No. 10, R

Sodium salicylate 3 i
Calcium bromide 3 ii
Sol. potass. hydrox. 5 i
Elix. peptenzyme q. s. 5 iv
Misce et Sig: Teaspoonful in water every 3 hours.

Why liquor potassa was added is beyond my understanding—calcium hydroxide is formed, which is insoluble in the mixture. Elixir peptenzyme contains pepsin, which is destroyed in alkaline mixtures.

## THE LAXATIVE PROPERTIES OF RHAMNUS ALNIFOLIA.\*

## A PRELIMINARY REPORT.

## BY ALVA COTTON AND L. K. DARBAKER.

During one of the annual botanical expeditions to the Pymatuning swamp, Professor O. E. Jennings, Head of the Department of Botany of the University of Pittsburgh and Carnegie Museum, called the attention of one of the writers to *Rhamnus alnifolia*, which grows abundantly in some parts of the swamp.

The shrub Rhamnus alnifolia differs but little from the general description of the shrubs of the Rhamnaceæ. It is a low-growing shrub, inhabiting swamps from Maine to Pennsylvania, Illinois and northward. The leaves are ovate, with an acute apex, serrate margin and almost straight-veined. The shrub flowers in June; the flowers are small, inconspicuous and of a greenish color. The fruit is drupe-like, three-seeded and blackish in color.

As this plant is related to Cascara Sagrada, it was suggested that it might have similar laxative properties and, if so, perhaps be used in the same manner as Cascara Sagrada. During the summer of 1930 and 1931 bark and leaves were collected, dried and made into fluidextracts, without aging.

After some experimentation upon animals, the fluidextracts were tried upon humans. It was demonstrated that the fluidextracts made from the bark of *Rhamnus alnifolia* produced laxative and cathartic actions similar to those produced by Cascara Sagrada but approximately twice as much was necessary to produce the same results as with the Cascara Sagrada.

The leaves also contain laxative principles but in such small amounts as to render the fluidextract unsatisfactory for human use.

From these preliminary experiments it would seem that the bark of *Rhamnus alnifolia* could be used in the same manner as that of Cascara Sagrada, with the disadvantage of a larger dose but with the advantages of less griping and it not being necessary to age the bark.

First Aid Week, March 12th-19th, should mean a week of service. Advise your patrons of the necessity of care and the purpose of a label on medicines.

<sup>\*</sup> Scientific Section, A. Ph. A., Toronto meeting, 1932.