

on a railroad. If the barrel is placed on the track too far to the right, that part of the barrel where it touches the right rail is larger than the part where it touches the left rail, which causes the right hand end to roll faster than the left hand: and if it should roll too far over to the left, the same thing will take place on that side. And so it is constantly adjusting itself on the track, with no cause for either end to slip, even in turning a curve. Just so with the car wheels (which are conically shaped from the flange outward), provided a proper amount of lateral play is allowed by laying the track a little wider than the flanges on the wheels would indicate.

T. P. H. asks: How do dentists harden and polish their vulcanized rubber plates?—A. R. asks: What will give a white porcelain finish, with glassy surface, to wood? It must be impervious to dampness.—S. Bros. ask: Is there a successful way of treating the material for pianoforte soundboards in order to increase the volume and duration of sound?

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 Earth's Motion. By J. A. B.
On Light, Space, and Matter. By A. S.
On Spiritualism. By J. W. M.
On a Measure of Value. By B. M.
On the Bible and Progressive Thought. By P. F. P.
On Cotton and Wool. By A. R. L.
Also inquires and answers from the following:
G. H.—D. L.—W. B.—T. J. L.—R. & B.—J. T. C.—E. C.—L. O.—A. J. W.—C. S.—W. S.—J. D. H.

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.

Inquiries relating to patents, or to the patentability of inventions, assignments, etc., will not be published here.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 inquiries analogous to the following are sent: "Who buys ores of antimony? Who makes spiral springs? Who makes electric engines? Who makes flexible shafting?" 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

Letters Patent of the United States were Granted in the Week Ending

October 24, 1876,

AND EACH BEARING THAT DATE.

[Those marked (r) are reissued patents.]

A complete copy of any patent in the annexed list, including both the specifications and drawings, will be furnished from this office for one dollar. In ordering please state the number and date of the patent desired, and remit to Munn & Co., 37 Park Row, New York city.

Table listing inventions with patent numbers and names, including items like Air compressor, Anti-friction bearing, Ash sifter, etc.

Table listing inventions with patent numbers and names, including items like Clasp for holding garments, Clock case, Clothes dryer, etc.

Table listing inventions with patent numbers and names, including items like Rock-drilling machine, Rolling blanks for oil well sockets, Rolling toy, etc.

Table listing inventions with patent numbers and names, including items like Coupling for canal boats, Cracker and lozenge machine, Cultivator, etc.

DISCLAIMERS.

8,609.—FLOW.—G. Watt, Richmond, Va.
157,425.—VEHICLE SPRING.—R. M. Stivers, N. Y. city.

DESIGNS PATENTED.

9,598.—COOKING RANGES.—A. P. Corse, Troy, N. Y.
9,594.—STOVE.—J. B. Crawford, Rochester, N. Y.
9,595 to 9,597.—EMBROIDERY.—E. Crisand, New Haven, Ct.
9,598.—HATS.—A. D. Foster, Chicago, Ill.
9,599.—BOA.—M. Freytag, Chicago, Ill.
9,600.—SHOW CARD.—J. Fuld, New York city.
9,601, 9,602.—STOVE.—J. Magee et al., Chelsea, Mass.
9,603.—FORK HANDLE.—G. Wilkinson, Providence, R. I.

FOR THE WEEK ENDING OCTOBER 31, 1876.

Table listing inventions with patent numbers and names, including items like Abdominal supporter, Agricultural boiler, Balanced slide valve, etc.