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| (Illustrated articles are marked with an asterisk.) | |
|---|---------------------------------------|
| sh, standing 241 inproved* 243 | Metallurgical and mechanical progress |

TABLE OF CONTENTS OF

SCIENTIFIC AMERICAN SUPPLEMENT No. 615.

For the Week Ending October 15, 1887.

Price 10 cents. For sale by all newsdealers

I. ANTHROPOLOGY.—The Ba-Yanzi.—Vivid description of this tribe of African savages.—Their human sacrifices.—The tombs of their chiefs.—The general customs.—2 illustrations. chiefs.—The general customs.—2: illustrations.

II. BOTANY.—A Plant Heliostat.—By BYRON D. HALSTED.—A Californian plant whose leaves always turn toward the sun.—Investigation of this curious habit.

Renanthera Lowi.—An interesting and beautiful flowering plant illustrated.—I illustration.

III. ELECTRICITY.—Improved Electric Pendulum.—A new and ingenious pendulum with magnetic escapement.—3: illustrations...

The Mix and Genest Microphone.—A new German transmitter for telephone service.—2: illustrations...

IV. ENGINEERING.—A New Arrangement of Hydraulic Main.—Leclaire's new main with Alavoine's strainers.—A new invention in gus engineering.—I illustration.

Large and Small Jocomotives.—A thirty-nine and a three ton locomotive compared.—Their relative dimensions and gauges.—2: illustrations. 9829 9826

illustrations

Petroleum Fuel.—The problem of burning petroleum on locomotives.—Experience with it in Russia and on the Pennsylvania road in this country.

The Comparative Value of Steam and Hot Water for Transmitting Heat and Power.—A paper read by CHARLES E. EMERY before the Am. Soc. Mech. Engineers.—An elaborate discussion of this subtact.

VI. HYGIENE AND PATHOLOGY.—A Patient's Account of the Pasteur Treatment.—The success of Pasteur's treatment and weakness of his adversaries' arguments

Color Blindness among Railroad Employes.—By WILLIAM THOMPSON, M.D.—Results of the tests in use by the Pennsylvania line, and their adoption by the Philadelphia and Reading road... 9829

VI. METALLURGY.—" Rapid" Open Hearth Steel Plant.—Thwaite's combination of pneumatic and open hearth process.—3 illustrations 9821

VIII. NAVAL ENGINEERING.—New Floating Dock.—A new English dry dock described and illustrated; its arrangements for taking on "listed" vessels.—2 illustrations....—By Sir WILLIAM THOMSON, recently delivered in Edinburgh; the forms and motions of waves.—8 illustrations.

IX. ORDNANCE.—The New One Hundred and Ten Ton Gun.—The dimensions and sections of the great Elswick gun, the largest of Sir William Armstrong's productions.—6 illustrations.

The Velocity of Propagation of Fiame.—By Lewis 1. White Ass. M. Inst. C. W.—Interesting experiments more directly addressed to the subject of the safety of the Davy lamp in coal 152. mines

XII. TECHNOLOGY.—Apparatus for Testing Oils.—An ingenious registering apparatus for testing the quality of lubricating oils.—Illegration.

Sand for Glass.—By Graphor. Sand for Glass.—By GEORGE WARDMAN.—American sources of supply for glass sand, its purity and appearance.

RAILROAD MEN'S BUILDING.

The new Railroad Men's Building, erected in this city by Mr. Cornelius Vanderbilt, at a cost of \$100,000, as a gift to railroad employes, was formally opened on apparatus and its portability are also notable. October 3, 1887, when it was turned over to the uses of the Railroad Branch of the Young Men's Christian Association. Speeches were made by the donor, Mr. Vanderbilt, and by several others. Then they were responded to in an address of acceptance by Mr. Elbert B. Monroe in behalf of the association to whom the building is specially dedicated. Bishop Potter was present, and created somewhat of a sensation by proposing three cheers for Mr. Vanderbilt. Mr. Chauncey Depew closed the proceedings by one of his characteristic addresses.

The building is situated on Madison Avenue near the Grand Central Depot. Within it contains all the appurtenances of a well-ordered club house-lecture room, bath rooms, reading room, lunch room, etc. Entertainments by prominent lecturers are to be given there throughout the season, and there is little doubt Frenchman with the "Lebel," have yet got the "hang" that much pleasure and profit will be derived by the of the magazine rifle, which, being far more complicated railroad employes from this gift of the railroad mag-

The building is to be accessible to all employes of roads using the Grand Central Depot. It is not exclusively in the possession of the Young Men's Christian Association. This point was made by Mr. Vanderbilt in his speech.

are used for the plumbing. In the library is a collection of 6,400 volumes of general and miscellaneous readfile. The lecture hall is 36 by 66 feet in area, and can seat 400 people. It is finished in oak, cherry, and ash. The building is wired and piped for electricity and gas. The architects were Robertson & Potter, of this city.

For a nominal charge any of the railroad employes oh the specified lines has full use of the privileges, and handling the old Zundnadelgewehr, of which this is after being in good standing for a year becomes a life member.

EXHIBITION OF TRAIN TELEGRAPHY.

An interesting exhibition of train telegraphy was given by the Consolidated Railway Telegraph Company, of this city on the 6th instant. A special train of six cars was run from Jersey City to Easton, carrying the apparatus for transmitting and receiving. The train contained the guests of the Consolidated Company, and the party was the outcome of an invitation extended by Mr. Charles A. Cheever, the president of made more prominent cartridge) the company, to the New York Electric Club. The trip occupied about five hours. During the running of | handling this type of the train, the operator was kept busy sending ar ceiving messages. Although the speed of th no relation to the practical working of yet a greater measure of public appr

speed, exceeding sometimes sixty mile The method is a simplification in Edison system, already very full The tin roofs of the cars are u condenser that is charged and of a "buzzer" many hundre other leaf of a condenser is wire strung on low poles ' nearly as possible at an ev The rapid charges and d; reproduced upon the lin ing these with a key, duced on the car, ar line, or vice versa. phones are used. head against t¹ He then est car seats, r

looked for from the fact that the cars.

The eas is notice

ms and mo-............ 9815 are thus connected to

car connections are the acme of simplicity.

The apparatus consists of the "buzzer," transmitting key, and induction coil. The core of the exhaustive trials at Bengal have proved that both latter is the magnet of the "buzzer." These are the Lee-Burton and the improved Lee are altogether secured to a small lap board. For battery, twelve chromic acid cells (Bunsen type) are used. A compact form of these has been adopted, and is carried in a hand case. The whole equipment for a car is carried and put in working order and transmit messages or receive them in a few minutes.

* See Scientific American, Vol. 54, No. 8.

The great advance over the old Edison method consists in the use of a single line wire instead of a number of parallel lines. The reduction of the quantity of

Many well-known scientists and electricians were on the train; among others, Thos. A. Edison, Prof. Barker, Messrs. Pope, Gillilland, Phelps, Van der Weyde, and others. The opportunity was taken for sending and receiving many congratulatory messages.

MAGAZINE RIFLES.

The merits and defects of the various types of magazine guns are just now attracting much attention in the European military press. L'Avenir Militaire makes serious charges against the efficiency of the German magazine gun, with which the German infantry have been supplied, and the Militar Wochenblatt replies with similar charges against the French arm. The one charge and the other do not differ essentially; neither the German soldier, with the new "Mauser," nor the than the old arm, requires more careful handling. That novices at such mechanisms should be awkward is scarcely surprising, and the observer at the butts, however friendly, would see little to praise in their target practice. That skill as well as experience is required to get the real value of the magazine gun has been clearly demonstrated during the last few months; and The building, of ornate style in brick and terra cot- an excellent proof that the new arm is not altogether ta, is two stories high. The roof is of glazed Spanish satisfactory is to be found in the German and French Akron tiles. The gymnasium and bowling alley are military journals, which, while indignantly denying fitted up with the latest improvements. The bath the truth of the assertions made by hostile critics, seem rooms include a plunge bath, 6 feet deep and 9½ by unable to bring forward any facts or figures to aid 131/2 feet in area. In the basement all the partitions them. Thus the Deutsche Heeres Zeitung, just at presare of marble, with bronze framework. Brass pipes ent much wrought up over the published observations of a correspondent of the Swiss journal Gazette Suisse, contents itself with denying in general terms the truth ing. In the reading room 100 newspapers are kept on of his statements, and makes no attempt to go specifically into the charges. It says that the new arm has been shown, beyond peradventure, to be at least quite as efficient as any other type known; that it is simple in construction, strong in parts, accurate in fire, and in the hands of the German soldier, accustomed to only an improvement, is more effective than any other. Yet the Swiss correspondent, who witnessed the work of a part of the 25th corps at the butts, only corroborates other military observers when he declares that men draughted from the farming districts of Bavaria, Wurtemburg, and especially the Pomeranians, Westphalians, and West Prussians, cannot, because of the great size of their fingers, operate the mechanism of the Mauser magazine gun with nicety, dispatch, or safety to the parts; and that in such unskillful hands the advantages of a quick-firh throv- $I^* \sim^*$ nst and its defects

> Again, like others and the r" (the lev

d raw levies e "extractor y shell and worked by t their fin-II. The cony of the piece, end as the carincertain, because

, the "Lebel," with been armed, it has. same defects as the r being quicker and chanism, the equation g is less, as are also the mprovements in this arm d General Tramind, comnool of St. Cyr, are very imme arm now in use, is of eight lets, made of steel, are fired by zaer, which is smokeless, of trelives little or no recoil, and, it is ne discharge is so slight that it cana distance of twenty-five yards. The such smaller than that now in use, as is idge, yet the trajectory is almost straight, eing hit at long range 95 times out of a posby those at all accustomed to arms of any In some respects this new piece resembles the ly invented Pralon rifle, but in its mechanism eradicated the defects which that was seen to

Recent experiences of the English with the repeating rifle have been peculiarly unsatisfactory. The Broad Arrow, quoting the Times of India, says that the unsatisfactory. It says:

"That there should be many who object to the new rifle on the grounds of the waste of ammunition involved is only natural, and to be expected, but to find by one man, the operator himself, and can be attached the weapon itself breaking down in its strongest point, viz, rapidity of fire, is astonishing, but not incomprehensible. The report says that the improved Lee is the better of the two, but that when any large number