

CATARH AND ITS CURE.

Rev T P Childs publishes to-day a wonderfully accurate description of the causes of catarrh, and the results of an inattention to the first symptoms of this terrible disease.

Business and Personal.

The Charge for Insertion under this head is One Dollar a line for each insertion; about eight words to a line.

National Steam Pump; best and cheapest. National Iron Works, New Brunswick, N. J.

Assays of Ores, Analyses of Minerals, Waters, Commercial Articles, etc. Technical formulae and processes. Fuller & Stillman, 40 & 42 Broadway, N. Y.

Kimball's Catarrh Cigarettes, an instantaneous relief and a pleasant smoke. They contain no tobacco.

80 H. P. Corliss Engine for sale low, by J. F. Bishop, New Haven, Conn.

The greatest improvement upon Turbine Water Wheels has recently been made by S. M. Smith, York, Pa.

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Wood-working Machinery, Waymouth Lathes. Specialty, Wardwell Patent Screw Bench; it has no equal.

Valves and Hydrants, warranted to give perfect satisfaction. Chapman Valve Manuf. Co., Boston, Mass.

Artificial Stone.—Wanted to buy receipt for making. Address Wm. A. Morrison, Alton, Ill.

New Gear Cutting Attachment for Lathes. Lace Leather Cutter. Something new. Send for lists. Jackson & Tyler, Baltimore, Md.

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The Lathes, Planers, Drills, and other Tools, new and second-hand, of the Wood & Light Machine Company, Worcester, are to be sold out very low by the George Place Machinery Agency, 121 Chambers St., New York.

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Solid Emery Vulcanite Wheels.—The Solid Original Emery Wheel—other kinds imitations and inferior.

Caution.—Our name is stamped in full on all our best Standard Belting, Packing, and Hose. Buy that only.

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Warranted best and cheapest Planers, Jointers, Universal Woodworkers, Band and Scroll Saws, etc., manufactured by Bentel, Margedant & Co., Hamilton, Ohio.

Machine Diamonds, J. Dickinson, 64 Nassau St., N. Y.

Eagle Anvils, 9 cents per pound. Fully warranted.

steam between the boiler and the fine, which will bear the greatest amount of pressure? A. The 36 inch shall.

(6) C. R. G. asks (1) if there is any difference in the friction of 2 equal lengths of hose, one to be laid straight and the other crooked.

(7) R. E. W. asks for an explanation of the action of the wheels of a car when going round a turn or curve.

(8) C. H. M. H. asks: What constitutes an artesian well? My friend argues that it is necessary that the water should rise above the surface of the ground.

(9) J. E. F. asks: Which is the best for the Wabash, Mississippi, and Yellowstone rivers, a screw wheel, stern wheel, or side wheels?

(10) W. C. asks: 1. Will it take the temper out of a steel casting or weaken it, under necessary heat to "shrink it on"?

(11) J. A. M. asks how to soften cast iron that is too hard for filing or drilling, so that it may be filed or drilled.

(12) W. G. C. asks: 1. How can I drill a hole in a glass plate without danger of cracking the glass?

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated:

C. S. W.—The ore does not contain silver, but much manganese and iron oxide. Properly powdered and washed it may have some market value on account of the manganese oxide which it contains.

Table of COMMUNICATIONS RECEIVED with patent numbers and titles like 'On Pyrometers', 'Simple Electric Pen', 'Tide in Lake Superior', etc.

Table of OFFICIAL INDEX OF INVENTIONS FOR WHICH Letters Patent of the United States were Granted in the Week Ending February 4, 1879, AND EACH BEARING THAT DATE.

Notes & Queries

(1) C. Z. S. asks for the best method of putting water grates in a locomotive fire box. How is the pipe connected with the front and back end of the fire box?

(2) A. S. asks how many sizes of pinions will run in an internal gear of 10 inches diameter. I want to run 24, the smallest three quarters of an inch, the largest 3 inches diameter.

(3) R. B. R. writes: Several journals have stated that the locomotive lately built for the Atchison, Santa Fe, and Topeka Railroad was the heaviest ever built.

(4) D. P. asks: What thickness must a cast steel cylinder 8 inches internal diameter have, so as to resist a steam pressure of 350 lbs. per square inch with complete safety?