

sleeved, so as to protect the wrists. These are shown in Fig. 8. They are generally too thin to ward off stings, but a very thin coating of linseed-oil will make them sting-proof, though rather stiff.

The lower openings of the trousers must be closed either by bicycle-clips, pieces of string, or by tucking them into the socks. Boots are, of course, preferable to shoes.

LADIES' COSTUME.

A famous lady bee-keeper thus describes her costume: "A shirt-waist with some light-weight worsted skirt makes a very good work-dress. Under this I wear a divided skirt made of the same material as the dress. A pair of leggings starched stiff reach from the boots to above the divided skirt, the latter being pulled well down on the leggings.

"To the top of the bee-gloves is sewn a pair of sleeves, usually cut from a man's worn-out shirt, having them long enough to reach well up over the shoulders, where they must fit rather closely so that bees cannot crawl inside. These are fastened together with a piece of white-rubber tape, 1 inch wide and 4 or 5 inches long, sewing each end of the tape to a sleeve. Fasten in the same way in front, only instead of sewing one end of the tape to the sleeve, work a button-hole and sew a button on the sleeve. In this way your sleeves and gloves can be slipped on or off quickly, and are perfectly safe so far as stings are concerned. A big apron with a couple of good-sized pockets finishes up the suit.

"Then, if you have a good bee-hat with a veil sewed securely to the edge of the brim, and a rubber cord run in the bottom edge, and pull the veil down tight in front, and fasten with a safety-pin. I think you may feel pretty secure from stings, and not suffer very greatly from the heat."

CHAPTER V.

Hives.

The beginner in bee-keeping ought at once to get acquainted with the parts of a hive, also the principles that are involved in its construction. On seeing one for the first time, he might be tempted to assume that the structure in which the bees are housed is a solid piece of carpentry, but examination will show it consists of at least a dozen movable pieces, and even this number is increased in the active months of the year—June, July, and August.

Let us suppose that the reader and the writer are going to examine a hive together, and that the latter is going to explain things a little as the inspection proceeds. We will therefore start with a modern hive on the stand, and since we are not side by side in reality, the writer will bring photography into play, and, as far as possible, illustrate each feature that is deemed worthy of notice.

First, we get the smoker going, then put on our bee-suits. All being ready, we stand alongside the hive, which will appear as in Fig. 10—that is, if it is a ten-frame Langstroth. Looking at it even casually, we observe that, like a dwelling-house, it has a roof, side-walls, and a foundation. These three are definite and distinct parts; furthermore, they are essential features of every modern hive. If you take hold of the roof you will find it to be removable, sometimes with a little difficulty, as the bees have a habit of fastening it down tight to the walls with propolis, so as to prevent the escape of heat from the interior. Just keep this little fact in mind, for as we proceed with our investigations we will learn the reasons for the bees' desire to keep warm the inside of their home. Fig. 11 shows the hive-cover removed. So far we have not seen the inside of the hive, because on lifting the cover we find a cloth quilt just underneath. This may be made of any kind of fabric that will retain heat, but ordinary table oilcloth is generally preferred, with the glossy side turned