

connected at present about 1,000 subscribers, it will be readily understood how difficult is the task before the Chinese operators, and yet all calls are handled with the same dispatch and accuracy as in an exchange containing American operators where numbers only are used. It is necessary, of course, for operators to be able to speak both the Chinese and English languages fluently.

"The Chinese subscribers invariably demand individual lines and are very heavy patrons of toll lines; in fact, they prefer long-distance telephony to all other forms of communication. Furthermore, the Chinese merchant is unusually prompt in the settlement of all accounts and very reasonable in all of his dealings with the company."

SOURCES OF "FALSE" HAIR

IN VIEW of the recent return of the age-long custom of supplementing the normal supply of female hair by reinforcements drawn from outside sources, the following inquiry into the nature of those sources, published by *The British Medical Journal* (London, August 27), does not come amiss. As a starter it gives an illuminative extract from a book by Francis Trollope entitled "Summer in Brittany." The press dispatches say that the styles of the outer world are now invading Brittany and the women are declining to sell their tresses, so that this source of supply can no longer be depended upon. Speaking of a fair in Collenée, at which what may fairly be called a "hair-market" was held, this author says:

"What surprised me more than all, by the singularity and novelty of the thing, were the operations of the dealers in hair. In various parts of the motley crowd there were three or four different purchasers of this commodity, who travel the country for the purpose of attending the fairs, and buying the tresses of the peasant girls. They have particularly fine hair, and frequently in the greatest abundance. I should have thought that female vanity would have effectually prevented such a traffic as this being carried to any extent. But there seemed to be no difficulty in finding possessors of beautiful heads of hair perfectly willing to sell. We saw several girls sheared, one after the other, like sheep, and as many more standing ready for the shears, with their caps in their hands, and their long hair combed out, and hanging down to their waists. Some of the operators were men, and some women. By the side of the dealer was placed a large basket, into which every successive crop of hair, tied up into a wisp by itself, was thrown. No doubt the reason of the indifference to their tresses, on the part of the fair Bretonnes, is to be found in the invariable 'mode' which covers every head, from childhood upward, with close caps, which entirely prevents any part of the hair from being seen, and, of course, as totally conceals the want of it. The money given for the hair is about 20 sous [about 20 cents] or else a gaudy cotton handkerchief—they net immense profits by their trip through the country."

Supplementing this, the writer in *The Medical Journal* goes on to say:

"Light hair comes mostly from Germany. It is sometimes stated that the color of the hair is an index of character; if this be true, it is obvious that character can be disguised by art. Queen Elizabeth was probably singular in her preference for a red wig, but the color did not belie her temper. The color most in demand, however, changes with the fashion at a given time. A fashion which we can characterize only as disgusting seems to prevail at present in certain places. This is the wearing of 'rats,' structures of which we confess we

know nothing, but which we presume to be intended to be decorative. They are, it seems, made sometimes of wire, sometimes of human hair, sometimes of flax or other vegetable which presents a more or less close likeness to human hair. In connection with this matter, we touch darker mysteries than those of the French or German hair-markets. We have recently seen it stated in an American paper that the hair-dealers of Canton, from whom large supplies of black hair are received for the manufacture of 'rats,' have been discovered exhuming corpses for the sake of the pigtails. The Chinese Government is said to be taking steps to stop this new kind of burking. We trust it will be successful in its efforts, for the traffic in dead hair is dangerous from a hygienic as it is hideous from an esthetic point of view. But what will not the devotees of fashion risk in the pursuit of their crazy cult? The trade in human teeth used to be highly profitable, and Bransby Cooper in his biography of his famous uncle gives an account of resurrection men who followed the troops in the Peninsula to get the teeth of the fallen soldiers, for which they got high prices in London."

A recent press dispatch quotes official figures from Washington showing that large quantities of human hair are being exported from Japan:

"Last year Kobé alone exported to the United States \$27,608 worth of human hair. This hair has steadily risen in price and now commands \$70 per 100 pounds. Fashion's decree has increased the demand in this country, and the purchase price has jumped \$15 per 100 pounds within the last twelve months."

BASEBALL BY ELECTRIC LIGHT

ALTHO little has been heard of the plan for illuminating baseball-grounds by electricity since it was tried in Cincinnati in the summer of 1909, the promoters are still working on it and trials made in Chicago a few weeks ago on a much larger scale "have demonstrated beyond doubt," says *The Electrical Review and Western Electrician* (Chicago), "that it is possible to light up an athletic field so brilliantly and evenly that any kind of game can be played by night as well as by day." We may soon hear even of the electric illumination of golf links, remarks the editor, and may, indeed, be able "to participate in any work or play by night as well as by day." Of baseball lighting we read:



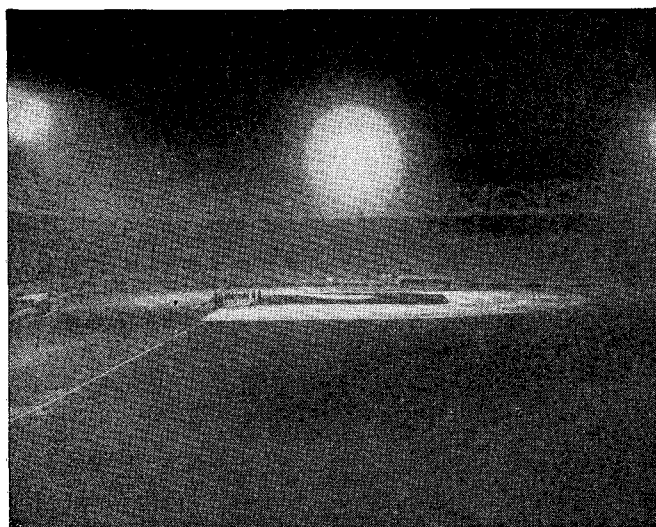
HOW THE "WHITE SOX" FIELD LOOKS BY ARC-LIGHT.

"Probably the most difficult problem in outdoor lighting of this class is the satisfactory illumination of a baseball field. Because a fly ball might strike any lamps suspended above the field, it is necessary to place the lamps on the edges of the field and so direct their light as to illuminate every part of the ground. Moreover, considerable light must be directed up into the space over the field so that the path of the ball may be easily followed. At the same time the lamps must produce such a diffused light that there is no more trouble from glare than on a sunny day."

From an illustrated article on the Chicago installation in a different part of the same issue, we glean these details:

"The system . . . provides for placing a limited number of very powerful flaming arc-lamps at some height along the edges of the field and directing their rays so as to illuminate the field quite uniformly without producing uncomfortable glare in the eyes of the players or spectators.

"For such games as baseball, where the ball is apt to be thrown high in the air, additional lamps are provided for lighting the space above the field so that the ball can be clearly



Illustrations used by courtesy of "The Electrical Review and Western Electrician," Chicago.

FROM THE BLEACHERS

The glare from the lamps is "not as troublesome as facing the sun."



FROM THE GRAND-STAND.

Evening baseball may soon threaten the profits of the theaters.

READY FOR AN EVENING GAME.

observed throughout its course. In the new installation at the 'Sox' Park these latter lamps were used for the first time, ten of them being placed in groups of two on the ground at the edges of the field, while ten similar lamps were mounted on top of the grand stand for the general illumination of the field.

"These lamps were placed at a height of nearly eighty feet from the ground and were grouped as follows: four on the edge of the roof on the first-base side, two similarly placed on the third-base side, two on a tower over the right wing of the grand stand, and two on a similar tower over the left wing.

"Hinged screens were provided for the roof lamps and these were swung out in front of the lamps to shut off the brightest and most direct rays from the eyes of the baseball-players. The tower lamps, being more remote from the diamond, were not screened. Being placed over the roof line, the ten high lamps did not throw an objectionable direct glare into the eyes of the spectators.

"The ten ground lamps were placed in groups of two, as follows: a group on each side of the home plate and close to the edge of the grand stand, a group near the edge of the center field, a group near the edges of the right and the left fields. A screen in the form of an arc was placed about ten feet in front of each of these groups to shield the players from the direct rays of the ground lamps."

With such an installation, the writer tells us, various lighting effects are possible. For games using the entire field the light may be uniform over the whole area; for games using the diamond or any other special portion of the field that portion is intensely illuminated and the remainder less brightly. The ground lamps are used chiefly while playing baseball. The following paragraph tells briefly the success of the scheme in actual games of lacrosse, football, and baseball:

"After a preliminary trial on August 23, the lighting system was tried out on three successive evenings for different games. On Thursday evening a game of lacrosse was played and, altho the ball used is a dark rubber ball, smaller than a baseball, little difficulty was met with in following it throughout the game in all parts of the field. On Friday evening a soccer football game was played without a hitch from lack of light; it was possible to observe all the details of the play even at the remote goal.

"On Saturday evening there was a game of baseball that was played fully as well as during daylight. This was the most severe test of the lighting system, but the ball was clearly observed at all times. Altho played by only semi-professional players the game was finished in one hour and ten minutes with a score of 3 to 0 showing that no difficulty was experienced by the players. . . . The players did not complain of glare from the lamps, some contending that it was not as troublesome as facing the sun."

EVERY MAN HIS OWN ICE-MAKER

THE PROSPECT of "an ice-plant in every flat" is held out to New-Yorkers by the New York Edison Company.

The ordinary lighting current will run the ice-machines, and the plan is expected to save money both for the users and for the company, which will thus be able to dispose of its waste current at a profit. Says the New York *Evening Post*, in an article based on an address which was recently delivered by Thomas E. Murray, general manager of the company, before the Association of Edison Illuminating Companies at the Thousand Islands:

"Those who favor the new scheme declare that it will mean a considerable reduction in the year's ice-bills. The electric refrigerator will furnish ice—or cold storage, which amounts to the same thing—more economically than the ice man. How much cheaper it will be, they are unable to say. The chief interest, of course, is in the increase of income to the monopoly and the saving of expense of maintaining a score of idle power plants during the summer months. . . .

"By combining the ups and downs of the ice-business with the downs and ups of the light-business, those who supply electricity to the city hope to create a constant demand for their commodity. If this can be done, they declare, it will mean cheaper electricity all along the line. At present the innocent consumer must pay in part for the electricity he does not use in summer. It is included in his winter light-bill. . . .

"The method of distributing this new commodity—'electrified ice,' it might be called—will be far simpler than that employed in the case of the common or garden variety upon which the ice-man grows fat and prospers. It will be distributed by wire. The same wire which carries the current to light the home will also serve to operate the refrigerating-machine. Ice will not be manufactured in the stations and carted through the city. Each home will have its own miniature plant.

"At least, that is the plan of the city's future purveyor of cold storage. Many apartment-houses and hotels to-day have their own ice-plants, run by electricity, so that the new system will be merely an adaptation of this idea. When the ice season arrives, the company will furnish the seeker after cold storage with an ice-box, ice-machine, wires, push-buttons, and—a meter. The amount of cold storage used will be measured in the same fashion as one's gas, water, and electric-light bills are recorded.

"There is a machine, all but perfected, which will make the new venture possible. In it the flat-dweller will be able to get three different grades of cold. By turning a switch he will get a moderately cool temperature in his ice-box. By turning it still further the temperature will stand almost at freezing. A third turn will produce an arctic climate, if desired.

"All this, it is said, can be done with little alteration to the present equipment of the power-stations."