

ICE PLANE.—Samuel Lewis, Williamsburgh, N. Y.—This invention has for its object to improve the construction of the improved ice plane, patented by the same inventor, March 3d, 1863, and numbered 75,028, so as make it more convenient in use, more easily adjusted, and more effective in operation.

CORN PLANTER.—Robert Forman, Normal, Ill.—This invention has for its object to furnish an improved automatic corn planter, simple in construction, accurate and effective in operation, and easily operated.

CHURNING MACHINE.—W. A. Rhodes, Lincolnville, Pa.—This invention has for its object to furnish an improved machine, by means of which the churning may be done easily, quickly, and conveniently.

TOY VELOCIPEDE.—H. C. Alexander, New York city.—This invention has for its object to furnish a toy velocipede, provided with a toy rider, and so constructed as to operate automatically upon a circular track.

Answers to Correspondents.

CORRESPONDENTS who expect to receive answers to their letters must, in all cases, sign their names. We have a right to know those who seek information from us; beside, as sometimes happens, we may prefer to address correspondents by mail.

SPECIAL NOTE.—This column is designed for the general interest and instruction of our readers, not for gratuitous replies to questions of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisements at \$1.00 a line, under the head of "Business and Personal."

All reference to back numbers should be by volume and page.

J. C. C., of Miss.—The smell in the collected rainwater standing exposed to the air in an open wooden vessel does not probably arise from the wooden vessel in which it stands, but from the accumulation of organic matter in it. You can purify it by leaching it through charcoal dust, which, placed in a cask, will make a good filter. When the charcoal loses its decolorizing power it can be renewed by heating it in a closed vessel.

E. A. D., of Va.—The resisting power of a non-conductor is not diminished by its relative position in regard to other conductors. So if a non-conducting substance be placed between heated gases and the walls confining them, it will not cease its action though another better conductor should afterward be placed between it and the hot gases.

J. C. K., of Iowa.—While we have no doubt that a locomotive with six-feet driving wheels, having a train attached, may have, at times, attained a speed of a mile per minute on down grades, we do not believe it ever drew a train at that rate. The highest speed at present attained upon any railway, is from London to Liverpool, where trains run at the rate of 50 miles per hour.

C. A. P., of Ill.—To make tragacanth mucilage take of tragacanth, a troy ounce, and boiling water a pint. Macerate with occasional stirring 24 hours. Then rub the mucilage together thoroughly to produce uniformity, and strain forcibly through linen. Add creasote until the odor is faintly perceptible in order to prevent mold and decomposition. If you wish to make a thick mucilage for sealing envelopes, etc., it will be sufficient to put some lumps of the gum in a small bottle and put in cold water. Let it stand until it softens. If too thick add water, if too thin add gum.

L. L. VanD., of Neb.—The pressure of a liquid on any portion of a lateral wall is equal to the weight of a column of liquid which has for its base this portion of the wall, and for its height the vertical distance from its superficial center to the surface of the liquid. A column of water 144 feet high weighs 2 1/2 lbs. for each square inch of base, if of uniform size throughout.

A. A. C., of Mich.—The moisture which accumulates upon the outside of a pitcher containing cold water is condensed moisture from the air. The temperature at which water thus deposits upon cold surfaces is called the dew-point, and is higher or lower according to the amount of moisture held in suspension in the atmosphere.

Business and Personal.

The Charge for Insertion under this head is One Dollar a Line. If the Notices exceed Four Lines, One Dollar and a Half per line will be charged.

Scientific Books to order. Macdonald & Co., 37 Park Row, N.Y.

An end to the explosion of lamps.—No accidents, no loss of life can occur where the Aparent is used. It can be applied to any kind of lamp or can. Address Van Wilhem & Co., Box 506. "A perfect protection.—Scientific American.

To Iron Manufacturers and Machinists.—A practical mechanic, draftsman, and engineer desires a position as general engineer at a blast furnace, or would invest a small capital and enter as a working partner in some mechanical business. Address R. F. Thomas, 513 Brown st., Phila., Pa.

Rights for sale of Cannon's improved dumb water, patented May 25th, 1869. Address A. Cannon, Jr., Patentee, Poughkeepsie, N. Y.

If you have a Patent to sell, or desire any article manufactured or introduced, address National Patent Exchange, Buffalo, N. Y.

Maleable iron manufacturers address A. J. Smith, Canal Dover, O.

Chain manufacturers send price list to J. T. Rafferty, El Dara, Ill.

All of Baird's Scientific Books for sale by S. R. Wells, 389 Broadway. Catalogues furnished free.

State Rights for sale for the best and cheapest Centrifugal Pump in existence. First Premiums awarded wherever exhibited. Address P., for circulars, Postoffice Box 148, Jersey City, N. J.

Peck's patent drop press. Milo Peck & Co., New Haven, Ct.

The Best and Cheapest Boiler-flue Cleaner is Morse's. Send to A. H. & M. Morse, Franklin, Mass., for circular. Agents wanted.

Continental Screw Company's Stock wanted. Address J. C. Clark, 66 Leonard st., New York.

For sale—A valuable Patent Right for an effective army and cotton worm destroyer. 20 bales of cotton saved in one day. Address Charles Steinmann, Napoleonville, La.

Wanted—Large or small capital, to sell Walker's Ventilator protector from sun-stroke. Send 50c. for sample, pamphlet, and terms. J. B. Walker, Lexington, Va.

Mill-stone dressing diamond machine, simple, effective, durable Also, Glazier's diamonds. John Dickinson, 64 Nassau st., New York.

An engineer, about leaving for Europe (where he has first-class business friends), to negotiate a very valuable patent, is desirous of receiving one or two similar commissions. 1st-class firms only treated with References A 1. For particulars address H. Moore, P. O. Box 6, New York.

Leschot's Patent Diamond-pointed Steam Drills save, on the average, fifty per cent of the cost of rock drilling. Manufactured only by Severance & Holt, 16 Wall st., New York.

For Sale—A Patent valuable to manufacturers of farm machinery. Will sell low, or trade for lands. Send address to H. S., Box 651, Cincinnati Postoffice, Ohio.

Tempered steel spiral springs made to order. John Chatillon, 91 and 93 Cliff st., New York.

The Tanite Emery Wheel—see advertisement on inside page.

For solid wrought-iron beams, etc., see advertisement. Address Union Iron Mills, Pittsburgh, Pa., for lithograph, etc.

Machinists, boiler makers, tanners, and workers of sheet metals read advertisement of Parker's Power Presses.

Diamond carbon, formed into wedge or other shapes for pointing and edging tools or cutters for drilling and working stone, etc. Send stamp for circular. John Dickinson, 64 Nassau st., New York.

The paper that meets the eye of manufacturers throughout the United States—The Boston Bulletin. \$4.00 a year. Advt'g 17c. a line.

Winans' boiler powder, 11 Wall st., N. Y., removes incrustations without injury or foaming 12 years in use. Beware of imitations.

Official List of Patents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING JULY 6, 1869.

Reported Officially for the Scientific American.

Table with 2 columns: Patent Number and Description. Includes SCHEDULE OF PATENT OFFICE FEES, Patent 92,138 (Sewing Machine), 92,139 (Harrow and Marker Combined), etc.

Table with 2 columns: Patent Number and Description. Includes Patent 92,196 (Knife-handle Bolster), 92,197 (Navigators' Bearing Indicator), 92,198 (Transplanting and Weeding Machine), etc.

92,280.—DOOR LATCH.—Jos. O. Curryer and Wm. C. Young, Thornstown, Ind.

92,376.—BEVERAGE.—Samuel B. Shaw, West Randolph, Mass.

1,828.—WOOD PLANER.—John Richards, Philadelphia, Pa. June 15, 1869.

How to Get Patents Extended. Patents granted in 1835 can be extended, for seven years, under the general law, but it is requisite that the petition for extension should be filed with the Commissioner of Patents, at least ninety days before the date on which the patent expires.

PATENT OFFICES, American and European, OF MUNN & CO., No. 37 Park Row, New York.

For a period of nearly twenty-five years MUNN & Co. have occupied the position of leading Solicitors of American and European Patents, and during this extended experience of nearly a quarter of a century, they have examined not less than fifty thousand alleged new inventions, and have prosecuted upwards of thirty thousand applications for patents, and in addition to this, they have made at the Patent Office over twenty thousand Preliminary Examinations into the novelty of inventions, with a careful report on the same.

CONSULTATIONS AND OPINIONS FREE. Those who have made inventions and desire to consult with us are cordially invited to do so. We shall be happy to see them in person, at our office, or to advise them by letter. In all cases they may expect from us an honest opinion.

THE GREAT ADVANTAGES OF MUNN & CO.'S AGENCY are that their practice has been ten-fold greater than any other Agency in existence, with the additional advantage of having the assistance of the best professional skill in every department, and a Branch Office at Washington, which watches and supervises all their cases as they pass through official examination.

WITHOUT EXTRA CHARGE. MUNN & Co. are determined to place within the reach of those who confide in them their business the highest professional skill and experience.

EUROPEAN PATENTS. American inventors should bear in mind that, as a general rule, any invention that is valuable to the patentee in this country is worth equally as much in England and some other foreign countries.

Schedule of Patent Office Fees. On each caveat \$10. On filing each application for a Patent, (seventeen years) \$15.

PROVISIONAL PROTECTION FOR SIX MONTHS. 1,791.—REPLACER FOR RAILWAY LOCOMOTIVES, AND OTHER ROLLING STOCK THROWN OFF THE RAILS.—Robert Dustin, St. John, New Brunswick, June 10, 1869.