No. 753,708. PATENTED MAR. 1, 1904.

C. E. JONES.

WHIFFLETREE HOOK.

APPLICATION FILED JAN. 11, 1904.

NO MODEL.

Fig. 1.

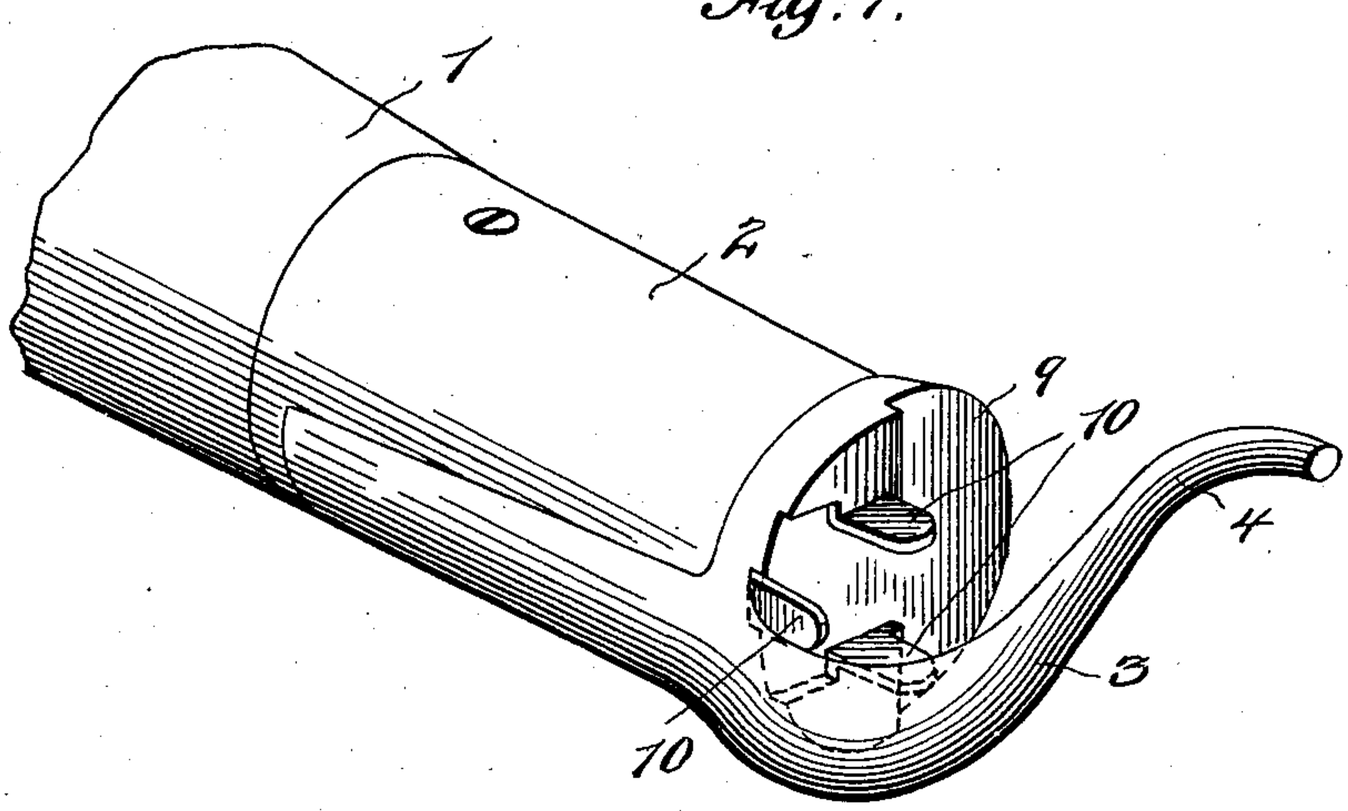

Fig. 2.

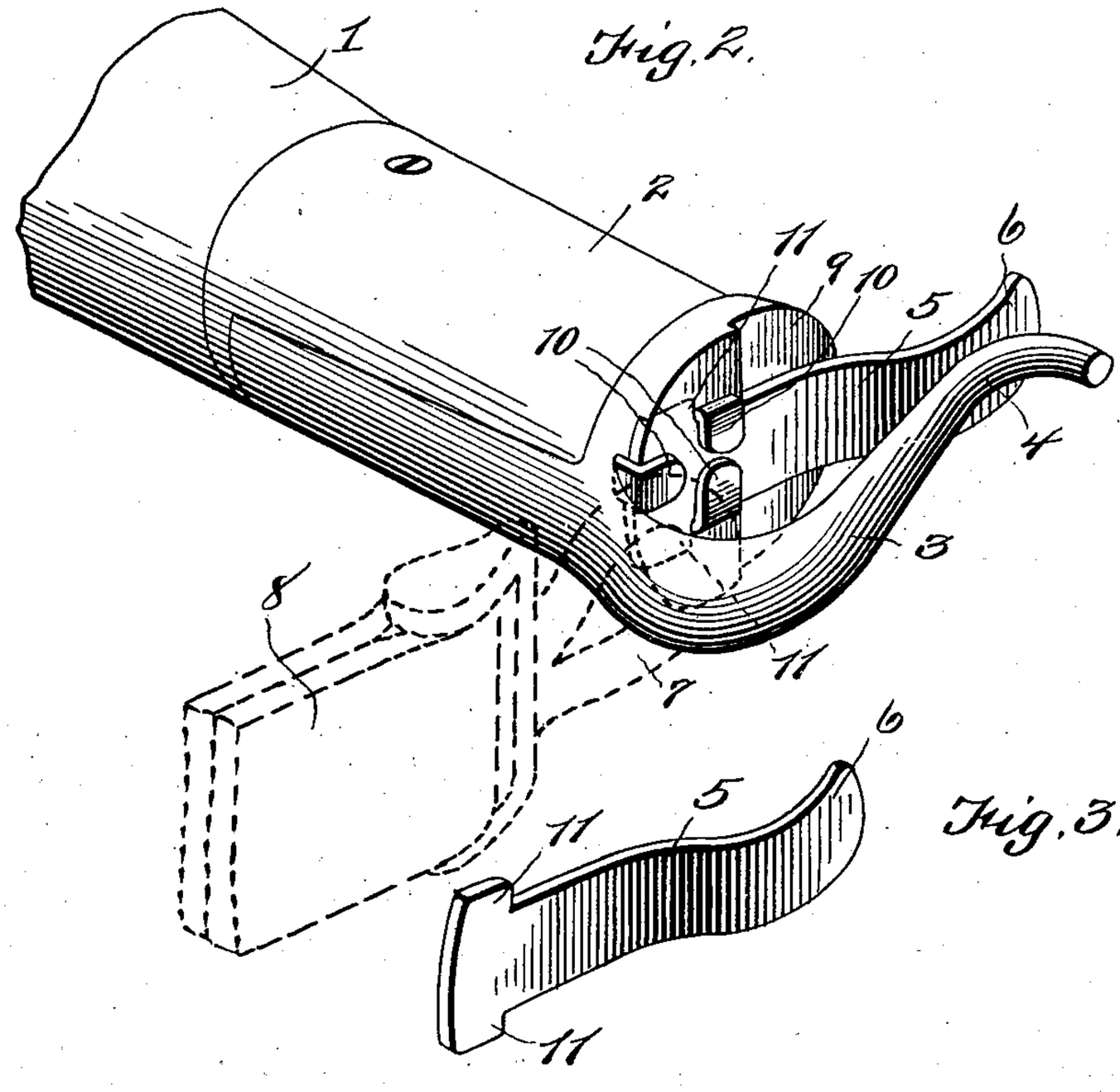

Fig. 3.

Witnesses

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No. 753,708. Patented March 1, 1904.

UNITED STATES PATENT OFFICE.

CHARLES E. JONES, OF WINDSOR, MISSOURI.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 753,708, dated March 1, 1904.

Application filed January 11, 1904. Serial No. 188,543. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. JONES, a citizen of the United States, residing at Windsor, in the county of Henry and State of Missouri, have invented certain new and useful Improvements in Whiffletree-Hooks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to whiffletree-hooks; and the object of the invention is to generally improve upon and render more efficient the whiffletree-hook upon which I have been granted Letters Patent in the United States, No. 490,023; and with this object in view I provide an automatic fastening in connection with the hook for retaining the cockeye on the end of the trace.

More specifically the invention consists in the provision of a sleeve having an integral hook and a recess in the end of the sleeve having shouldered walls and adapted to receive a spring which is held in place by integral lugs which project from the end of the sleeve and are adapted to be clenched over the inner end and the sides of the spring.

My invention is illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this application, in which—

Figure 1 is a perspective view of the sleeve for attachment to the whiffletree, showing the integral spring-fasteners thereon. Fig. 2 is a similar view showing the spring fastened to the sleeve. Fig. 3 is a perspective view of the spring detached.

Similar numerals of reference are employed to indicate like parts in all the figures of the drawings.

Referring to the drawings, the numeral 1 designates a whiffletree of any preferred form of construction, on the end of which is slipped a thimble or sleeve 2, having on the outer end thereof a hook 3, which extends rearward over said end and at a suitable distance from the latter. The hook 3 has the terminating end thereof flared outwardly from an inward depression 4, and secured to the outer end of the thimble or sleeve 2, adjacent to the base of the hook 3, is the forward end of a flat or plate spring 5, which is curved similarly to the said hook 3 and arranged in reverse position and having the rear portion thereof normally bearing against the inner depression of the said hook. The said flat or plate spring 5 extends slightly beyond the inward depression 4 of the hook 3 and is outwardly flared, as at 6, to form with the outwardly-flared portion of the said hook 3 an entrance-mouth. The forward end of the spring is inserted in a recess formed in the end of the sleeve, said recess being cast to suit the form of spring used, and integral lugs 10 project from the end of the sleeve adjacent to the side wall of said recess. In the drawings I have illustrated three lugs, one on each side and one at the base of the hook. When the spring has been placed in the recess, the lugs are clenched down over the same, as shown in Fig. 2, thus securely holding the spring in place without the necessity of perforating the spring and holding it to the sleeve by means of a screw or other fastening means, which latter means of fastening I have found to impair the efficiency of the spring or cause the same to break easily at the point of connection to the sleeve. When the spring is thus engaged by the lugs, it will be held from lateral movement by the walls of the recess. The end of said sleeve is cut away, as at 9, to permit the forward end of the spring to be inserted in said recess. The fixed end of the spring has two integral shouldered portions 11, which are designed to engage in a shouldered portion of the recess to assist in holding the spring from pulling out of the recess when engaged by the clenched lugs.

In connecting the cockeye 7 of the trace 8 with the improved hook it is pressed between the flat or plate spring 5 and the said hook to force said spring backward and permit entrance of the said cockeye to the said hook. After the cockeye has been inserted in this manner the flat or plate spring 5 assumes its normal closed position and provides a rear closed portion in connection with the hook 3,

which prevents disengagement accidentally of the cockeye. In detaching the cockeye 7 it can be easily passed out between the rear portion of the spring and the hook by forcing the spring inward in the same manner in which the cockeye was inserted in the hook.

It will be understood that the spring 5 is formed of stiff material in order to always sustain a normal closed position against the hook, and being readily and easily applied it forms a useful and positively-acting improvement in this class of devices.

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

1. In combination with a whiffletree, a sleeve mounted thereon, the end of said sleeve being recessed, an outwardly-flaring hook upon said sleeve, a spring having one end seated in said recess, integral lug portions upon said sleeve adapted to be clenched over said spring to secure the same to the sleeve, the free end of the spring adapted to normally bear against the hook, and outwardly flared, as set forth.

2. In combination with a whiffletree, a sleeve mounted thereon having an integral hook, the end of said sleeve being recessed, a spring having shouldered portions engaging shoulders formed in the walls of said recess, the free end of said spring being curved and adapted to be normally held against the curved portion of said hook, and lugs integral with the sleeve adjacent to the marginal edges of said recess and adapted to be clenched over the outer face of the spring to hold the same in said recess, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CHARLES E. JONES.

Witnesses:

CHARLES A. CARTER,

W. W. MOFFETT.