the Wabash river many times the size of the largest specimen, but it is not saleable.

B. M. asks: Which is the best way to bottle lager beer to avoid a second fermentation?—R. H. M. asks: If a heavy sphere, whose diameter is 4 inches, be dropped into a conical glass full of water, whose diameter is 5 inches and altitude 6 inches, how much water will run over?

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges, with much pleasure, the receipt of original papers and contributions upon the following subjects:

On the Tides. By W. H. P., and by Z.
On Poetry and the Locomotive. By J. H. B.
On the Vital Principle of Organic Matter. By W. H. B.
On Lighting Tapers. By F. W. D.
On a Parasite of the House Fly. By D. V. D.
On Boiler Explosions. By S. N. B.

Also enquiries and answers from the following.

M.—F. C. R.—H. C.—O. C.—H. S. R.—W. S. D.—P. B.—H. H.—C. C. M.—M. W. H.—J. M. E.—H. J. D.—J. P.—J. C. R.—A. P. E.—E. W. P.—S.—A. W. P.—C. H. A.—J. M.—F. H. W.—S. T.—R. G.—J. R. D.—A.—L. F. M.—J. F. J.—J. B.—R. A. K.

HINTS TO CORRESPONDENTS.

Correspondents whose inquiries fail to appear should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them. The address of the writer should always be given.

Enquiries relating to patents, or to the patentability of inventions, assignments, etc., will not be published here. All such questions, when initials only are given, are thrown into the waste basket, as it would fill half of our paper to print them all; but we generally take pleasure in answering briefly by mail, if the writer's address is given.

Hundreds of enquiries analogous to the following are sent: "Who makes the best steam trap? Who sells the best three horse engine? Who makes the latest improved steam cut-off? Who sells the best sewing machine motor? Whose is the best tool steel?" All such personal inquiries are printed, as will be observed, in the column of "Business and Personal," which is specially set apart for that purpose, subject to the charge mentioned at the head of that column. Almost any desired information can in this way be expeditiously obtained.

[OFFICIAL.]

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8,274, 8,275.—BREASTPIN.—L. S. Beals, Astoria, N. Y.
8,276.—POTTERY.—J. Coxon, Trenton, N. J.
8,277.—COFFIN SCREWS.—N. Hayden, Essex, Conn.
8,278.—BADGE.—H. C. Lees, Philadelphia, Pa.
8,279.—HITCHING POSTS.—L. Schaefer, Cleveland, Ohio.
8,280.—PICTURE MOUNTS.—R. Trautmann, New York city.
8,281.—VASE.—W. Tweeddale, Brooklyn, N. Y.
8,282.—PITCHER.—H. Vasseur, Wallingford, Conn.
8,283.—SPOONS, ETC.—C. Witteck, New York city.

TRADE MARKS REGISTERED.

2,383.—METAL CANS, ETC.—T. Burger, Plainfield, N. J.
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2,402.—SPIRITS.—Freiberg *et al.*, Cincinnati, Ohio.
2,403.—STARCH.—Glen Cove Starch Co., New York city.
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2,405.—RASPS AND FILES.—Heller *et al.*, Newark, N. J.
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4,637.—J. L. Adams, Montreal, P. Q. Tobacco cutter April 16, 1875.
4,638.—J. D. Stark, Brooklyn, N. Y., U. S. Elastic wheel lubricator. April 16, 1875.
4,639.—A. H. Swain, Winchester, Ind., U. S. Adjustable table and ironing board. April 16, 1875.
4,640.—R. F. Cooke, New York city, U. S. Elastic horse shoe. April 16, 1875.
4,641.—J. E. Wisner, Friendship, N. Y., U. S. Horse hay rake. April 16, 1875.
4,642.—M. D. Murray *et al.*, Johnstown, N. Y., U. S. Breast collars for harness. April 16, 1875.
4,643.—A. L. Carey *et al.*, Ypsilanti, Mich., U. S. Chain pump bucket. April 17, 1875.
4,644.—Wm. H. Gibbs, Oshawa, Ont. Middlings purifier. April 17, 1875.
4,645.—R. W. Jeffery, Woodbridge, Ont. Bolt lock for pitman box. April 17, 1875.
4,646.—J. Currie, Toronto, Ont. Boiler foam preventer and fuel saver. April 17, 1875.
4,647.—J. F. Webster, Hamilton, Ont. Screw machine. April 17, 1875.
4,648.—L. W. Russell, Gananogue, Ont. Fence corner April 17, 1875.
4,649.—B. Sloper, Montreal, P. Q. Hydrogen generator and carbureter combined. April 17, 1875.
4,650.—S. R. Bailey, Boston, Mass., U. S. Wood-bending machine. April 17, 1875.
4,651.—W. G. Rawbone, Toronto, Ont. Cartridge creaser April 17, 1875.
4,652.—S. H. Hall, Belle Plaine, Iowa, U. S. Tan vat April 20, 1875.
4,653.—J. B. Porter, Yarmouth, N. S. Ironing machine. April 20, 1875.
4,654.—E. Tiffany, Bennington, Vt., U. S. Circular knitting machine. April 20, 1875.
4,655.—A. G. Gray, St. John, N. B. Mowing machine. April 20, 1875.
4,656.—S. Rydbeck, Red Wing, Minn., U. S. Mortising machine. April 20, 1875.
4,657.—I. Levy, Ellaville, Fla., U. S. Fence picket machine. April 20, 1875.
4,658.—Wm. Peaker *et al.*, Brampton, Ont. Hot air dumb stove. April 20, 1875.
4,659.—J. S. Kemp, Magog, P. Q. Manure-spreading machine. April 21, 1875.
4,660.—B. Curtis, Jr., Boston, Mass., U. S. Buckle attachment. April 21, 1875.
4,661.—Wm. Shea, Trenton, Ont. Milk and liquid cooler April 21, 1875.
4,662.—Wm. J. Mansell, Toronto, Ont. Self-acting car coupling. April 21, 1875.
4,663.—W. H. Landon, Princeton, Ont. Parlor cooking stove. April 21, 1875.
4,664.—W. J. Wauchope, Niddrie, Scotland *et al.* Gas manufacture. April 21, 1875.

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