

(No Model.)

J. R. BALSLEY.
SCREW HOLDER AND DRIVER.

No. 545,331.

Patented Aug. 27, 1895.

Fig. I.

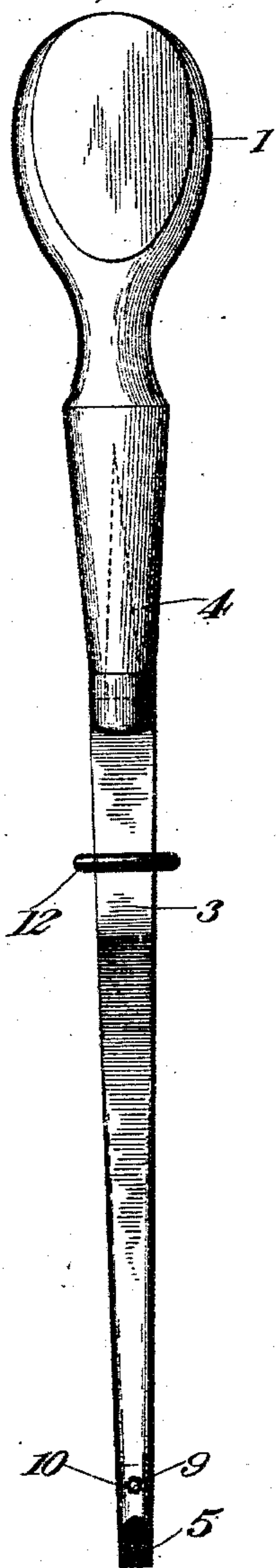


Fig. II.

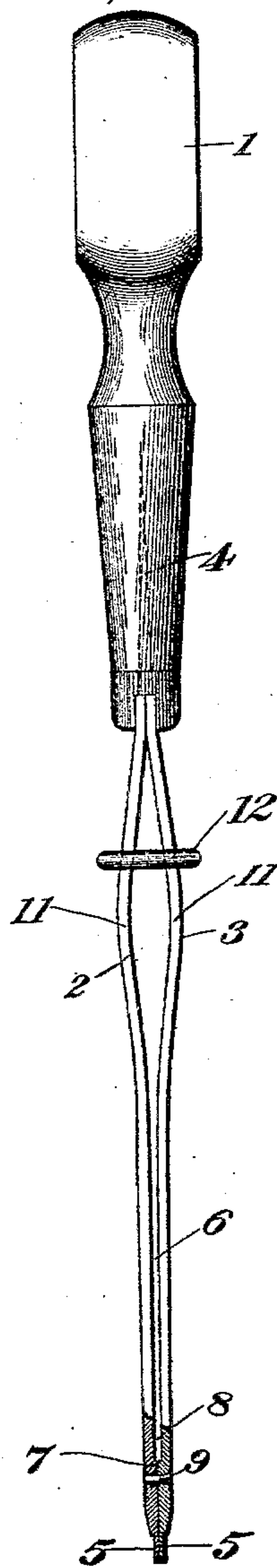
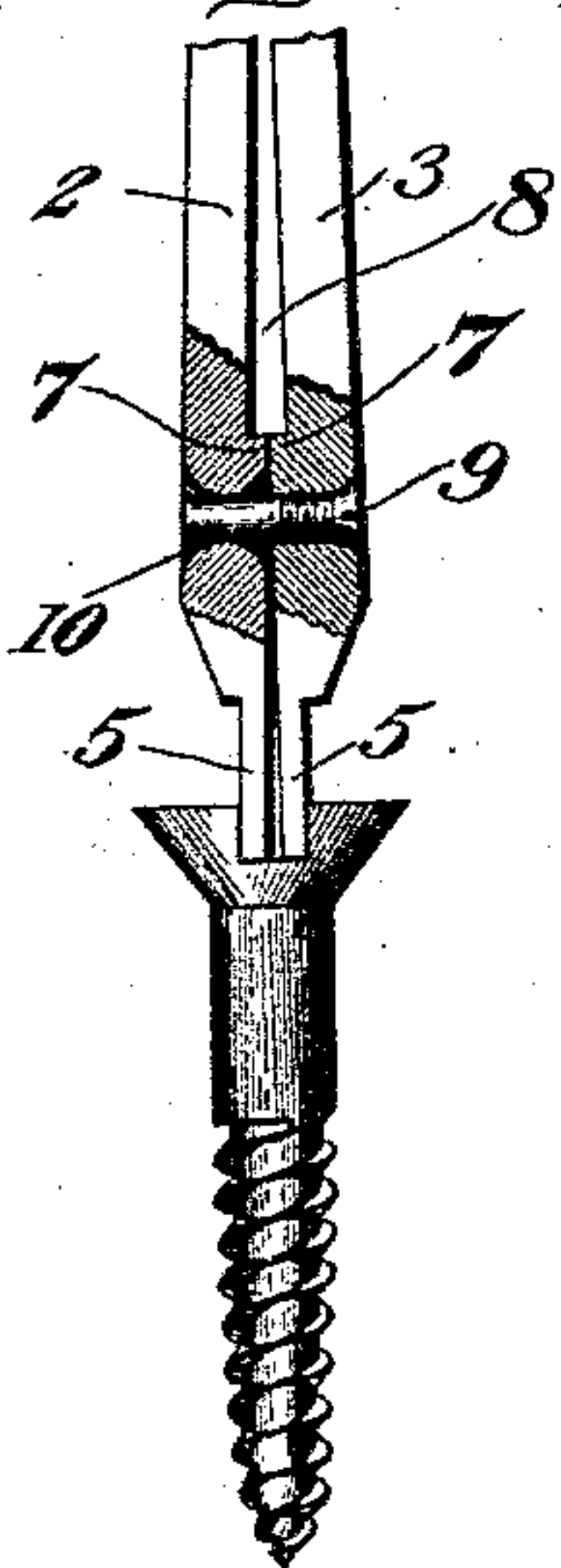


Fig. III.



Witnesses

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JAMES R. BALSLEY, OF CONNELLSVILLE, PENNSYLVANIA.

SCREW HOLDER AND DRIVER.

SPECIFICATION forming part of Letters Patent No. 545,331, dated August 27, 1895.

Application filed March 14, 1895. Serial No. 541,783. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. BALSLEY, of Connellsville, county of Fayette, State of Pennsylvania, have invented certain new and
5 useful Improvements in Screw Holders and Drivers, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce
10 improvements in that class of screwdrivers in which the blade of the tool is bifurcated and the screw is held by the expansion of the two ends thereof inserted into the screw-slot, whereby the holding power of the tool is in-
15 creased and the tool is rendered more serviceable, especially in connection with large, heavy screws.

In the accompanying drawings, Figure I is a side elevation of my present improved screw-
20 driver and holder. Fig. II is a similar view taken at right angles thereto and showing the nibs of the tool closed. Fig. III is a highly-magnified view of the nibs expanded.

Referring to the figures on the drawings, 1
25 indicates an ordinary handle, and 2 and 3 the legs thereof, secured to the handle by suitable means—as, for example, a tang 4—with which, if preferred, both the legs may be made integral. The legs terminate in oppositely-
30 located preferably parallel-sided nibs 5. Throughout the lower part of their lengths the legs are preferably parallel, as indicated at 6.

7 indicates a fulcrum, preferably consisting
35 of a ledge on the interior of each leg, above which a narrow slit 8 extends between the legs. In practice this slit is made very narrow, but in the drawings the size of the slit, as well as of the fulcrum-ledges, is magnified
40 in order to more clearly illustrate the gist of my invention. It is desirable to have the legs throughout their parts 6 parallel and the slit 8 which separates them as narrow as possible, in order that as the nibs 5 wear the tool may
45 be resharpened to adapt it to perform its work without impairing the efficiency of the tool. The ends of the two legs are preferably movably secured together, as by a screw-pin 9, screwing into one leg 3, for example, and en-
50 tering an aperture 10 in the other leg, like a pin. The aperture 10 preferably fits loosely on the pin end of the screw 9, so as to admit of the free movement of the legs upon the ful-

crum-points 7. Other means for holding the ends of the legs in accurate alignment may
55 be employed, but the use of the screw-pin 9 is a simple and convenient method of accomplishing the desired result. The two legs are designed to work slightly upon the fulcrum-ledges 7 by the compression of each leg toward
60 the axis of the slit 8. (See Fig. III.)

As a convenient and simple means for securing the compression of the legs above the fulcrum-points 7, I prefer to provide in each leg a bow 11 and above and around the bows
65 a sliding ring 12. The legs may be formed of spring metal, so that normally the nibs lie flat against each other, but by pressing the ring down upon the bows the legs are squeezed together from the fulcrum-points 7 and the
70 nibs are caused to separate, as is clearly shown in Fig. III. The combined thickness of both nibs is approximately a little less than the slot of the screws of the sizes for which the tool is adapted, so that a very small separation
75 of the nibs is sufficient to engage and hold the screw in position upon them. The exterior flat surfaces of the nibs are preferably roughened to prevent them from slipping
80 out of the screw-slot.

What I claim is—

1. In a screw holder and driver, the combination with a pair of legs and screw holding nibs thereon, of a fulcrum above the nibs on
85 which the legs move to expand the nibs as against the sides of a screw slot, and means for actuating the legs, substantially as set forth.

2. The combination with a pair of legs and screw holding nibs thereon, of a fulcrum above
90 the nibs beyond which the legs are separated, the nibs being adapted to be separated by the movement of the legs toward each other above the fulcrum, and means for actuating the legs toward each other, substantially as set forth. 95

3. The combination with a pair of legs and nibs, of a fulcrum above the nibs, a slit above the fulcrum, bows in the legs, and a sliding ring for compressing the bows, substantially
100 as set forth.

In testimony of all which I have hereunto subscribed my name.

JAMES R. BALSLEY.

Witnesses:

E. DUNN,

J. C. MUNSON.