Jan. 16, 1923. 1,442,629.

C. I. PARKER.

KNOB AND SPINDLE CONSTRUCTION.

FILED JAN. 10, 1922.

Fig. 1.

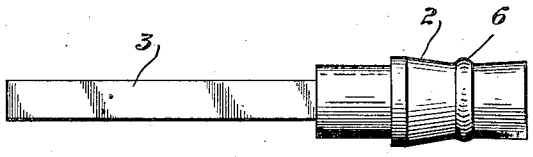


Fig. 2.

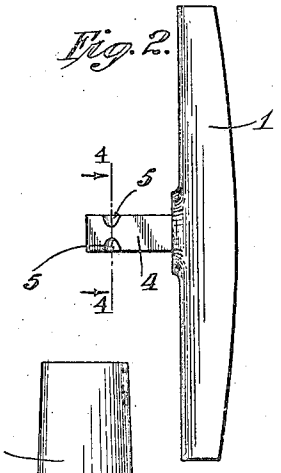


Fig. 3.

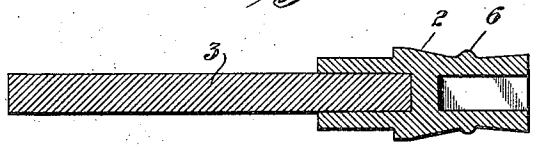


Fig. 4.

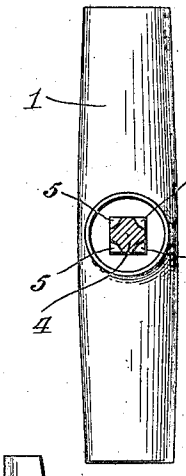
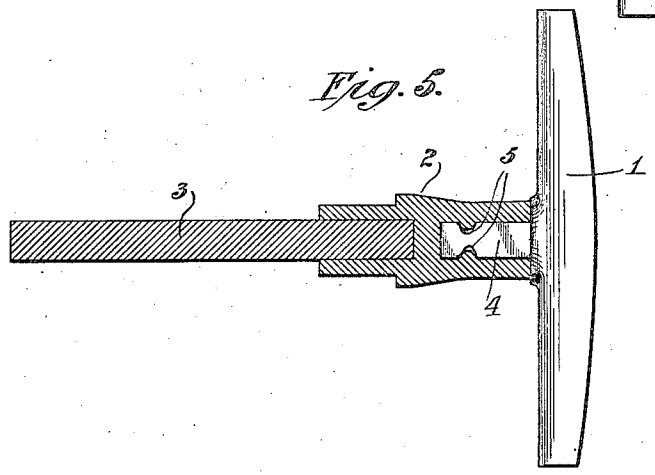


Fig. 5.



Chas. B. Parker, INVENTOR,

BY Mitchell & Talley ATTORNEYS.

Patented Jan. 16, 1923. 1,442,629

UNITED STATES PATENT OFFICE.

CHARLES I. PARKER, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO AMERICAN HARDWARE CORPORATION, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

KNOB AND SPINDLE CONSTRUCTION.

Application filed January 10, 1922. Serial No. 528,153.

To all whom it may concern:

Be it known that I, CHARLES I. PARKER, a citizen of the United States of America, residing at New Britain, Connecticut, have invented a new and useful Knob and Spindle Construction, of which the following is a specification.

My invention relates to an improved knob and spindle construction. The object of the invention is not only to improve the structure in such a way that it will lend itself admirably to being produced in different designs, but, from the standpoint of manufacturing, other conspicuous advantages will be gained as will hereinafter be seen.

In the accompanying drawing:

Fig. 1 is a side elevation of shank portion of my new construction.

Fig. 2 is a similar view of the knob or handle portion.

Fig. 3 is a longitudinal section of the parts shown in Fig. 1.

Fig. 4 is a rear elevation and section taken on the line 4—4 of Fig. 1.

Fig. 5 is a view of all the parts assembled, said view being partly in section.

1 represents the knob or handle, which part is intended for engagement by the hand. 2 represents a coupling shank. 3 represents the ordinary latch operating spindle usually made from iron. This spindle is preferably cast into the shank 2. 4 represents a short spindle. This short spindle is usually made from iron or steel and is preferably cast into the handle or knob 1. The spindles 3 and 4 are square in cross-section. In the outer end of the coupling shank 2 is a longitudinal cavity of a cross section appropriate to receive the projecting end of the short spindle 4. 5—5 represents notches or recesses formed in the corners of that part of the short spindle which stands within the shank 2 when the parts are assembled. As shown in the drawing, the shank is preferably formed with a raised annular rib 6 which is positioned over the notched portion of the spindle 4 so that when the parts are slid together, a powerful pressure may be advantageously applied to the sides of the knob shank so as to force down the rib or displace the metal of the shank sufficiently to force a portion thereof into the notched part 5 of the short spindle, thus permanently locking the parts 1 and 2 together. By this means the symmetrical appearance of the shank is preserved.

The invention is particularly useful when employed with a knob and spindle construction in which the handle is made in the form of a lever, and which if cast in final form together with a shank 2 and iron spindle 3 would occupy so much room that only a comparatively small number of pieces could be cast at one time. By my improvement, at least twice as many pieces may be cast at one time since they can be more compactly arranged on a pattern and in the flask. Again, by the present improvement various combinations of different handles and shanks may be easily made to produce different designs without the necessity of making a complete pattern and mould for each special design.

What I claim is:

A handle having a short coupling spindle of square cross-section rigidly connected thereto, a coupling shank, a relatively long spindle of square cross-section for connection to said shank at one end, said shank having a recess in the opposite end squared to receive the relatively short spindle, said short spindle having notches in its corners with portions of the metal of the shank forced into said notches to permanently unite said parts.

CHARLES I. PARKER.