

Popular Science.

TERRA-COTTA LUMBER is the name of a new material for building, now being manufactured at Perth Amboy, N. J. It is formed by mixing "top" clay, freed from grit, with sawdust, and firing it until the latter is burned out, leaving a porous brick which can be sawn, planed, and nailed, like lumber. It is capable of many applications in building, and seems to be destined to extensive employment, particularly in fire-proof constructions.

MR. STANLEY has returned to Europe, after an absence of between three and four years, during most of which time he has been on the Lower Congo. From the station which he established at Vivi, below the Yellala Falls, his object was to make a road past the long line of cataracts, about 150 miles, to Stanley Pool. Much of the road has, we understand, been constructed and five stations have been established. Mr. Stanley himself has been 300 miles into the interior, with what results to science remains to be seen.

M. BRARD, of La Rochelle, has succeeded in producing an electrical battery which works by combustion. It is composed of a plate of carbon, so shaped as to hold a quantity of nitrate of potash, the two being separated by asbestos, and the whole enveloped in asbestos paper. Strips of copper connecting with the carbon and the nitrate serve as electrodes, and when this compound briquette is placed in the fire and burned, a current of electricity is excited, which flows during the time taken for its combustion, the carbon pole being negative, and the nitrate positive. These slabs may be coupled like any other battery, either in tension or quantity. Three or four slabs in tension produce the decomposition of water.

PRACTICAL TESTING WITH THE MICROSCOPE.—At a recent meeting of the Franklin Institute, it was shown by Mr. Grimshaw that the microscope may be of good service in estimating the value of structural materials. It may determine whether or not the material is good enough to warrant trial with the testing machine. The author produced photographs of a piece of timber from a highway bridge that was wrecked two years ago, after a few days of service, through a strain caused by an empty truck; and the poor character of the wood was at once apparent. Such micro-photographs of timber, in fact, show that in the strong specimens, the concentric rings are close in texture and of slight width, and the radial plates frequent, wide, long and thick, while the reverse is found in the poor material. As a parallel in metal-work, Mr. Grimshaw exhibited two portions of pure Lake copper, one an ordinary ingot, of coarse and crystalline grain, dark red color, and full of small blowholes; the other, cast with proper precautions against oxidation, the grain close and fine, the color salmon, and no blowholes. Tests of tensile strength of sheet and wire from these materials strikingly confirmed the indications of the microscope.

At the late scientific meeting in Montreal, Dr. Asa Gray, who has done more work for American botany than any other botanist, gave a short historical sketch of the Floras which have been published of our native plants. The plants east of the Mississippi are generally well known; but few have any idea of the amount of work that is yet necessary to be done on our western plants. The recent publications of Messrs. Gray and Watson, which cover about half of our native flora, contain 5,000 specimens, and double that number is a fair estimate of the plants found in the United States.

THE manufacture of rubber goods, which assumes large proportions in the United States, has been of late years retarded on account of an insufficient supply of the crude rubber. At a recent meeting of seventy of the rubber manufacturers, representing capital to the amount of ninety million dollars, it was decided to reduce the production of manufactured goods twenty-five per cent., owing to the meager supply and high price of raw material. The present supply of rubber is derived from Brazil and is known as Para rubber. Mr. E. R. Heath, who has just returned from a two years' exploring trip in Bolivia, reports that vast forests of rubber trees exist on the banks of the Beni river, which is a navigable stream for 500 miles from its junction with the Mamore, and which promises to furnish a large part of the future rubber supply.

EXTREME poverty is a cause of insanity. The lack of proper food and of bodily comforts, the wearing anxiety of daily want, the hardships of the laborer's wife, induce ill health, and with it insanity.

WHAT WILL THE WEATHER BE TO-MORROW

Pool's Signal Service Barometer OR STORM GLASS AND THERMOMETER COMBINED, WILL TELL YOU.

Advertisement for Pool's Signal Service Barometer, featuring an image of the instrument and text describing its accuracy and utility for farmers and sailors.

MENDELSSOHN PIANO CO.

Grand Offer for the next 60 days only. \$850 Square Grand Piano for only \$245. Magnificent rosewood case, elegantly finished, 3 strings, 7 1-3 Octaves, legs and style, heavy serpentine and our new patent overstrung scale, beautiful carved Hammers, in fact, every improvement which in any way tend to the perfection of the instrument, has been added.

Our price for this instrument, boxed and delivered on board \$245 00. Just reduced from our late wholesale, factory price, \$295, for 60 days only. This is now, by far, the greatest bargain ever offered the musical public.

Cash sent with order will be refunded, and freight charges paid by us both ways. If Piano is not just as represented. Several other special bargains: Pianos, \$100 up. Over 15,000 in use, and not one dissatisfied purchaser.

Hand-manufacturer. Every Piano fully warranted for 5 years. SHEET MUSIC at one-third price. Catalogue of 3,000 choice pieces of popular Music sent for 3 cents.

MENDELSSOHN PIANO CO., P. O. Box 2058, New York City.

CUT PRICES.—The Famous LIVERMORE \$2.00 STYLOGRAPHIC PEN at only \$1.00. Former Price, \$2.00. Pens sent by return mail. Parties will also receive a sufficient quantity of superior ink for six months use.

PRIDE OF THE SUNDAY SCHOOL & HOME CIRCLE. PATTERSON \$65 ORGAN. Contains four new songs, eleven useful songs, Sub Bass Octave Cuspidor, Tremolo and Echo Swells, furnished without the extension top, finished for Chapel, at the mansion of the best organists, and is universal in popularity.

THE UNIVERSAL TYPE WRITER. THE BEST HOLIDAY PRESENT. A Type Writer placed within the reach of all. The attention of clerks, stenographers, draughtsmen, and engineers, as well as of boys and girls, is respectfully called to this new and ingenious invention.

ALMOST AS BAD. THE HOLIDAYS ARE COMING, AND THE UNDERSIGNED BEGS LEAVE TO STATE TO HIS NUMEROUS CUSTOMERS AND FRIENDS IN GENERAL, THAT HE HAS REDUCED THE PRICES.

MOLLER'S PURE COD-LIVER OIL. The Great Church Light. Superior to any Highest Medical Authorities testify to its delicacy of taste and smell. For sale by Druggists.

INVESTORS. Full information about our \$100,000 loan, not a dollar lost. 12 years experience. Lawrence, Kansas, and 243 Broadway, New York.

CATALOGUE OF BOOKS AND TRACTS

PUBLISHED BY THE AMERICAN SABBATH TRACT SOCIETY, ALFRED CENTRE, N. Y. NATURE'S GOD AND HIS MEMORIAL. A Series of Four Sermons on the subject of the Sabbath. By Nathaniel Wardner, late missionary at Shanghai.

THE SABBATH AND THE SUNDAY. By Rev. A. H. Lewis, A. M. Part First, Arguments, Part Second, History. 16mo. 268 pp. Fine Cloth, \$1.25. This volume is an earnest and able presentation of the Sabbath question, argumentatively and historically.

THOUGHTS SUGGESTED BY THE PERUSAL OF GILFILLAN AND OTHER AUTHORS ON THE SABBATH. By Rev. Thos. B. Brown, Pastor of the Seventh-day Baptist Church at Little Genesee, N. Y. Second Edition, 125 pp. Fine Cloth, 50 cents. Paper, 10 cents.

A DEFENSE OF THE SABBATH, in reply to Ward on the Fourth Commandment. By Geo. Carlrow. Third Edition—Revised. 168 pp. 25 cents. This work was first published in London in 1724. It is valuable as showing the state of the Sabbath argument at that time.

INDICATION OF THE TRUE SABBATH, in 2 parts. Part First, Narrative of Recent Events. Part Sec. one, Divine Appointment of the Seventh Day. By Rev. J. W. Morton, late Missionary of the Reformed Presbyterian Church. 66 pp. Paper, 10 cents.

THE ROYAL LAW CONTENDED FOR. By Edward Steniet. First printed in London, in 1658. 64 pp. Paper, 10 cents. LIFE AND DEATH. By the late Rev. Alexander Campbell, of Bethany, Va. Reprinted from the "Millennial Harbinger Extra." 50 pp. Price, 6 cents.

COMMUNION, OR LORD'S SUPPER. A Sermon delivered at Milton Junction, Wis., June 15th, 1878. By Rev. N. Wardner, D. D. 20 pp. The Society also publishes the following tracts, which will be sold at cost, in large or small quantities, to any who may desire them.

TRACTS. No. 2—Moral Nature and Scriptural Observance of the Sabbath. 62 pp. No. 10—The True Sabbath Embraced and Observed. 16 pp. No. 11—Religious Liberty Endangered by Legislative Enactments. 16 pp. No. 15—An Appeal for the Restoration of the Bible Sabbath. 40 pp.

ADDITIONAL LOCAL TRAINS WESTWARD. 5.30 A. M., except Sundays, from Salamanca, stopping at Great Valley 5.38, Carrollton 6.05, Vandala 6.28, Allegany 7.02, Ocean 8.00, Hinsdale 8.28, Cuba 9.27, Friendship 10.53, Belvidere 11.24, Belmont 11.45, Scio 12.10, Wellsville 1.45, Andover 2.40, Alfred 3.43, Almond 4.20, and arriving at Hornellsville at 4.45 P. M.

ADDITIONAL LOCAL TRAINS WESTWARD. 12.25 P. M., daily, except Sunday, from Hornellsville, stopping at Almond 12.36, Alfred 12.46, Andover 1.05, Great Valley 1.24, Cuba 2.23, Ocean 2.50, arriving at Salamanca at 3.45 P. M.

BUCKEYE BELL FOUNDRY. Bell Foundry and Tin for Churches, Schools, etc. FULLY WARRANTED. Catalogue sent Free. VAN DUZEN & TIFT, Cincinnati, O. HISTORY OF CONFERENCE.—REV. JAMES BAILEY has left a few copies of the History of the Seventh-day Baptist General Conference at the Recorder office for sale, at \$1.00.

New York Medical College and Hospital for Women. 213 WEST 54th ST., NEW YORK CITY. The regular Winter Session (20th year) will begin October 2d, 1882, and continue twenty-four weeks. Daily Clinics will be held in the College, and the Hospital and Dispensary adjoining give special advantages for practical studies.

12 beautiful Christmas Cards. Colors, sent on receipt of 25 cents, by mail. Large quantity at 10 cents. WILLIAM L. DORR, ALBION & Co., 115 Main St., Cincinnati, Ohio.

MEMORIAM—THE MANY FRIENDS of the late REV. N. V. HULL, D. D., are pleased to know that an account of his FUNERAL SERVICES, and the memorial services delivered on that occasion by President of Alfred University, have been published in appropriate form by the American Sabbath Society, and is furnished by mail at 10 cents.

PENSIONS for Soldiers, Widows, Parents and Children. Any Pension or Injury claim, or any other case, will be promptly and successfully prosecuted.

NEATLY AND PROMPTLY DONE AT THE RECORDER OFFICE. Orders by mail will receive special care.

A TALKING HORSE. Would you like to see a horse that can talk? This is the only horse in the world that can talk. It is a horse of the name of "TALKING HORSE" and it can talk to you in any language.

CERTIFICATES OF MEMBERSHIP. Return notice of the certificates having been sent to you by mail, for sale at this office, by mail, postage paid, per dozen, 25 cents; per hundred, \$1.25.

Wanted. AGENTS! AGENTS! AGENTS! GEN. DODGE'S new book, entitled "Thirty-Three Years Among Wild Indians!"

Gen. Sherman. This work was at once subscribed for by President Grant and other Cabinet members, and by Gen. Sherman, Gen. Sherman, Gen. Sherman, and thousands of others.

NO PATENT NO PAY. OBTAINED FOR MECHANICAL, MEDICAL OR OTHER COMPOUNDS, OR TRADE-MARKS AND LABELS. Caveats, Assignments, Infringements, and all matters relating to Patents, promptly attended to.

DR. ASA GRAY. A leading London Dispensary establishes a Dispensary in New York City for the treatment of Epileptic Fits.

D. UNIVERSITY. ALFRED, N. Y. VILLAGES FOR LADIES AND GENTLEMEN. Collegiate, and Theological Department. Scientific, Normal, Mechanical, and Drawing courses of study.

PATENTS. In the U. S. Patent Office. We are Patent Agents, engaged in patenting and can obtain patents in any country from Washington.

AGENTS. Through Tickets to all points at the very lowest rates, for sale at the Company's Office. Baggage will be checked only on Tickets purchased at the Company's Office.

