

When one sash is in front of the other, the hinged frames of each sash can be freely manipulated.

THROAT-FRAME FOR MAIL-BAGS.—CHARLES BATEMAN, Gales Creek, Ore. The inventor has devised an ingenious throat-frame for mail-bags, which holds the mouth of the bag open at full extent in rectangular form for the free reception of the mail-matter, and also forms a secure closure for the bag-mouth.

COVER CLAMP AND HANDLE FOR FRUIT-BASKETS.—MAJOR TUCKER, Brockton, N. Y. The device performs the dual function of serving, as a handle for a fruit-basket and as a means for securing the cover of the basket in place.

SCRAPER.—WILLIAM H. ONION, New Orleans, La. The purpose of the invention is to provide a scraper which may be easily dumped and handled, to which end novel mechanism is employed for holding a bucket in active position and for raising it, so as to carry its load to the dump, and then for readily and quickly inverting the bucket to discharge its contents.

STRAPPING-TOOL.—WILLIAM MAX, Brooklyn, New York city. To provide a tool for conveniently draining and stretching metal straps across the side of a box before nailing is the object of the invention.

ADJUSTABLE BOOK-REST OR TABLE.—MAJOR MILLER, Lowell, Wis. Upon a stand a jointed arm is mounted for horizontal movement; and upon the arm a table is carried for adjustment independently of the adjustment of the sections of the arm or of the arm in its entirety.

HOSE-COUPLING.—JENS C. MARTIN, Spokane, Wash. The coupling is composed of two parts adapted to engage and automatically lock together.

Designs.

TRIMMING.—PAUL GUMBINER, Manhattan, New York city. The trimming includes a series of scallops at opposite sides of a longitudinal line, the scallops of one series being opposite the space intervening the scallops of the opposing series.

NOTE.—Copies of any of these patents can be furnished by Munn & Co. for ten cents each.

NEW BOOKS, ETC.

DER MEISTER VON PALMYRA. Dramatische Dichtung in fünf Aufzügen. Von Adolf Wilbrandt. Edited with introduction and notes by Théodore Henckels. American Book Company. 1900. 12mo.

It can safely be said that every teacher of the German language has been wishing for a long time that this masterpiece of Adolf Wilbrandt might be prepared and edited for class use in American schools and colleges.

LES PLAQUES DE BLINDAGES. Par M. L. Baclé. Paris: Vve Ch. Dunod. 1900. Quarto. Pp. 233. 197 illustrations.

This monograph on armor plates is devoted to a history of steel armor, manufacture of the plates, and tests which have been made both in Europe and America.

UEBER DEN HYDRAULISCHEN STOSS IN WASSERLEITUNGSRÖHREN. Von N. Joukowsky. St. Petersburg. 1900. Price \$1.

The action of the so-called "hammering" in water mains is so little known that Prof. Joukowsky, of the Moscow Imperial University, determined to conduct a series of experiments which would add something to our knowledge and supplement the work of Prof. Carpenter.

Business and Personal.

Marine Iron Works. Chicago. Catalogue free. "U. S." Metal Polish. Indianapolis. Samples free. Yankee Notions. Waterbury Button Co., Waterbury, Ct.

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HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for your information and not for publication. References to former articles or answers should give date of paper and page or number of question.

(7919) G. W. asks: 1. What length of spark must my induction coil produce to make an X ray apparatus for examining objects such as a leg or arm? A. A coil giving an 8-inch spark will answer for the thinner parts of the body, but for every kind of service one giving a 14-inch spark should be had.

(7920) O. M. S. asks: 1. How may opaque objects be seen under the microscope? A. By the use of the bull's-eye condenser. A lens which will focus the light of a lamp upon the upper surface of the object.

(7921) L. F. S. Vancouver, Wash., writes: I wish to know what horse power would be developed by a stream of water, which, if dammed would give a head of 130 feet or more.

of water 1,200 feet with a loss of less than 2 feet head will be 2 1/2 inches in diameter, and will cost about \$1 per foot. A Pelton wheel and connections will cost about \$400.

(7922) Y. N. W. writes: As it is your aim to disseminate useful information we make the following statement which will interest all photographers: We recently purchased one of the new aluminum trays and lately undertook to intensify a negative in it, using a three solution intensifier.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued JULY 10, 1900, AND EACH BEARING THAT DATE.

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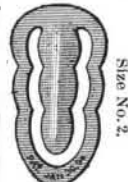
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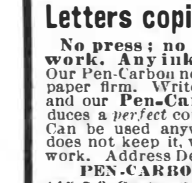
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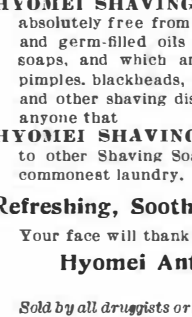


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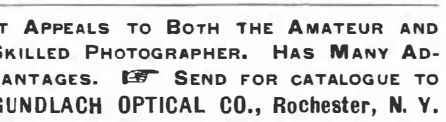
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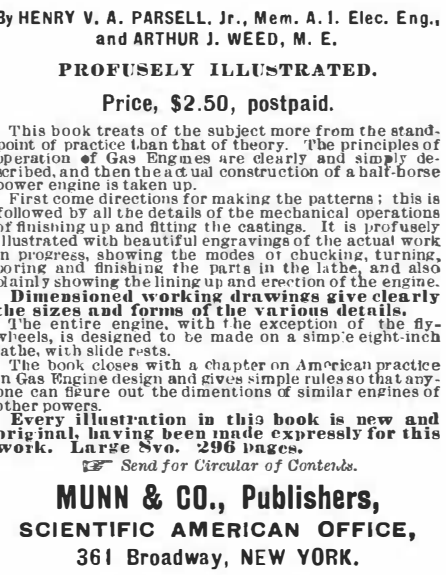
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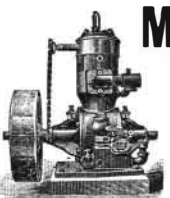
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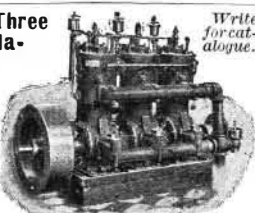


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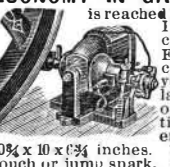
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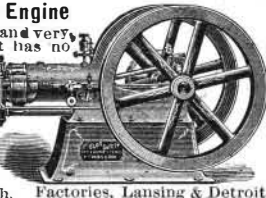
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