

The Wash 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Enquiries relating to patents, or to the patentability of inventions, assignments, etc., will not be published here.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 weaving 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.]

INDEX OF INVENTIONS

FOR WHICH Letters Patent of the United States were Granted in the Week ending April 20, 1875, AND EACH BEARING THAT DATE. [Those marked (r) are reissued patents.]

Alarm, burglar, L. M. Johnson... 162,235
Alarm, burglar, Kennoch & Gilliland... 162,239
Ash pan for stoves, A. T. Bleyley... 162,267
Asphaltum to a liquid, reducing, A. K. Lee... 162,394

Clock, R. H. Strong... 162,430
Cloth winding and measuring, J. Wayland... 162,438
Coal scuttle, Feldmeier & Stoepelwerth... 162,367
Cock, corn, P. Bail... 162,375

2,384.—MEDICINE.—E. R. Burnham, Chicago, Ill.
2,385.—SOAP.—W. Conway, Philadelphia, Pa.
2,386.—MEDICINE.—W. M. Clarke & Co., Boston, Mass.
2,387.—SHIRTS.—E. Jennings & Co., Chicago, Ill.

SCHEDULE OF PATENT FEES.
On each Caveat... \$10
On each Trade mark... \$25
On filing each application for a Patent (7 years)... \$15

CANADIAN PATENTS. LIST OF PATENTS GRANTED IN CANADA, APRIL 16 TO 21, 1875.

4,636.—Wm. T. Root et al., Ingersoll, Ont. Radiator and steam heating apparatus. April 16, 1875.
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.

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DESIGNS PATENTED.

8,272.—STOVES.—B. M. Anthony, Detroit, Mich.
8,273.—OILCLOTHS.—J. Barrett, New York city.
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.

TRADE MARKS REGISTERED.

2,393.—METAL CANS, ETC.—T. Burger, Plainfield, N. J.