

of iron. No. 8 is oxide of manganese, containing carbonate of lime.—J. E. G.—It is actinolite, a silicate of magnesia and lime with a small percentage of the oxides of iron and manganese. It is not valuable as an ore.—J. C. B.—It is a compact slate, containing a considerable amount of iron pyrites; this has been converted by exposure to the weather to a white incrustation of sulphate of iron, which is soluble and gives the disagreeable taste. No. 2 is a fine sand rock containing some alumina.—B. S.—The specimen of granite sent has a fine color, is tough, and would come into use for the purposes to which red granite are applied.—H. L. A. C.—The red mineral is red ochre, or sesquioxide of iron; the crystals in the cavities are quartz, which have occupied the place of crystals of another species; the other mineral, glassy but softer than quartz, is sulphate of barytes or heavy spar.—J. C. B. T.—It is sulphide of lead, or galena.

E. J. B. asks: What will cure blindness in chickens? The disease, which is contagious, consists in a sort of yellow scum growing over the sight of the eye, and comes, I have been told, from overfeeding with corn.—D. G. asks: How can I prepare small blocks of wood so that they will not expand when exposed to the action of steam, nor contract when exposed to the atmosphere of 100° Fah.—H. B. asks: Does the hair grow after death? If so, why?—W. says: A cast iron ball 18 inches outside diameter, cored out to 12 inches, leaving a shell 3 inches thick, with one hole 1 1/4 inches in diameter through the shell, lay in such a position that it filled with water. The water froze, and with a loud report the ball was torn in three pieces. How many tons pressure did it take to tear asunder the ball, and why did it give a report in bursting?—W. J. B. asks: What is the best method of grinding leger blades for shearing woolen cloth?

COMMUNICATIONS RECEIVED.

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

- On Propelling Yachts. By H. W. H.
On the Birth Rate. By F. Y. A.
On the Fish Jointed Rail. By F. A. B.
On an Ore-Roasting Furnace. By E. H.
On Talking Ants. By J. S.
On Rifle Projectiles. By J. M.
On Spiritualism. By F. H. R.
On an Invisible Gas Lighter. By E.
On Telegraph Alphabets. By J. W. C.
On the Sagacity of the Partridge. By J. K.
On Mathematical Problems. By A. E. O.
On Perpetual Motion. By J. W.
On Small Steam Engines. By E. W.
On Engine Valves. By L. F.
On Pneumatic Transmission. By S. P. D.
On Balloons. By W. A. W.
On the Drive Wheel of a Locomotive. By J. A. K.
So enquiries and answers from the following:
F. A. R.—H. G. C.—J. W. C.—J. N. N.—A. M. C.—J. C.—J. E. B.—W. J. D.—G. A. B.—J. V. M.—R. D. C.—M. F. R.—P. P. J.—T. F. & Co.—F. A. G.—R. W. G.—C. T. E.

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 sells dollar steam engines? Who makes pens for ruling machines? Who sells sextants and quadrants? Who makes endless chain? Who makes a machine for cutting dough into pieces of similar weight? Who sells hemispherical anemometers? Who makes blowers suitable for furnaces for melting iron? Who sells nitroglycerin? Who sells stereotyping appliances? Who sells materials for decalcomanie, vitrimanie, and diaphanie?" 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

February 23, 1875,

AND EACH BEARING THAT DATE.

[Those marked (r) are reissued patents.]

Table listing inventions with names and dates, including Animal hopple, Battery, Book holder, Boot, Box machine, etc.

Table listing inventions with names and dates, including Breweries, Brush attachment, Brush for grain cleaners, Brush, shoe, Bustle, Butter worker, Buttons, etc.

Table listing inventions with names and dates, including Plane, Planter row check, Plow, Dugdale and Breed, Plow, A. Hampe, Plow carriage, etc.

Table listing inventions with names and dates, including CIGARS, WASHINGTON BLUE, BAKE POWDER, HOSIERY, etc.

SCHEDULE OF PATENT FEES.

Table listing patent fees: On each caveat, On each Trade mark, On filing each application for a Patent (17 years), etc.

CANADIAN PATENTS.

LIST OF PATENTS GRANTED IN CANADA, FEBRUARY 26 to 27, 1875

Table listing Canadian patents: 4,430.—E. H. Aydon, Wandswoth, England, et al. Improvements in smelting, etc.

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