

60 pounds pressure; 1 1/2 inch opening, 65 pounds pressure. The above I believe are two extremes as to flow, and both wells are for power purposes.

(4478) W. J. A. writes: I want to construct a resistance box for the 8 light dynamo and would like to get some instructions. I want it placed on top of the field magnets and be as small as possible.

(4479) E. R. asks: 1. Would the working of a Samson battery be affected if the zinc be a solid cylinder instead of having a slit down one side?

(4480) A. W. S. says: Will you please inform me through your Notes and Queries column as to whether the dates of the summer and winter solstices are fixed or movable?

(4481) J. B. writes: Please explain the action of a current of electricity passing along a wire a considerable distance (say 100 feet or so) then turning short about and returning to place of beginning, the outgoing portion of the loop and the returning portion being insulated and lying close together the entire route, and the two single ends attached in circuit, so as to cause the current to pass around the loop.

(4482) J. C. H. asks: 1. How many storage cells can the eight-light dynamo charge at one time? A. 30. 2. How often should the solution of a storage cell be renewed? A. It does not require renewal.

might imply, but it contains illustrations of engineering works of magnitude now under construction in the West and well written articles on scientific and general mechanical subjects.

TO INVENTORS.

An experience of forty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

July 26, 1892.

AND EACH HEARING THAT DATE.

[See note at end of list about copies of these patents.]

- Adding machine, R. S. Robertson. 479,531
Advertising clock, F. Welleba, Sr., et al. 479,537
Air brake, J. F. Carpenter. 479,736
Alarm. See High and low water alarm.
Album, photographic, G. Schwab. 479,537

- Faucet, registering and measuring, H. F. Read. 479,721
Feed bag attachment, F. E. Kerr. 479,546
Fence, wire distributor for wire, H. C. Pratt. 479,571
Fence, D. Milliken. 479,443
Fence for hay stacks, collapsible, S. O. Thompson. 479,680

- Rock channeling tool, G. M. Githens. 479,499
Rock drill, F. P. Belt. 479,435
Rock, dynamo, P. Cunningham. 479,733
Rotary engine, E. Waldren. 479,479
Safe, A. A. Root. 479,464

DESIGNS.

- Bottle, F. H. Thuegler. 21,736
Decorative fabric, M. Schwab, Jr. 21,734

TRADE MARKS.

- Beer, Frank Fehr Brewing Company. 21,526
Beer, C. A. Lammer. 21,527
Bindings, dress, Heeman & McCarthy Company. 21,521

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 25 cents.

NEW BOOKS AND PUBLICATIONS.

Milling is the title of a new illustrated monthly magazine of about the size of Scribner's and Harper's monthlies, published by the D. H. Rank Publishing Company, Indianapolis, Ind.