ALL FROM A KERNEL OF CORN.

Chicago, March 8.—A company with 80 million dollars capital completed its organization in New York this week and it is to deal in nothing else than corn—buying the shelled grain, manufacturing it into thirty or forty products and selling them. The Corn Products company is the corporation's name, and it controls the Glucose Refining company, a combination in itself; the Pope Glucose company, the Illinois Sugar Refining company, and the National Starch company, another combination. All these companies are to be conducted as independent concerns, but the Corn Products company will be in control, and the usual "community of interests" plan will be followed. In one year this concern will use 75 million bushels of cash corn—all to become manufactured products. Every week means 1½ million bushels bought. Kansas in its normal years raised 200 million bushels, and all except about 25 million bushels remains in the state as food for hogs and cattle. The Corn Products company will use in one year three times the surplus Kansas may have left from a normal crop. It will consume as much corn as all Europe buys in a small export year, and nearly half as much as the Europeans take in big export years. A difference of ten cents a bushel in price means 7½ million dollars to the products company. That's the kind of a corn customer this 80 million dollar company is to be. The by-products of Indian corn make the concern possible.

The average farm boy, hoeing between the lanes of tall corn stalks, thinks the product of his long labor in the hot summer days means only feed for cattle and hogs, the rest to the distillery, with probably a very small portion for corn meal. Some may have heard that the corn becomes glucose or starch, but it would be hard to convince these lads that they are growing grain that may find its way into beer, corn oil, sugar, rubber, mucilage, gum drops, wall paper, soap, ink, salad dressing, calico or a dozen other materials. It is hardly a matter of twenty years since corn began to find its way into these products to a large extent. Sixty years ago it was fed only in the grain for the animals and ground for men to eat or drink. Corn starch made from corn was unknown. Thomas Kingsford, an Englishman transplanted in New Jersey soil, was making starch from wheat every day seventy years ago in Colgate's factory in New Bergen, and when he suggested taking the starch from maize he was discouraged and even ridiculed. It was in 1842 that he solved the problem and brought from corn its first by-product aside from whisky and meal. Now practically all the starch made in the United States is from Indian corn. It was nearly forty years after Kingsford's discovery that the great family of derivatiers was born, and every day chemists are working on the little kernels, digging for new sources of wealth.

The Little Germ is Overlooked.

There are four parts to a kernel of corn—the outer covering, the hull or bran; then the hard, flinty or glutenous part, then the starch and last the little white point which extends through the tip and is called the germ. Of the four parts the germ, about the size of the wheat kernel, is the most interesting and, when its weight is considered, the most valuable. Its history is like that of the cotton seed, for only a few years ago it was looked upon as a nuisance and the starch and glucose manufacturers spent money to get rid of it. Machines cracked each grain, the mass was given a bath and the light germ floated out while the starch, bran and gluten remained behind. After the chemists found that the dispised little germs contained an oil worth more than any other constituent of Indian corn the waste ceased. Now the germs are put under hydraulic pressure of something like two tons to the square inch and the oil is squeezed out of them. The little coats of fibre left become a base for oil cake and go back to the cattle.

Corn oil is of golden color, transparent and so sweet and pure that it often serves as a substitute for olive oil. Unlike other vegetable oil, it will stand for years in any climate or temperature without changing its color or becoming rancid. In the office of Dr. T. B. Wagner, chief chemist and vice president of the Glucose Syrup Refining company, stands a flask of oil that has been there for three years and it is as sweet and clear as the day it was made. For a barrel of 380 pounds the manufacturer in Chicago gets about $23, or six cents a pound—nice price for what was thrown away a few years go.

In the manufacture of paints corn oil is said to be of greater value than linseed oil. The corn product is less readily oxidized than the other vegetable oils and white paint made from it remains white, while that made

MR. COBURN, OF KANSAS, IN JUNGLE OF STARCH, GLUCOSE, RUBBER, CONFECTIONERY, ETC.