

CORRESPONDENTS

W. J. D. of New York .- Soft solder is composed of 66 parts of lead and 34 of tin. J K. of N. Y.-The articles on dyeing were published

in Vol. 10. There is no cheap plan for dyeing a dark brown on wool that will enable it to stand a strong sour of sulphuric acid. You can, by dyeing the goods a red with camwood, topping them with a prussian blue, or dyeing them first an indigo blue, and a red on the top, with madder, camwood, cochineal, or lac.

F. W. C. of Vt.-India rubber has been proposed to line vessels, to prevent leakage in case of collisions at sea. It would answer a better purpose than gutta percha,

but would be more expensive. N. II. of Md.—Those who have made inquiries of us respecting the work called "The Tinman's Guide," wish to purchase it.

Wm. Hogan, of Hogansville, Ga., wishes to purchase the best spoke lathe to be had in the market. Address him as above.

J. P., of Mass.-We do not know of any one engaged in the manufacture of steel wire. It is proper for your postmaster to charge 2 cents each on foreign papers sent to

G. M. M., of Tenn.-Patents have been secured for ma chines designed to reap, thrash, and separate the grain at the same operation. We believe they are considered impracticable, and, so far as we know, not one of them is now in use

L.V., of Ill.-When boards are steeped a long period in a solution of the sulphate of copper, to preserve them, the solution should be weaker than when steeped in it only for a short period. Boucherie employs a stronger solution than that given by us. We cannot send you No. 28 of the last volume. We have seen drawings of Sala ville's method of ventilating granaries. The power of a windmill is just in proportion to its strength and the pres-sure of the wind on its sails. A breeze of five lbs. pres-sure on the square foot exercises twice as much power as

a gale exerting only half the pressure. S. T. McD., of N. Y.—Any person stamping or printing the word "patented" on an unpatented article or machine, with the intention to deceive, is liable to a fine of \$100 for each offence. The date of the patent must be stamped or marked on all patented articles, under a penalty of \$100 for each neglect, if offered for sale by a patentee or assignee.

P.S.A., of Ala .- We cannot conceive how you can obtain a vacuum in your tube by the descent of wa-ter, when both ends of it are immersed in water. It is well known that in a pipe of uniform diameter, water falling in it will cause a partial vacuum, because its velocity increases with the time of its descent.

John E. Boatman, of Bainbridge, Ohio, wishes a machine for knitting ladies and gentlemen's hoes. Who can supply him with this kind of a machine ?

L. F. H, of Vt-Sharp's breech-loading rifles are manufactured at Hartford, Conn. They can be purchased in this city. Some breech-loading rifles are very good for target shooting.

D. E. P., of Pa.-We did not receive your letter in time to do what you requested in regard to the milk pre-serving. If you intend to take out a patent for it, it will be better to defer the notice untilsuch time as you might wish to publish an engraving of it. B. J. V. M., of Pa.—Whirlpools revolve in all direc-

tions; they do not whirl contrary to the sun by any known law of nature. The water which you saw whirlingdown a pipe must have received its peculiar motion from the form of the pipe, or some other such cause. You will find the rules for obtaining the velocity of water under a head on pages 216 and 224, volume 11, Scientific American

B. W. M., of N. Y,-Good oil paint is the best for en posed brick or wood work.

U. B. V., of Pa.-Your suggestions in regard to the ven tilation of ships or sailing vessels by means of suitable machinery operated by clock-work are not new. This plan was first suggested in 1830 by a Commodore in the Navy, for ventilating dwellings in southern countries.— Since that time it has often been proposed to us.

A. S., of N. Y .- Attempts have been made to produce such a machine as you describe, but as yet we believe no success has been attained. Send us a sketch of yours and

we will examine it. I. W., of N. Y.—Thegyroscope is an old invention, but was not generally known until it was illustrated in our last volume.

H. M., of Pa.-In architecture there is an arch called the "flat arch," on account of its curve being hidden to the eye, because it embraces such a small part of a cir-

R. G. S., of Md.-Acetate of lead dissolved in water then added to a solution of the bi-chromate of potash, precipitates the chromate of lead, which is employed as a yellow pigment in painting. You can easily manufac-ture it if you have chrome ore, as you state, on your farm.

J. M. B., of Ohio.-You will find rules for calculatin water power in our last volume, and by applying them to your case you will be able to calculate the power of your fallexactly

J. McC., of Conn.-You cannot employ a syphon useful y to raise water to drive a water wheel. The reason why a syphon raises water is owing to the unbalanced pressure of the atmosphere ; its outside leg must always be lower than the water level which supplies it. and the excess of its length over the short leg, is all the power you could obtain. As you would have to dig a pit for this purpose, and would have no tail-race, you will perceive that the project is impracticable.

Moneyrečeived at the SCIENTIFIC AMERICAN Office on account of Patent Office business for the week ending Saturday, Nov. 29, 1856 :--

S. P. S. of N. Y., \$30; P.H. of 111., \$55; A. & R. of N X., \$10; P. E. of Ala., \$15; R. D. of Vt., \$25; H. F, P.
 of Mich., \$30; R. C. W. of O., \$20; W. B. of Tenn., \$25;
 K. & W. of Ind., \$25; J. L. of Pa., \$25; G. W. F. of Ind., K. & W. of Ind., \$25; J. L. of Pa., \$25; G. W. F. of Ind.,
\$27; C. & W. of Md., \$100; J. S. of Mass., \$5; M. J. M.
of Md., \$15; T. G. of R. I., \$25; V. R. D. of Ill., \$30; J.
G. E. of Pa., \$30; J. R. of N. Y., \$20, R. G. P. of N. J.,
\$30; O. & W. N. of Conn., \$30; W. F. of N. Y., \$20; S. N. S. of N. Y., \$60; H. P. of N. Y., \$15; V. R. of N. Y.

of Mass., \$100 ; W. S. of L. L, \$25. Specifications and drawings belonging to parties with

thefollowinginitials have been forwarded to the Patent Office during the week ending Saturday, Nov. 29 :-E. G. A. of Mass. (2 cases) ; R. D. of Vt.; W. B. of Tenn.; K. & W. of Md.; J. S. B. of N. H.; W. S. of L

I.; G. W. F. of Ind.; T. G. of R. I.; J. S. of Mass.; J B. of Ill.; R. W. S. of Ala.; M. J. M. of Ind. Important Items.

COMPLETE SETS OF VOLUME XII EXHAUSTED. regret that we are no longer able to furnish complete sets of the present volume. All the back numbers except 1,6, and 9, we can yet furnish, if new subscribers desire to commence back to the beginning of the vol-ume; but unless they specially request to the contrary when making their remittance we shall commence their subscription from date of receipt of the order.

Subscribers to the SCIENTIFIC AMERICAN who fail to get their papers regularly will oblige the publishers by

stating their complaints in writing. Those who may have missed certain numbers can usually have them supplied by addressing a note to the office of publica INVENTORS SENDING MODELS to our address should al-

ways enclose the express receipt, showing that the transit expenses have been prepaid. By observing this rule we are able, in a great majority of cases, to prevent the collection of double charges. Express companies, either through carelessness or design, often neglect to mark their paid packages, and thus, without the receipt to confront them, they mulct their customer at each end of the route. Look out for them.

PATENT LAWS AND GUIDE TO INVENTORS.-This pam phlet contains not only the laws but all information touching the rules and regulations of the Patent Office Price 12 1-2 cents per copy. A Circular, giving in-structions to inventors in regard to the size and proper construction of their models with other useful informat tion to an applicant for a patent, is furnished gratis a this office upon application by mail.

RECEIPTS—When money is paid at the office for subscription, a receipt for it will always be given; but when sub scribers 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.

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HIVE INTELLIGIBLE DIRECTIONS- We often receive let ters 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 of fice at which they wish to receive their paper, and the State in which the post office is located.

TO THE PRESS .- Any newspaper or publication which is entitled to the SCIENTIFIC AMERICAN on the terms prescribed in the Circular which was sent from this office a few weeks ago, and does not receive it regular is requested to make complaint to this office, when the omission shall be promptly corrected.

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IMPORTANT TO INVENT-ORS.

ORES. THE UNDERSIGNED having had TEN years' practical experience in soliciting PATENTS in this sund foreign countries, beg to give notice that they con-tinue to offertheir services to all who may desire to se-cure Patents at home or abroad. Over three thousand Letters Patent have been issued, whose papers were prepared at this Office, and on an average Afteen, or one-third of all the Patents issued each veck, are on cases which are prepared at our Agency. An able corps of Engineers, Examiners, Draughtsmen, and Agecification writers are in constant employment, which renders us able to prepare applications on the shortest notice, while the experience of a long practice, and facilities which few others posses, we are able to give the most correct counsels to inventors in regard to the patentability of inventions placed before us for ex-amination. Private consultatiens respecting the patentability of in-

sive the most correct counsels to inventors in regard to the patentability of inventions placed before us for ex-amination. Private consultations respecting the patentability of in-ventions are held free of charge, with inventors, at our office, from 9.4. 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 improve-ment should be first forwarded, which we will examine and give an opinion as to patentability, without charge. Models and fees can be sent with safety from any part of the country by express. In this respect New York is nore accessible than any other city in our country. Circulars of information will be sent free of postage to any one wishing to learn the preliminary steps towards making an application. In addition to the advantages which the long experience and great success of our firm in obtaining patents present to inventors, they are informed that all inventions pat-ent dthrough our establishment, are noticed, at the pres-rives a very wide spread and substantial in fluence. Most of the patents obtained by Americans in foreign countries are secured through our sy while it is well known that a very large proportion of all the patents applied for in the U.S., go through our agency. MUNN & CO. American and Foreign Patent Attornies, Principal Office 123 Fulton street, New York.

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