

sodium acetate is ground and put on a conveyor and sprinkled with the theoretical amount of sodium acid sulphate being of course the niter cake from the nitroglycerine plants, and this mixed powder runs into a horizontal tube with a screw conveyor in it, the tube being heated to a temperature by which double decomposition takes place, forming normal sodium sulphate and acetic acid. The acetic acid goes over to a catalizer which is used to convert the acetic acid into acetone. Those who are interested in that catalysis can look up Dr. Squibb's *Ephemeris* of about 1896. He worked the problem out very thoroughly.

The acetone, containing some acetic acid goes into some separators or evaporators and condensers by which the acetic acid is returned and the acetone is separately condensed as crude acetone, and then is distilled in the ordinary beer and column still of the American type, which was originally put up on the European continuous type, but the workmen being more familiar with the American type have converted it into the familiar style. But the acetone product is very pure and quite a little ketone oils are saved and the potash is sent out as potassium chloride and not as potassium sulphate, and of considerably over the standard 80 per cent.

I think that this represents a fairly good utilization of kelp and it is quite possible that even in normal times this plant may continue. The initial costs were very heavy, but having once put in the investment and as the capital is returned quickly under war prices, they need not consider capital investment, and the operation is not very expensive.

The Oregon lakes have been touched on. Analyses were given of the lime in the Summer Lake. I saw the Abert Lake, which is about 30 miles north of the last railroad in northeastern California, which is said to be similar to Summer Lake, but being 30 or 40 miles from the railroad the conditions are rather unfavorable so far as freight rates are concerned. Although they have potash in their waters, there seems to be some doubt as to how much. This I did not test.

I am reminded here by the present discussion of the deposits in Nebraska that on the side of this lake, the Salt Lake, there is a spring of what seems to be practically fresh water, with fish in it, coming up from an unknown depth and with a very strong flow of water, so that seemingly the salts that are found in those lakes do not come from underground sources. And I may say that 35 miles