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NEW YORK, SATURDAY, OCTOBER 15, 1887.

Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as 'Army, British, standing', 'Metallurgical and mechanical progress', 'Railroad Men's Building', etc., with corresponding page numbers.

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Table listing contents of the supplement, including sections like 'I. ANTHROPOLOGY', 'II. BOTANY', 'III. ELECTRICITY', etc., with page numbers.

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 October 3, 1887, when it was turned over to the uses of the Railroad Branch of the Young Men's Christian Association.

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.

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.

The building, of ornate style in brick and terra cotta, is two stories high. The roof is of glazed Spanish Akron tiles. The gymnasium and bowling alley are fitted up with the latest improvements.

For a nominal charge any of the railroad employes on the specified lines has full use of the privileges, and 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 method is a simplification in Edison system, already very full. The tin roofs of the cars are under a condenser that is charged and of a "buzzer" many hundred other leaf of a condenser is wire strung on low poles nearly as possible at an even distance.

The apparatus consists of the "buzzer," transmitting key, and induction coil. The core of the latter is the magnet of the "buzzer." These are secured to a small lap board. For battery, twelve chromic acid cells (Bunsen type) are used.

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 apparatus and its portability are also notable.

Many well-known scientists and electricians were on the train; among others, Thos. A. Edison, Prof. Barker, Messrs. Pope, Gilliland, Phelps, Van der Weyde, and others.

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.

Again, like others and as a rule, the "extractor" is worked by the hand of the soldier. The construction of the piece, and as the cartridge is inserted, because

the "Lebel," with the same defects as the Lee-Beaumont, being quicker and simpler in mechanism, the equation of the piece, and as the cartridge is inserted, because

Recent experiences of the English with the repeating rifle have been peculiarly unsatisfactory. The Broad Arrow, quoting the Times of India, says that the exhaustive trials at Bengal have proved that both the Lee-Burton and the improved Lee are altogether unsatisfactory.

* See SCIENTIFIC AMERICAN, Vol. 54, No. 8.