

Answers to Queries

W. H. J., of Pa.—The old system of fastening shoes to horses feet by nails is still universally practiced.

J. R., of Ohio.—The weight of one cubic foot of water is 62 1/2 pounds.

P. B., of Conn.—One square foot of wrought iron one inch thick weighs 49 1/2 pounds.

B. F. G. W., of N. Y.—Our charge for obtaining the information you desire in regard to Legare's patent will be \$5.

G. R. B., of Pa.—We do not know of any parties engaged in making artificial leather.

G. H. C., of N. J.—Nothing is more agreeable to us than to receive accounts from our institutions of learning of new discoveries in science.

P. W., of R. I.—Every steam piston should be packed. We have seen many varieties used but none that were at all equal to the three rings as ordinarily made.

T. W. R., of N. Y.—There must have been water in your mold, or the cores were damp.

M. McD., of Mass.—One 20-inch gun has already been cast, but is not yet finished.

C. R. M., of Conn.—Fusible safety plugs are not used in this country for steam boilers.

I. P., of N. Y.—If your invention has proved to be a valuable one to the country, the fact of your having realized a small fortune from it will not militate against its extension.

J. J. S., of Ky.—The machine to which you refer for making cigars was published in the SCIENTIFIC AMERICAN, Vol. I, No. 16, new series.

E. M. W., of—An artesian well is one in which the water flows up from an under seam above the surface.

J. G., of Mass.—You will find an illustrated series of articles on the manufacture of axes, in Vol. I, of our new series, beginning at page 267.

V. C., of N. J.—Stevenson's turbine yields a larger proportion of the total power of the water than any other water wheel that we know of.

S. W. N., of N. Y.—Nothing is better settled than that a body projected vertically upward from the earth, would fall with the same velocity that it rises were it not for the resistance of the atmosphere.

At the Scientific American Office, on account of Patent Office business, from Wednesday, July 6, 1864, to Wednesday, July 13, 1864:—

J. D., of N. Y., \$16; A. W. T., of Ill., \$20; J. F., of N. Y., \$22; J. H. C., of N. Y., \$16; P. & M., of Mass., \$15; L. D., of N. Y., \$16; J. R. B., of N. Y., \$20; O. C. P., of N. Y., \$20; A. J. L., of N. J., \$20; J. B. R., of N. Y., \$20; E. T., of Pa., \$20; G. G. P., of N. Y., \$16; M. R., of N. Y., \$16; L. G. K., of Mass., \$20; A. M., of Ill., \$25; E. C. C., of Mass., \$16; S. W., of Ill., \$25; McI. & G., of Pa., \$16; W. H. H., of Ill., \$25; A. W., of Ill., \$25; G. McK., of N. Y., \$25; T. G. M., of N. Y., \$40; G. & G., of Pa., \$16; W. S., of Ohio, \$25; N. T., of N. H., \$16; L. M. H., of N. Y., \$15; W. R. M., of Pa., \$32; A. S., of N. Y., \$16; L. S., of N. Y., \$20; O. C. F., of D. C., \$16; G. H., of N. Y., \$46; G. E. R., of N. Y., \$20; E. C., of Iowa, \$20; A. A. S., of Iowa, \$20; S. W. H. W., of N. Y., \$20; W. W., of Conn., \$20; H. U., of Conn., \$20; H. F., of N. Y., \$16; G. M., of N. Y., \$10; C. B. R., of Mass., \$32; E. S., of Minn., \$16; R. N. T., of Wis., \$20; H. N., of Pa., \$21; R. W. G., of Ill., \$60; E. D., of Pa., \$10; G. H., of Cal., \$25; T. S., of Pa., \$25; D. C. A., of Iowa, \$20; D. D., of Ill., \$16; A. M. G., of N. H., \$25; J. P. C., of N. Y., \$25; E. C. G., of Cal., \$100; J. R., of Mass., \$25; W. G. K., of Ind., \$16; O. C. McC., of Ohio, \$20; E. B., of C. W., \$20; J. P., of Mass., \$20; T. E., of N. Y., \$16; H. E. F., of Conn., \$20; C. B. G., of Iowa, \$20; I. H. L., of Pa., \$45; H. T., of Wis., \$20; J. P., of N. Y., \$20; P. S. P., of N. Y., \$20; C. H. S., of Pa., \$16; S. S. G., of Mass., \$28; J. A. L., of Wis., \$16; L. O. C., of Pa., \$36; R. P. B., of Mich., \$20; H. C. S., of Ill., \$16; T. W. H., of Wis., \$30; E. O. F., of La., \$16; C. R. H., of Wis., \$25; T. & P. S., of Pa., \$25; H. D., of Ohio, \$16; E. L., of Ind., \$16; T. S., of N. H., \$41; T. R. F., of Mich., \$22; P. J., of Ill., \$16; J. W. C., of N. Y., \$25; H. C., of N. Y., \$27; G. H. S. D., of N. Y., \$75; O. C. E., of N. Y., \$22; P. L., of N. Y., \$22; J. L., of N. Y., \$22.

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Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from Wednesday July 6, 1864, to Wednesday, July 13, 1864:— J. F., of N. Y.; H. C., of N. Y.; G. H. S. D., of N. Y. (3 cases); O. G. B., of N. Y.; P. L., of N. Y.; J. L., of N. Y.; J. B. E., of Mo. (2 cases); F. W., of England (3 cases); D. E. B., of Ind.; J. B., of Mich.; E. S., of Pa.; N. Y., of N. J.; F. G. L., of Mass.; R. W. G., of Ill.; T. S., of N. H.; D. & B., of N. T.; C. & M., of Ohio; H. N., of Pa.; T. S., of Pa.; S. N. T., of Wis.; T. G. M., of N. Y.; R. W. G., of Ill.; J. R., of Mass.; W. S., of Ohio; T. R. F., of Mich.; G. C., of Ill.; J. P. C., of N. Y.; J. W. C., of N. Y.; A. M. G., of N. H.; L. O. C., of Pa.; B. & G., of Ill.; A. M., of Ind.; S. S. G., of Mass.; T. & P. S., of Pa.; A. W., of Ill.; J. & J. N. T., of Ind.; G. H., of Cal.; W. H. H., of Ill.; S. W., of Ill.

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