29:—

C. H. W., of R. I.; R. W., of Ct.; W. P., of Ct.; E, H., of N. Y.; W. & G. B., of Pa.; J. S., of N. Y.; M. F., of L. I.; E. S., of N. Y.; J. P. S., of Tex.; J. McC., of Mich.; G. C. II., of Mass.; A. W., of Ill.; A. F. W., of L. I.; L. R., of N. Y.; G. & T., of N. J.

Important Items.

BACK NUMBERS AND VOLUMES-The following numbers and volumes of the Scientific American, are for sale at this office, at the annexed prices :- Volume VI Vol. VII, Vol. IX, and Vol. X, complete. Price, bound per Volume, \$2,75. Numbers in sheets, complete, \$2. Of Volumes IX. and X., we have also about 40 numberseach, not consecutive, which will be sent by mail on receipt of \$1.

RECEIPTS—When money is paid at the office for subscrip tion, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a bona fide acknowledge ment of the receipt of their funds.

BINDING-We would suggest to those who desire to have their volumes bound, that they had better send their numbers to this office, and have them executed in a uniform style with their previous volumes. Price of bind-

Literary Notices.

THE NORTH BRITISH REVIEW—This is one of that galaxy of foreign literature—the four Quarterlies—published by Leonard Scott & Co., No. 54 Gold street, this city. Its origin is due to the celebrated Dr. Chalmers, and is essentially the offspring of the Free Presbyterian Scott ish Church, but is not a religious Review, exclusively, like the "Princeton." It is comparatively a young Quarterly, beside the old Edinburgh, but it ranks perhaps the highest for decided ability. The number for this quarter, just issued, contains ten excellent articles. The first isonatory of the manufacturing population of Britain, and advocates the claims of a college in England something like that proposed in the State of New York, called the "Peoples" Ollege." It is an article which we commend to the attention of our manufacturers, machinists, engineers, &c. This Review has some very eminent contributors, such as Sir David Brewster, Sir Wm. Hamilton, Drs. Cummings, Chandlish, Hannah, and others of fame.

POSTAL REFORM—Its Urgent Necessity and Practicability: by Pliny Miles.—This is one of the most clear and emphatic exhibitions of the benefits of a cheap postalsystem that we have ever read. Mr. Miles tells us, among other facts, that, in 1835, before there was any reduction of postage either here or in England, the people of Great Britain wrote and sent through the post office \$2,000,000 and letters, and the people of the United States \$40,000,000, and in 1852 the correspondence of Great Britain, fostered by their cheap and uniform postage, and the system of free letter delivery, had increased to \$410,000,000 letters, while the number in the United States was only 102,000,000. During the period of 14 years, the population of this country increased 45 per cent. while that of Great Britain increased less than 5 per cent.; yet the increase of correspondence by mail in that country was, in round numbers, 400 per cent., while with us it was but 153 per cent. Stringer & Townsend, 222 Broadway, N. Y., publishers.

GREAT WORK ON THE ARCTIC REGIONS—Dr. Kane has been busily engaged since his return, in preparing a full account of his wonderful voyage to the Arctic Regions. Messrs. Childs & Peterson—the enterprising publishers.—Philadelphia, have the work in hand, and are sparing no expense to make it one of the most magnificent ever issued from the American press. It will be illustrated with twenty-five steel engavings, and a great number of beautiful woodcuts, representing scenes drawn by Dr. Kane on his expeditions. It will soon be issued at the love price of two dollars and a half per volume.

Puntam's Monthly—The January number of this sterling original magazine opens with an article on Will. Shakspeare and his Plays, in which the great dramatic poet is treated in a very pompous Johnsonian manner—without the Doctor's logic. A review of Prescott's "Philip the Second," is an able article. The editorial notes are excellent, and contain a fund of useful interesting matterrelating to an innumerable number of subjects. As a whole, this number is a good one to commence the new year, and gives evidence of great ability on the part of its contributors.

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give the most correct counsels to Inventors in regard to the patentability of Inventions placed before us for examination.

Private consultations respecting the patentability of inventions are held free of charge, with inventors, at our office, from 9 A. M., until 4 P. M. Parties residing at a distance are informed that it is generally unnecessary for them to incur the expense of attending in person, as all the steps necessary to secure a patent can be arranged by letter. A rough sketch and description of the improvement should be first forwarded, which we will examine and give an opinion as to patentability, without charge. Models and flees can be sent with safety from any part of the country by express. In this respect New York is more accessible than any other city in our country.

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