

quickly and cover with warm pipe clay for a time. The working parts should be polished perfectly before attempting to replace them in the watch.

(29) W. C. W. asks: What process or preparation will prevent strips of lead from blackening the hands? A. Coat them with a thin covering of varnish or melted paraffin.

(30) B. & B. say: We wish to build a large brick factory, 50 x 100 feet, four stories high, and wish the three upper stories to be damp or sweat proof. What is the best mode of building it? A. Build hollow walls laid up in a good cement mortar.

(31) J. McT. asks: 1. Will concrete do for a cellar wall and foundation for a frame building? A. Yes. 2. Will common lime do to mix it with, or will it require cement, or some of each? A. Pure cement is best.

COMMUNICATIONS RECEIVED.

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

- On Newspaper Subscriptions. By J. H. P.
On Marine Propulsion. By R. F.
On a Discovery in an Ancient Temple. By J. E. W.
On a Body in a Hollow Sphere. By J. W.
On the Material Theory of Light. By G. L. B.
Also inquiries and answers from the following:
J. C. W.—J. G. A.—W. D.—U. R. D.—J. S.—W. M.—G. C.—C. S.—S. P. F.—C. Z.

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Enquiries relating to patents, or to the patentability of inventions, assignments, etc., will not be published here.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 inquiries analogous to the following are sent: "Who makes marbled slate? Whose is the best steam-heating apparatus? Whose sells the most accurate barometers? Why do not makers of agricultural implements advertise in the SCIENTIFIC AMERICAN?" 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

July 25, 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 various inventions such as Air brake and signal, Anchor, Arch, hollow tile, Bag holder, etc., with corresponding page numbers.

Main table listing inventions and their patent numbers, including items like Car coupling, Car for railways, Car seals, etc., and continuing down to Lock, latch, D. K. Miller.

SCHEDULE OF PATENT FEES. Table listing fees for various patent services such as On each Caveat, On each Trade mark, etc.

THE VALIDITY OF PATENTS.

The inexperienced purchaser of a patent does not generally appreciate the importance of having its claims examined, and their validity and scope defined by some person experienced in such matters, before parting with his money. It is not unusual for the assignee, just as he is commencing the manufacture of articles under his recently purchased patent, to find that it is an infringement upon some previously issued patent, and that he has not only made a worthless investment, but that he is likely to get mulcted in damages if he proceeds with his manufacture.

We therefore recommend any person who is about to purchase a patent, or about to commence the manufacture of any article under a license, to have the patent carefully examined by a competent party, and to have a research made in the Patent Office to see what the condition of the art was when the patent was issued. He should also see that the claims are so worded as to cover all the inventor was entitled to when his patent was issued; and it is still more essential that he be informed whether it is an infringement, as above suggested, or not.

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