RESEARCH NOTES

PLASTIC CANNULA FOR RUMEN FISTULA

A plastic cannula made of polyvinyl chloride[1] (fig. 1, A) has been developed by this Station to be used as a plug for rumen fistulas. The cannula

FIG. 1—A, Plastic cannula in place in rumen fistula; B, parts of plastic cannula.

consists of three parts (fig. 1, B): An adjustable flange, a threaded nipple with a fixed flange, and a plug. The diameter and length of the threaded nipple are $4\frac{1}{2}$ and $4\frac{3}{4}$ inches, respectively.

[1] Lock Joint Pipe Co. of Puerto Rico, Plastic Products Sales, Hato Rey, P.R

The operative procedure consists in making an incision large enough for the adjustable flange to pass through skin, muscle layer, and rumen wall into the rumen. Both skin and rumen wall are then sutured together. The adjustable flange is inserted into the rumen through the incision and the threaded nipple with the fixed flange is screwed on.

The cannulas were found to be durable and nonirritating. They can be removed and replaced with a minimum of discomfort for the animal; they require little attention, and are of moderate cost.

The function of the cannula is to serve as a plug for rumen fistulas in animals with normal rumen microflora kept under proper environmental conditions. Rumen fistulas are used in the collection of samples of rumen contents, for *in vitro* cellulose digestion or artificial-rumen techniques[2], for rumen-evacuation procedures[3], and for other studies related to ruminant nutrition.

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