

SKIN OF THE SCIENCES.

REMARKABLE TURBINE WHEEL OF AN ENGLISH INVENTOR.

Other Novelties of Note—Unique Contrivances for Workshop and Laboratory—A Handy and Efficient Carbonometer.

Trials were recently made at Newcastle-on-Tyne of the "steam turbine" of the English inventor, Parsons, and were most successful.

The trials at Newcastle-on-Tyne of this unique motor were made under the auspices of J. A. Ewing, professor of engineering of Cambridge University, England, and elicited the following extraordinary results:

It is a notable and interesting fact that this turbine of simplicity solves at a single bound, often striven after, but never satisfactorily accomplished to himself, (that is, economically), by James Watt—a rotary steam engine.

A HANDY WATER MOTOR. A Handy Thing That Can be Useful in Every Home.

The ease and simplicity with which such a motor as the one shown in the illustration may be set up and utilized to do a great variety of work will be apparent at a glance.

A CONVENIENT WATER MOTOR. alteration. It is then connected by a light belt with sewing machines, fans, freezers, churns, or with lathes, dental engines, scroll saws, washing machines, typewriters, presses, etc.

A NEW CARBONMETER. A Little Device That Registers the Air's Impurities.

The accompanying cut from the Medical Record shows a cheap device for determining the excess of carbonic acid in the atmosphere, in school rooms, sick rooms, hospitals, mines, tenement houses, etc., where accurate measurements are required.

Each apparatus consists of a glass test tube about five and a half inches long, and nine-sixteenths of an inch in diameter, together with a smaller tube about six inches long, contracted about one inch from either end, with a valvular rubber bulb and tube to attach; also a rubber ring to fix its depth in the test tube, and a wooden wire stand for supporting it, with a small bottle of lime water and a syringe.

Fill the test tube for about one inch, up to the horizontal line, with a few drops of clear saturated solution of lime water; take the smaller tube with bulb attached, adjust the rubber ring so that it will hold the tube about three-eighths of an inch from the bottom of the test tube; gently compress tube and then allow it to fall again with moderate rapidity, and so continue as often as desired.

After filling and discharging the bulb six or eight times, the opacity of the lime water obscures the black spot on the base of the stand, the air is absorbed, the observer looking down through the top of the test tube through the lime water, the air is unfit for continuous respiration. In good air the spot does not to be observed in 30 or 40 fillings of the bulb, and in poor air not at all.

R. SIMPSON'S Friday Bargains MONEY SAVERS FOR HOLIDAY BUYERS The Genuine of these Bargains is on the face.

WITHIN eight days of Xmas. The last Friday but one before Xmas. Our lists are planned with this thought in view. The goods are holiday goods, seasonable goods, Xmas bargains. See:

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