To all whom it may concern:

Be it known that I, FREDERICK A. DILLINGHAM, a citizen of the United States, and a resident of the city of Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Umbrella Top-Notchers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

My invention relates to umbrella top-notchers, that is to say, to the devices employed in umbrellas to retain the ribs of the umbrella at the top. In top-notchers of the past it has been customary to retain the ribs by hooking them over a ring member supported in some desired manner, and holding the hooked ends over the ring by means of a cover member which was fixed to the umbrella supporting rod. These structures, besides being somewhat inadequate to withstand the strains in a large umbrella, are very troublesome when it comes to repairing the umbrella. The moment the cover member is removed in such top-notchers, the entire set of ribs are released from the ring over which they are hooked. It then becomes a troublesome task to get them all back again, because they all have to be held until the cover member is down.

This difficulty is also present in the assembling of the umbrella, but its greatest inconvenience is apparent when it is necessary to replace one rib which is broken or bent. At such time not only is the task of keeping all the ribs from springing out laborious, but the cover member has to be nailed to the umbrella rod, and the nailing of it back again cannot be done in a very secure and lasting manner.

Accordingly it is the object of my invention to provide a top-notch in which the ribs are held separately on the common retaining ring, and in which the cover plate has no function except to prevent the rib retaining member from rotating around the umbrella rod.

These objects I accomplish by that certain construction and arrangement of parts to be hereinafter more specifically pointed out and claimed.

In the drawing:

Figure 1 is a central, vertical, sectional view of the top-notch in place on an umbrella rod.

Fig. 2 is a like view, showing the cover member raised and one of the ribs about to be removed from the top-notch.

Fig. 3 is a top plan view of the blank from which the device is made, showing several of the tongues bent over.

Fig. 4 is a like view of the same formed up ready for use.

Fig. 5 is a perspective view of the cover member.

Fig. 6 is a side elevation of the parts shown in Fig. 3, except that the tongues are all raised.

1 is the umbrella rod which is cut away at the top to form a shoulder 2 on which the top-notch is seated. In forming the top-notch, a blank 3 of metal is cut with a series of radial tabs 4 and stamped out with the central portion of the blank turned up in a series of tongues 5 located between the said tabs. A metal ring 6 is then placed over the blank in a proper machine and the tabs 4 bent around the ring, with the intermediate tongues standing up, adjacent the apertures 7, left in the completed piece by the spaces between the tabs.

The umbrella ribs 8 are bent, as is customary, to form hooks 9 at their upper end and the hooks are hooked over the ring by inserting the ends of the hooks through the slots or apertures 7. The tongues are then bent down, one over each hook and serve to retain each hook permanently on the ring so that they may swing thereon, but so that each hook has a separate retaining tongue.

The top-notch so formed is set over the umbrella rod so that it rests on the shoulder 2, and it is evident that some means is necessary to prevent it rising up on the rod when the umbrella is in use and to prevent the whole device from turning around on the rod.

For this purpose the cover plate 10 is provided. This plate has a central collar member 11 which is to be tucked in any desired manner to the umbrella rod. It fits down closely over the top-notch member and is dented in at 12, 12, in several places preferably, so as to engage between several of the bent over tongues. This will stop the rib retaining member from turning around on the rod, and also will prevent the same from rising up off of the shoulder thereof.
It is not believed to be necessary to show the umbrella cover, it being understood that it may be secured over the ribs in any desired manner.

It is evident that the various objects here-fore mentioned are adequately accomplished by the structure now fully described. For removing any rib, it is necessary to raise the cover member and pry up the tongue that retains the rib that it is desired to remove. The rib may then be taken out without disturbing any of the other ribs. Moreover the ring retaining member is not secured to the umbrella rod, and does not have to be unfastened to release it.

It is not desired to be limited in the claims that follow to specific structure where the wording of the claims does not negative a broad interpretation, because there are various equivalent structures which would accomplish the spirit of this invention, which is the providing of a top-notch which separately retains each umbrella rib.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an umbrella top-notch, a ring member over which the umbrella ribs are to be hooked, means for mounting said ring, said mounting means having means integral therewith for retaining the ribs on the ring, and a cover member secured to the umbrella to hold said ring mounting means in fixed position thereon.

2. In an umbrella top-notch, a ring member over which the umbrella ribs are to be hooked, means for mounting said ring, means for retaining each rib separately on the ring, said means integral with the mounting means for the ring, and a cover member secured to the umbrella to hold said ring mounting means in fixed position thereon.

3. A top-notch comprising a ring member, a retaining member therefor, having apertures for the insertion of ribs on the ring by hooking them over the same, tongues on the retaining member located adjacent to the apertures, and a cover plate secured to the umbrella and adapted to hold the top-notch from rising or turning thereon.

4. In an umbrella top-notch, the combination with an umbrella rod, of a ring member over which the umbrella rings are to be hooked, said ring member loosely mounted on the rod, and a cover member rigidly attached to the rod, and having means thereon for maintaining said ring member in non-rotatable position on said rod.

5. In an umbrella top-notch, a metal piece having a series of radial tabs, a ring, said tabs bent around the ring, and tongues adapted to bend down over the spaces intermediate the tabs, for the purpose described.

6. In an umbrella top-notch, a metal piece having a series of radial tabs, a ring, said tabs bent around the ring, and tongues adapted to bend down over the spaces intermediate the tabs, and a cover piece having depressions to fit between the tabs and rigidly mounted on the umbrella.

FREDERICK A. DILLINGHAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."