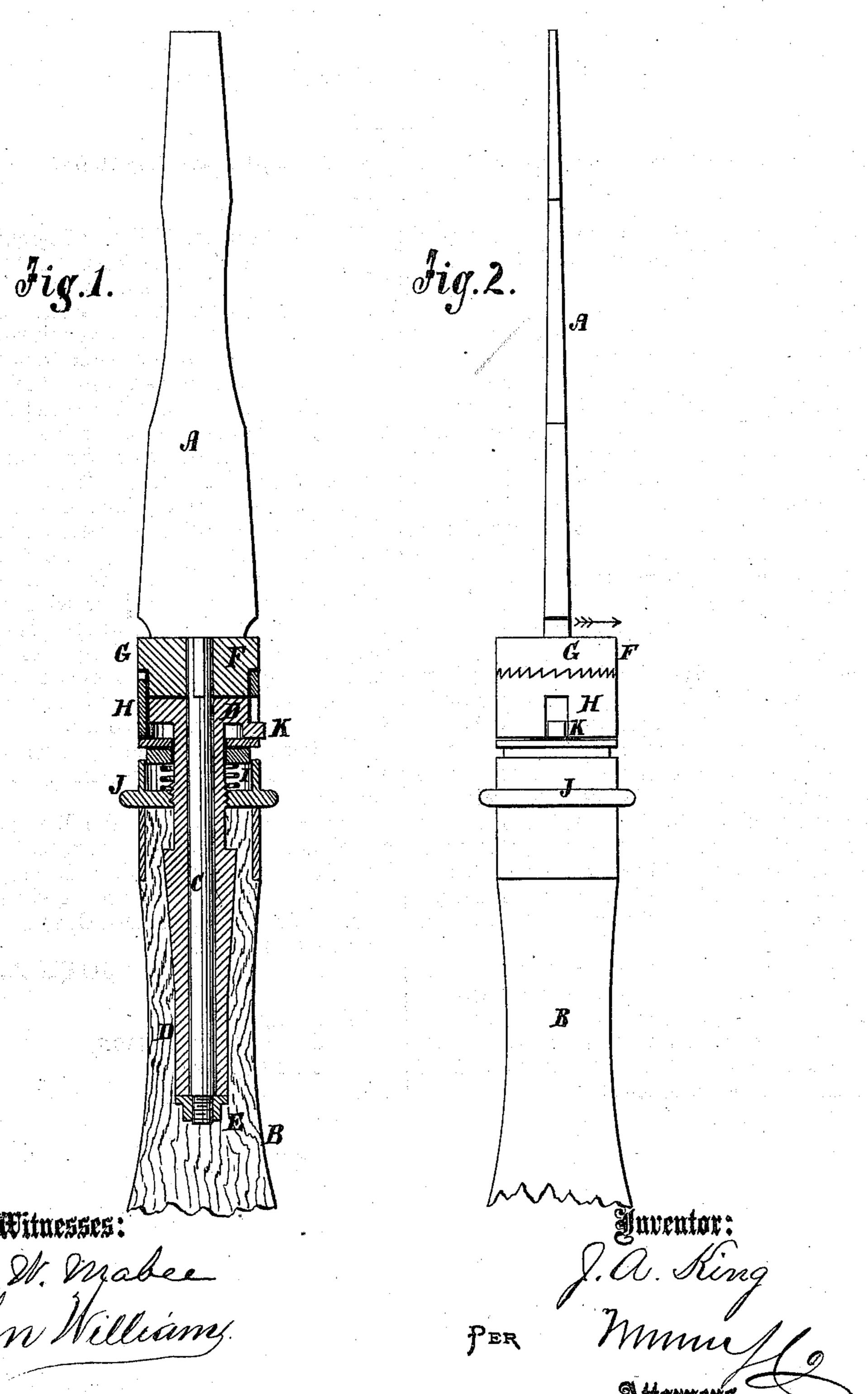
JOHN A. KING.

Improvement in Screw-Drivers.

No. 126,716.

Patented May 14, 1872.



UNITED STATES PATENT OFFICE.

JOHN A. KING, OF JAMAICA, NEW YORK, ASSIGNOR TO HIMSELF AND G. L. PECK, OF SAME PLACE.

IMPROVEMENT IN SCREW-DRIVERS.

Specification forming part of Letters Patent No. 126,716, dated May 14, 1872.

Specification describing a new and useful Improvement in Screw-Drivers, invented by John A. King, of Jamaica, in the county of

Queens and State of New York.

My invention is an improvement on that for which Letters Patent were issued to W. S. Goss August 4, 1868, No. 80,622, which I hereby disclaim. I have so constructed and arranged the parts composing the ratchet mechanism that they occupy less space and are far better adapted to endure severe strain or torsion of the instrument.

In the accompanying drawing, Figure 1 represents a longitudinal central section of a screwdriver constructed according to my invention. Fig. 2 is an outside view.

Similar letters of reference indicate corre-

sponding parts.

A is the screw-driver blade. B is the handle. C is the shank which is fast on the blade A. D is a tube through which the shank passes, at the end of which it is fastened by a nut, as seen at E. F is a metallic piece which is fast on the shank of the screw-driver, the outer portion of which, G, is a ratchet, as seen in Fig. 2. H is a corresponding ring of metal which fits into and engages with the ratchet. This piece turns with the handle, and is forced up so as to engage with the ratchet by a spiral spring I, seen in Fig. 1. J is a flanged nut, which is turned back, as seen in Fig. 1, when the screw-driver is to be used for driving. In Fig. 2 is seen a lug, K, which passes through a slot in the inner ratchet H, which turns with the handle or is fast on the shank-tube. This lug turns the loose ratchet H.

The operation is as follows: The spiral spring, by a constant pressure, keeps the two ratchets engaged with each other when power is not applied to drive a screw. When power is applied to turn the screw-driver in the direction of the arrow it will be seen that the screwdriver may be revolved, while the handle has but a slight movement back and forth as the inner ratchet slips back against the pressure of the spring and takes a new hold of the screwdriver after each effort. The screw-driver is thus revolved with a slight movement of handle. This enables the operator to not only use the screw-driver with one hand, but he may retain his grip upon the handle while revolving the blade of the screw-driver for ordinary work. For unscrewing, it is only necessary to turn up the nut J so that the ratchet cannot be separated in turning the screw-driver back, as the handle and blade work together when the nut is so turned up.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent—

The screw-threaded tube D provided with a disk-shaped head and lug, K, the ratchethub G, slotted ratchet-ring H, flanged screwnut J, and spring I, all arranged as specified. with the handle B, shank C, and blade A to operate as set forth.

JOHN A. KING.

Witnesses:

JOSEPH WILKINSON, JOHN FLEMING.