NOTES

A SIMPLE METHOD OF SELF-POLLINATING COTTON FLOWERS

A NUMBER of different methods of self-pollinating cotton flowers have been described. In 1912, Gilbert reported a method which consisted of coiling fine copper wire in a spiral around the enlarging flower bud, making one end of the wire fast to the base of the petals and doubling the other end over the tip of the bud. The coil prevented the petals from opening and the doubled end served to retard entrance of insects. In 1913, Meade described a method in which gem paper clips were placed over the unexpanded corollas. In both methods, attaching tags for identifying selfed bolls was an additional operation. In 1926, Kearney and Porter described their method of bagging Egyptian cotton flowers in Arizona. The method consisted of placing small paper bags over the flower buds the day before opening. The bags were then folded and made fast with a pliable insulated wire. The writer has used the paper bag method successfully by folding the bag tightly around the flower pedicel and making it fast with a paper clip. Ballard, in 1934, described a method in which a small paper cone was slipped over the unopened corolla and attached to the fruiting branch by a small copper wire. Another method, which is quite commonly employed by breeders, is that of snapping a small rubber band around the tip of the unopened corolla and tagging the selfed boll with a small marking tag.

Instead of attaching paper marking tags, some breeders prefer to use strings knotted around the boll pedicel. Where the tags bear any kind of an inscription, only those of the highest quality should be used; and even then, the legends are sometimes destroyed by wasps. Numerous other methods, published and unpublished, find local usage and adherents who claim certain conveniences or advantages.

The writer has employed practically all of the methods described, each of which has certain advantages; but some of these, it is felt, are largely theoretical and may be offset by laboriousness or other objections. The number of flowers to be selfed, the object of the selfing, and the amount of time or labor and materials available to do the work are, of course, the most important factors determining choice of methods.

During the season of 1935, a new method, or rather a new combination of methods, of selfing cotton flowers, was developed which seemed to be reasonably safe and was less time-consuming than other methods tried. By this method a small merchandise marking tag, strung with a 7-inch double strand of 28-gauge copper wire, is looped around the boll pedicel and the wire coiled loosely around the un-