interesting and comparatively innocent plant, though uncomfortable to those who come too close to it. It contributes a picturesque feature to an otherwise monotonous landscape and bears a delicious fruit for those who like it. But in the fresh fields and pastures new of Australia it flourishes better than on its native heath. The individual clumps measure ten to thirty yards in circumference and often stand so close as to be hog-tight. Survey parties have to chop a path through it in plac When it is cut off the crop weighs 700 to 1000 tons peracre. In New South Wales where four million acres are more or less infected theannual loss is estimated at $2,500,000.

How to get rid of the prickly-pear, or at least check its further spread, has been the subject of an investigation of a commission of the Commonwealth under the scientific control of Dr. T. H. Johnston of the University of Adelaide. His conslusion, as expressed to the Wellington meeting of the Australasian Association for the Advancement of Science, is that chemical means of extirpation, such as poisoning by arsenic, are so expensive as to be prohibitive, and that there is no probability that cactus can be turned into a source of income, as has been the case with another pest innocently introdnced, the rabbit. He regards the prickly-pear as of little value as fodder for sheep or cattle. It has been found in New Mexico and South Africa that the juice of the fruit can be fermented and made into alcohol, but this, he concludes, could never be made profitable. There remains only the biological method of attack and Dr. Johnston proposes to draft into the warfare various sorts of bugs and worms, beetles and weevild, bacteria and fungi, that have been found preying upon the cactus in any part of the world. These, the natural enemies of the pestiferous plant, would attack it attall points, root, stem, segment and fruit, and by keeping up the conflict day and night may accomplish what man cannot do directly.

It is an ingenious plan of campaign, but there is always the danger that the insect or parasite introduced to attack the cactus may find the crops as good or better feeding, and so the allies desert to the side of the foe. The lesson of it is that a nation cannot be too careful what sort of immigrants it admits, be they vegetable, animal or human.

CONVENTION PHOTOS SENT BY WIRE

Photographs taken at the Republican National Convention in Cleveland were transmitted by wire to New York, where negatives prepared from them were made available for press distribution. This service was a further test of the invention of a method for the rapid wire transmission of photographs, announced recently by the American Telegraph and Telephone Company, and demonstrated before an audience of newspaper people in New York and Cleveland.

A transmitting machine was installed in the Cleveland Discount building, and the one and only receiving apparatus was located in the Telephone Building at 195 Broadway, New York. The transmitting and receiving equipment were connected by a long distance telephone circuit and were in operation daily throughout the convention. Regarding the futures of the invention, officials of the company said that the extent to which it is installed on their long distance lines will depend entirely on the demand which arises for such a type of service.

The system is the outcome of work covering several years and provides a simple, rapid and accurate method for transmitting pictures which will operate over a telephone line. The simplicity of the method is such that a postive transparency

film is suitable for transmission. The apparatus is designed to transmit a picture five by seven inches in a little less than five minutes and the picture is received in such form that after photographic development of the usual sort it is ready for newspaper or other reproduction. As films can be used for transmission while still wet the system eliminates any delay due to drying.

SIMPLE SCIENCE

By WOW

BUTTER

Among edibles cows may not seem to possess as many lines of beauty as some others, but they are beautifuler than pigs. Pigs are a complaining class also whereas cows are more philosophical and even tempered, which is a great aid to the development of grace, poise and beauty of form. Cow language again, although at times a bit too strong for city use, is accommodated quite nicely in the wide open spaces of the country.

Whatever cows may lack in beauty of form and language they make up in beauty of usefulness. Pigs come next. Cow and pig meat are easily first and second prize Then again milk comes from cows and butter comes from milk. What is more charming than a pot of lovely fresh yellow country butter.

Butter is usually made in a dairy. This word is derived from the old English word "dey", which meant a farm maid-servant, because it was she who used to churn the butter. In the present servantless days it is made either by the wife or by machinery and the dairy may be the back porch, if the flies are not too bad, or the cellar or the factory.

Butter fat occurs in milk in the form of very small round globules which do not stick together unless rather violently shaken. They stick together the most readily if the temperature is between 56 and 62 degrees. The churning should be done slowly at first, then more rapidly and finally slowly again. Real expert buttermakers find no difficulty in the work but amateurs often find the problem very exasperating and very trying on the language.

Poor butter is usually caused by two conditions. It may be due to the presence of the wrong kind of bacteria which gain admittance when the cream is not kept in a clean place, or is kept at the wrong temperature. Buttermakers of good reputation nowadays cultivate lactic acid bacteria which they call a starter, and they impregnate the cream with them, thus developing a nice flavor in the butter, Then again if the buttermilk is not thoroughly washed out the butter retains too much of the casein, which tends to cause rancidity. Butter usually contains about 85 per cent, of fat, from 10 to 15 per cent, of water, a little casein, milk sugar, salt, etc.

Some butter is firm, other butter is infirm. Some is renovated, some needs it. Some is greasy and some is streaky. Some is yellow from June grass, some from yellow eyes, but most of it is useful for lengthening lives.
