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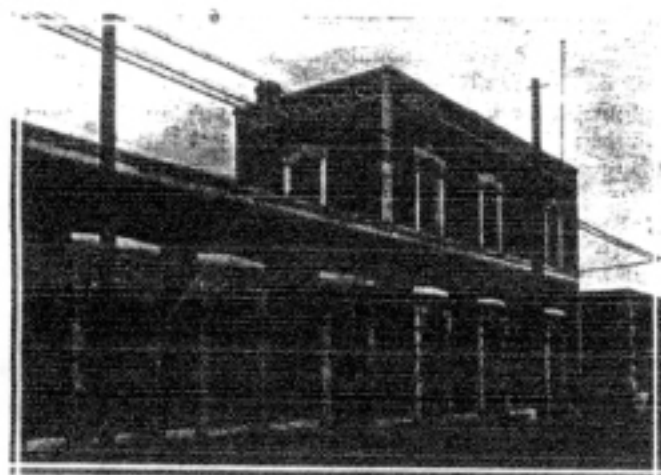
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Cutting in a New Telephone System in Old Mexico

Governor and Other Officials of State and City Participate in Affair Which is Accorded Deserved Importance—
Interesting and Unusual Photographs Show Conditions Not Familiar to Northern Operators—
A Mexican and an English Account of Proceedings

A modern telephone system, replacing the original out-of-date one, has just been placed in service at Chihuahua, Mexico, installed by the Compañia Telefonica de Chihuahua, of



Main Exchange of Cia. Telefonica de Chihuahua.

which F. L. Cleavenger is superintendent. Mr. Cleavenger, while sending us photographs and accounts of the opening as given in the local papers, professed himself to be entirely too busy rebuilding the plant and operating it to even outline the history of the company. Other photographs came to us through the courtesy of P. O'Brien, of the Missouri & Kansas Telephone Co., at Leavenworth, Kans.

From the local descriptions of the opening we find that the system represents an expenditure of upwards of \$100,000 Mexican, equivalent to about \$50,000 in gold. Of this, \$30,000 is represented by the building and real estate, \$20,000 by the switchboard and central office equipment, the balance being distributed over the outside plant, which is full cable.

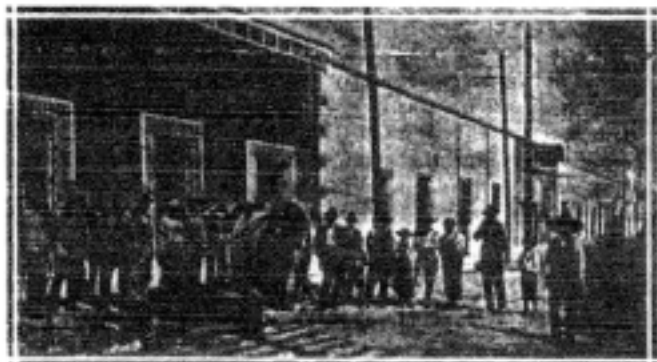
The opening of the new exchange was made a gala occasion. The actual cutting-in was accomplished by Governor Gonzales, of the state of Chihuahua. The ceremonies were attended by many other men of prominence in the state and city, to whom an elaborate banquet was later served.

El Corero, the largest Mexican daily in Chihuahua, rather naively described the affair. The translation of its account is, in part, as follows:

"Yesterday, between the hours of six and seven o'clock p. m., in accordance with previous invitations sent out by William Dale, president of the company, the new telephone plant of the Cia. Telefonica de Chihuahua was inaugurated before a large assemblage presided over by the governor of the state of Chihuahua, Don Abram Gonzales. Shortly after the arrival of the governor he proceeded with the inauguration by first making a few well-timed remarks expressing his pleasure in being permitted to officiate in the inaugurating of a public enterprise of such vital importance to the progressive community of Chihuahua. He then proceeded with the ceremony by cutting the first service into the new switchboard. In less time than it takes to tell it the entire service of the exchange was taken up from the new exchange without the least interruption.

"Before and after the act of inauguration Messrs. Dale, Pot-hast, Booth, Cleavenger and others very courteously showed all the visitors through the various departments, at the same time giving information about the handling of the service and the working of the different parts of the new installation.

"The main entrance brings you into the office of Superintendent Cleavenger, and opening from this room all of the departments are easily available. To the left as you enter is the door leading into the room containing the main frame with the protective devices for keeping foreign currents from burn-



Mexican Construction Gang Stringing Cable.

ing out the switchboard, also the wire chief's desk, the power board, etc. Opening from this room you enter the battery room and the patio of the building. The latter is large and



The Youngest Operator.



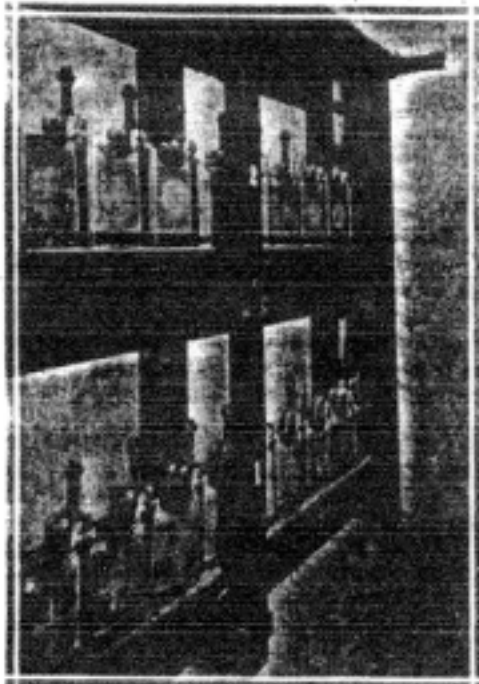
Main Switchboard and Chief Operator's Desk.



Wire Chief's Desk.

convenient for many uses in handling the work of the exchange. Directly back of the office are the workshops and stock and material rooms.

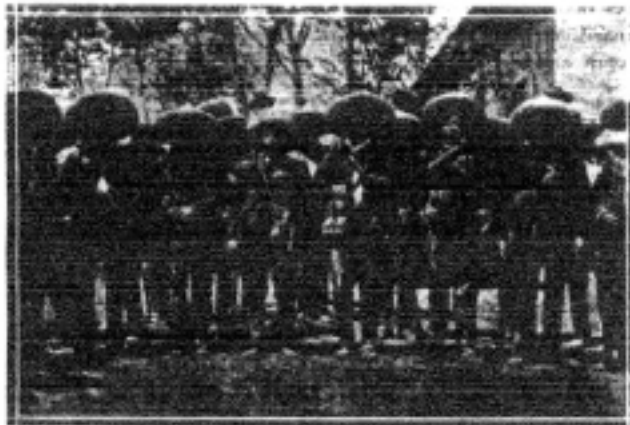
"A division wall separates the residence of the superinten-



A Corner of the Battery Room.

dent from the exchange, but enables Mr. Gleavenger to be close at hand and more closely supervise the service and work under his direction. On the second floor is situated the switch-board room and rest room, the latter furnished with every accommodation for the comfort of the operators. In front of the main board is located the position of the chief operator, who has full charge of this room and will supervise the work of the employes on the board.

"After the inauguration champagne was served to the assemblage, a congratulatory speech was made by the secretary of state, Don Braulio Hernandez, a few toasts proposed, and the guests departed, after expressing themselves well pleased with what they had seen and wishing the telephone company every success."



A Group of Genuine Mexican "Trouble-men."

The *Chihuahua Enterprise*, printed in English, or, rather, in American, has this to say of the governor's part in the matter: "Promptly at 6 p. m. the president of the company, William Dale, requested Governor Gonzales to pull a tri-color ribbon,

the national colors, on the large wired frame, that would change the system from the old to the new. The governor jerked away and the 'cutting over' process was done with." Neat, brisk and to the point is the *Enterprise*. At all events, the system is working and is highly commended by its subscribers.

The photographs show the exchange of the *Compania Telefonica de Chihuahua*, both inside and out; a gang stringing cable, and a bunch of "trouble men." These latter are the genuine Mexican brand of "trouble men," but, fortunately, they do not devote themselves to the telephone business. They are Francisco (Pancho) Villa, the famous Chihuahua bandit, and his chiefs. They and their band of about 200 men were enlisted in the rebel cause during the late unpleasantness. As will be recalled, the telephone played a most important part in the revolution.

A British View of Apparatus Tendencies, Discussion of Automatic and Semi-Automatic Service.

In an extended article on the telephone exchanges of London, by G. H. Bryant, which appears in the *National Telephone Journal*, of London, appears the following interesting prediction:

"The present-day manual systems are but a phase of the evolution of telephony, and not the ultimate. It is needed but a casual inspection of the automatic system on show at the Earl's Court Exhibition two years ago to realize its possibilities, and that some master minds are at work on the problem. That the manufacturers of manual systems realize this and are striving to make headway in the new field is proved, I consider, by the patents that are being taken out by them. If you glance through the specification files at the Patent Office you will tumble across patents relative to automatic systems which tell their own tale.

I am of the opinion that we shall graduate to an automatic system. Every auto-device that is added to manual boards is a step in that direction, and by such means the worth of automatic plant will be gauged and the preliminaries for a pure automatic system be tested.

For some months past I have been pondering over the possible advances that will be made on our present-day manual switchboards, and I have, as a result, figured out what might be called a transition stage.

I conceive a manually operated switchboard similar in outline to the board of the present day, but minus the answering cords, local jacks and lamps; an automatic device would evenly distribute the calls, as they were made, among the operators required for the load, and be so arranged that the working portion of the board could be expanded or contracted according to the load. Such an arrangement would enable an even quality of service to be given day and night, and, combined with a simplification of the operator's work, the extent of the switchboard would be reduced owing to the loading up that would be possible.

The subscribers and outgoing trunk multiples would be retained. Each cord would have two supervisory and one calling lamp (of a different color), also a listening key.

When a subscriber lifted his receiver off the hook he would be automatically connected to a cord circuit on a position, and cause the calling lamp to glow.

The operator would throw the listening key, ascertain the subscriber's requirements, and connect accordingly; for local as well as trunk connections the ringing would be automatic. An indication of the calling subscriber's tariff would be given to the operator on one of a series of tariff pilots arranged so that when the listening key of a cord circuit was thrown the pilot corresponding to the calling subscriber's rate would glow.

The foregoing covers the "A" board only. It is conceivable that the "B" board will be replaced by automatic apparatus controlled by the distant "A" operators, who would take up a disengaged trunk and select the required number by means of a device on the key-shelf. Such a selecting device would have to take a minimum of the "A" operator's time in selecting a number, and would not be designed on the lines of the impulse-sender as used on a subscriber's instrument on an automatic system.

Such systems will only serve as stepping stones and prove the capableness of automatic apparatus and pave the way for the general introduction of automatic exchanges.