AGRICULTURE

NATURE RAMBLINGS by Frank Thone

Hybrid Corn's Conquests

HYBRID corn, one of the biggest things that has happened to American agriculture in its whole history, struggled for recognition for more than a decade. Even three years ago, only a comparatively narrow strip in the heart of the Corn Belt, from eastern Illinois to central Iowa, was sufficiently sold on the hybrid corn idea to devote as much as half its farm acreage to it. But last year the whole farm belt "went hybrid" with a bang: the 50% mark was passed for its acreage as a whole, and the percentages for the three main states, Iowa, Illinois and Indiana, were 88, 77 and 66, respectively, *The Nation's Business* reports.

Increasing radically as it does the yield per acre (100 bushels to the acre is not uncommon), hybrid corn makes possible an increased yield per farm, but at the same time a decreased acreage devoted to corn, which is a soil-costly crop because it requires clean cultivation and thereby exposes the soil to water erosion on sloping fields. Its roots go deeper than do those of the old-type corn, thereby bringing up plant nutrients and moisture from levels formerly beyond corn's reach. Its straight, strong stalks stand up better against summer windstorms, and are more easily handled by corn harvesting machines. Taken altogether, hybrid corn is nothing less than an agricultural revolution.

It has also revolutionized agricultural practice in another respect. Seed-corn of the old type was seldom purchased. The farmer simply picked out the best-looking ears from his crop and saved them. All too often that fine appearance concealed hereditary weaknesses. But there was no other way of selecting seed; and the method had at least the virtue of providing seed at little cost. Hybrid corn seed, however, has to be raised by specialists and purchased by the farmer every year. And it is not cheap; it costs from $4 to $8 a bushel. Nevertheless, the increased yield is so great that the expense seems worth while to most farmers.

Areas outside the Corn Belt, especially in the drier lands to the south and west, from Nebraska to Texas, are now beginning to come into the hybrid corn empire. New varieties will have to be originated, to cope with the more severe summer heat and drought of that region, but they are already on the way. Hybrid corn has conquered.

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RESOURCES

Cosmetics Not To Be Rationed, Regardless of War Emergency

Substitutes From Native Resources Replacing Imports; Changed Formulae Can Yield Satisfactory Products

YOU can relax, girls, and use that bright red lipstick and the rest of your beauty kit freely. Washington does not share Hollywood's alarm that great defense industries will get into the hair, so to speak, of the feminine beauty and charm trade.

True, some chemicals that go into lipstick, rouge, cold cream and other cosmetics are also stuff that explosives and war goods are made with. But, America knows its resources better these days, and there is a confident feeling among officials and drug trade experts that the United States can contrive a satisfactory substitute for almost any cosmetic material that may be diverted to defense channels or be blockaded from our shores.

Talc for talcum powder, for instance. Italy used to be a mainstay source and American manufacturers who looked providently ahead laid in stores of the Italian talc which now come in handy. Meanwhile, talc shipments come from India and other Far East countries and America's own sources of talc are getting attention. Our own talc is not so easy to convert into fine powder, but it can be done.

Important in face powder is zinc oxide, which is considered irreplaceable in making rubber, and is widely used in paints, galvanizing and automotive industry. Face powder can get along without zinc oxide if need be, by using titanium oxide and making some other changes in the formula.

There are cosmetic substitutes for nitrocellulose, which is a nail polish material and at the same time material for munitions and airplane wing coatings. And cellulose products, after all, can be produced in this country from our own wood pulp, cotton linters, cornstalks, peanut shells, and many another plant material.

Bromine and other chemicals used in lipstick dyes are not getting in the way of defense industry needs at present. If they should, substitutes can be evolved, a chemist explained. And so it goes, with prospects of need for resourcefulness in some cosmetic production, and possibly new formulas for old. Chief headache of manufacturers is more likely to be shortage of experienced workers than material, one official foresees.

With no need to worry that American women will have to go back to nature, or rub beet juice on their lips and rose petals on their cheeks, a la Victorian grandmothers, the 1941 cosmetic prospects are for brighter and gayer faces. Shy colors of 1940 are giving way to patriotic reds. And cosmetic manufacturers look to a widening market, as more women get defense industry jobs and have money to spend on charm and beauty.

That cosmetics have become a necessity for feminine happiness, instead of a luxury, as they once were is the view of one government official who deals in the safety of such products. Women lean on cosmetics for backbone, is the way he puts it. We could do without them, certainly, if we should have to choose between beauty goods and things needed to maintain life. But there is no sign on the horizon that American women will have to take the grim stand that British women have had to take since December —getting along with 25% of the normal manufacturers' output of these cheerful aids to living.

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Ants can go without food for months, and stand freezing cold and submergence under water for days.

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