Again, I suppose, it is too late now. After ten years nothing has been done. If we revised the Pharmacopœia as it ought to be revised, we would insist on the right standard after having given people an opportunity to raise stramonium. We can raise, without trouble, stramonium on good garden soil, and we can raise it on poor agricultural soil with 0:35 percent alkaloidal content. But, as long as the Pharmacopœia calls for 0.25 percent, there is no use trying to raise stramonium with 0.35 percent.

The people down south can go and collect a handful of stramonium and take it to the corner-grocery and get their pipe of tobacco, or bottle of whiskey for it. That is the way drugs are frequently collected. As Dr. Stockberger has remarked, our "crude drugs" are frequently exceedingly crude.

I do not want to take up too much of your time, but I might say a word about the present war-situation. I am not a believer in war, and I do not know that there is any justification for the war. But if we had had warning that this war was coming, and known the result, we might have produced sufficient thymol for the United States in northwestern Wisconsin. However, it is too late now.

Monarda punctata grows freely in the sandy areas along the lower course of the Wisconsin river. This plant yields from one-half to one percent of volatile oil, fifty percent of which is thymol. Whereas the related species, *Monarda fistulosa,* grows abundantly on heavier soil, it seems difficult to propagate the former species in the heavier soils of our gardens or farms. Nevertheless *M. punctata* may be improved by cultivation on poor sandy soils. Thus it has been shown that a straggling wild plant, when transplanted and cultivated, is greatly improved. The former may be a foot or two high, with a few straggling branches six inches long. After cultivation in the same soil, this same plant could not be covered by a bushel basket.

In connection with this plant, a few observations have been made that throw some light on the attitude of animals toward plants. Both *Monarda fistulosa* and *M. punctata* grow wild in the meadows, but neither is touched by grazing cattle. However, if the oil, which, as already stated, contains fifty percent of phenols, is removed by distillation, cattle and sheep will feed on the exhausted material. During a summer that produced a scarcity of hay, such exhausted *Monarda* was sold for the price of hay.

Man's relation to the genus *Monarda* is very similar. Thus *Monarda didyma* has long been used as a substitute for tea but not the botanically related *punctata* or *fistulosa.* Whereas the latter contain a fair amount of volatile oil, fifty percent of which consists of phenols, the former contains but a trace of oil, none of which is phenolic in character.

The behavior of cattle toward wormwood is quite parallel. In some of the wormwood fields, cattle are used, up to a certain stage in the development of the plant, for weeding. They will keep down the grass without eating the wormwood. However, after the oil has been removed by distillation, the exhausted herb is eaten by the animals. Hence, wormwood culture and cattle raising have developed hand in hand.

No doubt, there are a number of medicinal plants that might be cultivated advantageously. However, we must not play with the standards, as we have done in the case of stramonium. Moreover, we must learn much more about the cultural conditions, as illustrated by the monardas, plants so well known in the wild condition, but which we have not yet mastered for economical purposes in garden and field.

ACTION OF PEPSIN AND TRYPSIN ON ONE ANOTHER.

Excess of trypsin inhibits the digestive action of pepsin in acid solutions, and excess of pepsin hinders the digestive action of trypsin in alkaline media. In both cases the inhibition is directly proportional to the amounts of the enzymes present.—E. S. Edie (Biochem. J., Chem. Abstr. Amer. Chem. Soc., 1914, 8, 2399).