March 11, 1952 W. E. BRENNEMAN 2,589,042

HOOD HINGE SPRING REMOVER

Filed April 7, 1950

FIG. 1

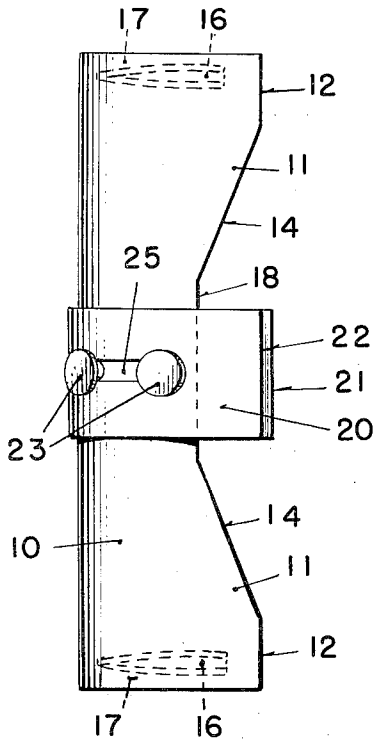


FIG. 2

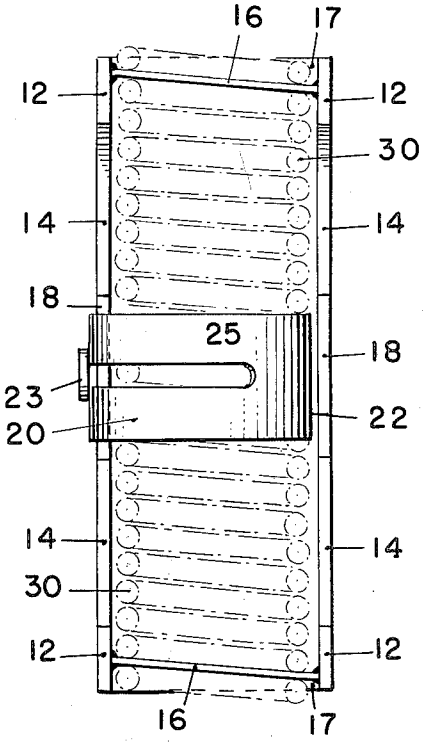
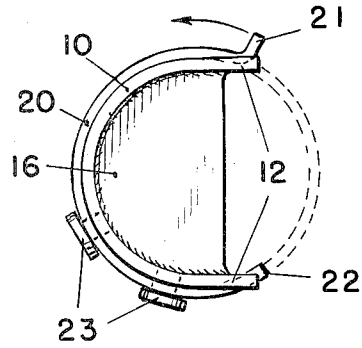


FIG. 3



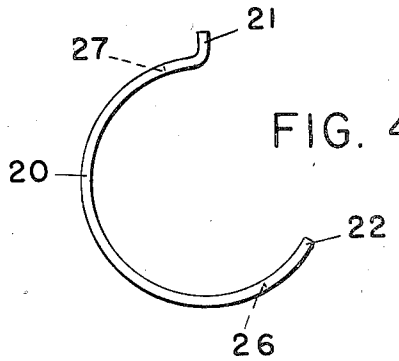


FIG. 4

INVENTOR

WALTER E. BRENNEMAN,

BY Henry H. Snelling

ATTORNEY

Patented Mar. 11, 1952

2,589,042

UNITED STATES PATENT OFFICE

2,589,042

HOOD HINGE SPRING REMOVER

Walter E. Brenneman, York, Pa.

Application April 7, 1950, Serial No. 154,556

2 Claims. (Cl. 29—227)

1

This invention relates to means for releasing a spring, such for example as the spring associated with an automobile hood, and has for its principal object the provision of a spring handling tool which can readily and easily be inserted in the spring when the hood is raised so that when the hood is lowered the tension of the spring is released on both sides of the tool and with perfect safety as the spring is locked to the tool, thus permitting the workman to reach under the hood and unfasten the spring from either end, either the hood end or the body end.

In the drawings:

Fig. 1 is a side view.

Fig. 2 is a front view.

Fig. 3 is a top plan view.

Fig. 4 is a detail.

The body of the tool is a sheet of number 16 gage steel bent to form a semi-cylinder **10** having four integral guiding portions **11**, slightly flared outwardly as at **12** and sloping centrally toward the main body portion **10** by the angular edges **14**. For a 1⅜" diameter spring the inside diameter of the body would be 1⅝" and the flared portion would be a half inch beyond the axial plane, the more readily to guide the spring into the body cavity.

At each end of the body **10** there is a head **16** tilted at an angle of 5° and brazed in place to leave a space **17** of about a quarter inch at top and bottom. These two heads **16** project beyond the axial plane by $\frac{3}{16}$" therefore extending beyond the central vertical edge **18** of the tool.

A spring clip **20**, having a finger piece **21** and a free end **22** oscillates about the central section of the body, being held in place by a pair of flat head rivets **23** carried by the body **10** and received in the slot **25**, starting 40° from the end **22** at the point **26** and extending 186° to the point **27**. When the spring **30** is within the body **10** as in Fig. 2 and engaging the two heads **16**, the clip **20** is closed on the spring by moving the finger

2

piece **21** away from the open side, or counterclockwise as seen in Fig. 3.

What I claim is:

1. A spring handling tool including a semi-cylindrical body having four integral guiding portions, each guiding portion having a sloping edge extending outwardly from the central portion of the body to a point short of the proximate end of the tool, a head spaced inward from the two opposite ends of the body and extending partly into the guiding portions, a spring clip extending around the central portion of the body inside of the four extended portions, said clip having a central slot therein, and securing means, carried by the body, extending within the slot to guide and limit the movement of the clip so as to lock a spring in place when the clip is revolved to close the open side of the body.

2. A spring handling tool including a body curved to semi-cylindrical shape with an open side to receive in the body a helical spring of about the same diameter as the inside of the tool, a head near each end of the body, a slotted clip centrally surrounding the body, and securing means, carried by the body, extending within the slot to guide and limit the movement of the clip so as to lock a spring in place when the clip is revolved to close the open side of the body.

WALTER E. BRENNEMAN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,008,694	Bryant	Nov. 14, 1911
1,428,566	Timmerman	Sept. 12, 1922
1,474,792	Ruttinger	Nov. 20, 1923

FOREIGN PATENTS

Number	Country	Date
26,100	Great Britain	Sept. 9, 1909