

- R. H., of Pa.—Smoke-burning locomotives are common in England, where bituminous coal is employed, but such are not required where anthracite is used for fuel. The common principle of consuming their smoke is to admit warm air through a bridge-wall at the back of the fire-box. The warm air mingles with the smoke and supplies it with the requisite amount of oxygen. Another method consists in supplying the warm air through a perforated furnace doors, behind which is a box forming part of the door, where it is heated and passes in streamlets through holes to the fire. You will find it difficult, if not impossible, to operate satisfactorily a smoke-consuming locomotive in a coal mine, because it will con sume so much air and generate so much carbonic acid gas, as to render the mine unendurable to the miners.
- T. J. R., of Ohio.-Sound is produced by the vibrations of the atmosphere, and the sensation is conveyed to the mind through the nerves of the auditory organ. It is waste of time to dispute the question whether sound exists independent of the sense of hearing, or not, because sound would be unknown but for that sense.
- C. C., of D. C.-What is meant by stating that "aniline exists in coal oil" refers only to the crude product of coal distilled at a lower temperature than destructive distillation. The benzole is usually extracted from the naphtha. As you state, true benzole ot exist, so far as we have ascertained, 114 petroleum
- W. M. M., of Wis.—We have no copies of No. 1. Vol. V. series) of the Scientific American.
- C. C. P., of Ohio.-You have not clearly expressed what information you desire to obtain respecting jour copper tubes, or we should have cheerfully given it.
 Walter Brown, of La Crosse, Wis., wishes to purchase a
- machine for making round matches.
- C. E. L., of Mo.-We cannot decide upon your articles until we see them. The subject is rather hackneyed, but you may be able to present some new views of it.
- G. W. H., of N. Y.—Several patents have been granted for machines capable of sawing two sides of a tapering marble monument. By referring to the back files of the SCIENTIFIC AMER ICAN you will find the claims.
- C. S. M., of Mass. -- A machine for turning off grindstones and keeping them true, while in use, was patented on June 5, 1860, and illustrated in Vol. VI (new series), No. 32, on page 376 of the SCIENTIFIC AMERICAN, by George C. Howard, of Philadelphia. Address him for further information at No. 15, South Eighteenth street, Philadelphia. It is said to be an excellent machine.
- D. E., of N. Y .- We think but few of our readers would be interested in the subject of lenses, or the difference between one kind and another.
- C. C. S., of Mass.—You will find an illustrated description of Dr. Page's electro-magnetic engine on pages 65 and 68, Vol. VII. (old series) of the Scientific American. There is no manufactory of electro-magnetic engines in the country, but any maker of elec trical apparatus will make you one to order.
- J. H. M., of Mass. We have answered this question so many times that we must refer you to Vol. VII (new series), No. 12, page 187, of the Scientific American for a full account of the way n which engineers are appointed to the navy.

 A. J. C., of Ohio.—We think your case is in the hands of
- reliable men. That class of claims in which yours is ranked has not yet received attention from the Government, and it is impossible for the agents, mentioned in your letter, to say when they will be attended to. They state that they have several similar cases and are urging their consideration at the hands of the Government as much as they can. We sympathize with your misfortunes, but have patience and you will doubtless be rewarded.
- F. G. M., of Mich.-We advise you to procure a steam engine by all means. There are no caloric engines in the market of the size and power you want, or that would at all suit your pur-You will find an oscillating or a vertical cylinder engine pre rable to the cheap horizontal engines sometimes offered for sale.
- W. T., of N. Y .- We are not in possession of the displace ment of the steamers City of Baltimore or Merrimac, nor yet their relative borse-power. The paragraph in question was copied from a daily journal. The subject is important, as you say, but we do not think that the requisite information could be obtained, especi ally the details of the construction of the City of Baltimore, by in arting your letter. The Marriana's superiority doubtless lies in her model, and it is a notorious fact that, notwithstanding the "hue and cry' made in the daily papers about our slow steamers, we have vessels capable of outrunning the English ships, when they are in proper order. A steamer on blockade duty is hardly in a fi condition to run a race, yet all of the fastest English blockade runners, about which so much is said, have been caught and made prizes.

Money Received

At the Scientific American Office, on account of Patent Office business, from Wednesday, June 3, to Wednesday, June 10.

R. H. G., of N. Y., \$75; J. G. W., of N. Y., \$275; G. F. J. C., of N. J., \$20; W. D., of Ohio, \$20; G. N. D., of Ky., \$20; J. B., of Iowa, \$20; E. C., of N. Y., \$16; J. McC., of N. Y., \$10; W. M. D., of N. Y., 41; E. P., of Ill., \$20; M.C E., of N. Y., \$20; M. B. W., of Conn., \$45; At, E. F., of III., \$20; 31.0 E., of N. Y., \$20; M. B. W., of Conn., \$45; J. B. C., of Conn., \$16; J. D. W. W., of N. Y., \$44; T. F. B., of N. Y., \$16; L. and H. of Mass., \$30; B. and B., of N. Y., \$20; F. C. P., of N. J., \$20; L. and H., of Pa., \$20; J. I., of Ohio, \$20; H. and W., of Ohio, \$17: A. B., of N. Y., \$16; F. B., P., of Mass., \$10; A. W., of N. Y., \$20; H. M., of N. Y., \$20; H. M., of N. Y., \$20; H. and W., of Ohio, \$17: A. B., of N. Y., \$16; F. B., P., of Mass., \$10; A. W., of N. Y., \$20; H. M., of N. Y., \$20;

Y., \$25; H. J. D., of Ill., \$15; I. J. F., of Iowa, \$15; A. B. K., of C. W., \$22; A. W., of N. Y., \$25; J. and S., of Mich. \$25; A. B., of 5. W., \$22, A. W., of N. I., \$25; J. and S., of Mich., \$25; A. B., of Vi., \$25; C. W. T., of Mich., \$15; G. W. W., of Pa., \$16; S. P. La. D., of Iowa, \$15; J. T., of Wis., \$16; R. H. B., of N. Y., \$25; L. and B., of Ohio., \$30; R. P. P., of Wis., \$35; L. and S. B. H., of Mass., \$16; G. M., of Ill., \$15; J. H. A., of Mich., \$26; E. B., of Mass., \$25; T. J. B., of Ohio, \$16; J. H. C., of Va., \$20; W. McK., of Pa., \$16; R. B. R., of N. Y., \$46; D. H. and P., of Wis., \$15; G. C., of N. J., \$16; J. K., of Cal., \$16; C. M., of Mass., \$25; W. M. B., of Ind., \$85; W. H. M., of Conn., \$41 J. B. S., of Ill., \$15; H.4H. J., of Conn., \$25; S. W., of Mass., \$25; I. S. A., of Mass., \$25; W. B. R., of Mich., \$25; E. P., of Md., \$25; S. T. S., of Mass., \$16; C. H. P., of R. I., \$12; G and H., of Mass., \$16; A. C. F., of N. Y., \$16; C. M., of N. Y., \$20; J H. J., of N. Y., \$86.

Persons having remitted money to this office will please to examine the above list to see that their initials appear in it, and if they have not received an acknowledgment by mail, and their initials are not to be found in this list, they will please notify us immediately, and in form us the amount, and how it was sent, whether by mail or ex

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from Wednesday, June 3, to Wednesday, June 10, 1863:—

Office from wednesday, June 5, wednesday, June 10, 1005.—

J. F., of N. Y.; A. S., of Ill.; R. D. N., of N. H.; A. B., of Vt.; J. and S. of Mich.; R. H. B., of N. Y.; A. W., of N. Y.; L. and B., of Ohio; R. P. P., of Wis.; F. and K., of Cal. (2 cases); D. G. H., of Mass.; E. P., of Md.; S. W., of Mass.; W. B. R., of Mich.; J. H. A., of Mich.; J. S. A., of Mass.; H. H. J., of Conn.; C. M., of Mass.; T. R., of N. Y.; C. H. P., of R. I.

Magazines and other Publications received.

THE PRACTICAL DRAUGHTSMAN. Published by Henry Carey Baird, Philadelphia.

This work is one of practical utility to every person connected with the mechanicarts. Its tables of contents embraces treatises on and illustrations of gearing, slide valves, steam cylinders and their appur-tenances, and many other specialities, which will be found extremely valuable to all, whether proficient or unskilled in science. Also, in regard to perspective, application of shading to gears, screws and kindredmatters, these are fully and clearly explained in the letterpress accompanying the examples given. The work is very handsomely issued by Mr. H. C. Baird, the enterprising publisher, and is sold for \$7 50. It is a large single volume, quarto, and will be a valuable addition to any library. We frequently receive letters from our patrons desiring information as to where they can procure standard mechanical books. We would refer all such to Mr. Baird; he is making this branch of book-publishing a special feature, and should be sustained by the mechanical community at large. His advertisement will be found in another column.

TREATISE ON THE PARABOLIC CONSTRUCTION OF SHIPS AND OTHER MARINE ENGINEERING SUBJECTS. By J. W. Nystrom, C. E. Published by J. B. Lippincott & Co.,

Philadelphia.
We have received a treatise on the parabolic construction of ships by John W. Nystrom, C.E., and we owe the author an apology for delaying a notice of his work so long. The work is carefully written and is issued with the object of obtaining more positive rules for the principal lines of a ship or other vessel, as the load water-line, rails n plan, cross-sections, displacement, sheer, &c. These rules are intended to be arbitrary, and by their exercise the most inexperienced ship-builder can lay down as fine a vessel as the most skillful person in his trade — In addition to the examples given, which are fully illus. trated, Mr. Nystrom furnishes a compendious account of iron-clad ships and specifications for an armored corvette proposed for the Government. The work will be found useful to all those whose interests ad them to investigate the subject therein treated on.

ENCYCLOPEDIA OF CHEMISTRY. By Professor James Booth,
A. M., Melter and Refiner at the U. S. Mint. Pub-lished by Henry Carey Baird, Philadelphia.

Chemistry touches all arts-agriculture, metallurgy, medicine, dye ing, painting, bleaching, tanning, photography, telegraphy, &c., and as a humorous lecturer upon it once said: "a knowledge of it will benefit every man who boils a kettle and every woman that makes a pudding. We welcome all new books and publications which are reliable and intended to disseminate correct chemical information; and the above mentioned is a volume of this character. It is the seventh edition of a work published several years ago. Its editor, Professor Booth, of Philadelphia, is a thorough analytical and manufacturing chemist. It is a standard work-a book of ready reference, as useful to the chemist and manufacturer as a dictionary of language to the scholar. It contains definitions and descriptions of known substances and chemical processes. We have used it constantly and have always found it to be very convenient and reliable.

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