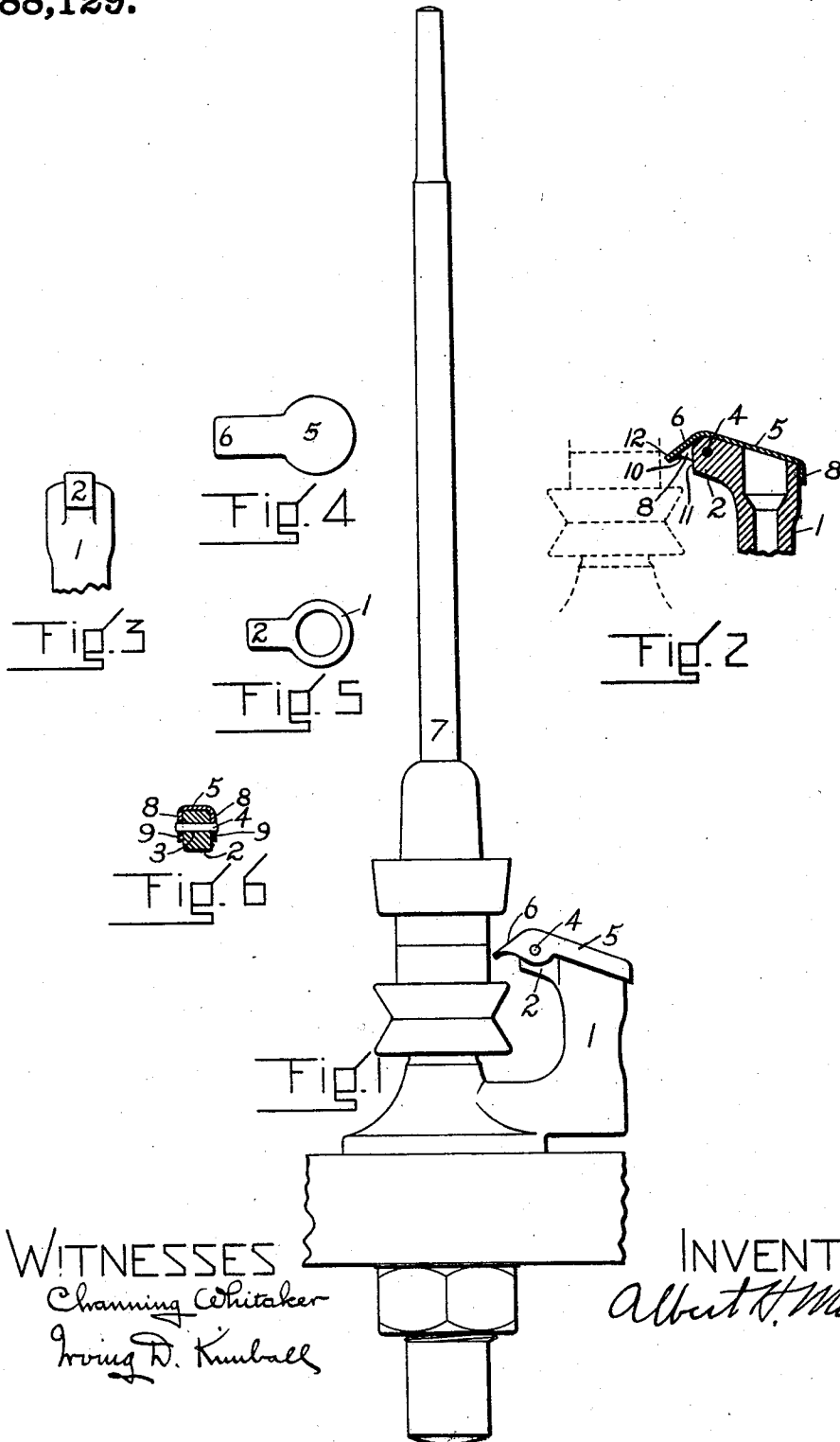


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DOFFER GUARD AND OIL WELL COVER FOR SPINDLE SUPPORTS FOR SPINNING AND THE
LIKE MACHINES.

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DOFFER-GUARD AND OIL-WELL COVER FOR SPINDLE-SUPPORTS FOR SPINNING AND THE LIKE MACHINES.

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To all whom it may concern:

Be it known that I, ALBERT H. MORTON, of Lowell, in the county of Middlesex and the Commonwealth of Massachusetts, have
5 invented certain new and useful Improvements in Doffer-Guards and Oil-Well Covers for Spindle-Supports for Spinning and the Like Machines, of which the following description and claims, with the accompanying drawing, is a specification.

My invention relates to doffer-guards and oil-well covers for spindle-supports of spinning, twisting, and the like machines; more particularly to such guards-and-covers as
10 are pivotally mounted upon an oil-well post.

The invention consists essentially in the combination in a new article of manufacture, in one piece of substantially uniform thickness throughout, of a doffer-guard, an
15 oil-well cover, and a flange common to the guard and the cover and constructed for pivotal mounting upon an oil-well post.

It also consists in the combination of the article with an oil-well post constructed to
20 receive it and means for pivotally mounting the guard and cover upon the post.

In the drawings of the preferred form of my invention: Figure 1 represents in side-elevation the spindle, the spindle-support, and the article pivotally mounted thereon; Fig. 2 represents in longitudinal-section, through the axes of the oil-well post and the spindle, the upper portion of the post with the article pivotally mounted thereon and
30 indicates by dotted lines the operative position of the spindle-whirl and a part of the spindle-support; Fig. 3 is a partial side-elevation of the post as seen when looking from the spindle, and showing the form of the lug upon which the guard-and-cover is
40 mounted; Fig. 4 represents the article without the post projected upon a plane parallel to the top of the post; Fig. 5 represents the top of the post projected upon a plane parallel thereto, but not showing parts lower than the top; and, Fig. 6 represents a vertical section as seen when looking toward the spindle, and showing the article, the lug, and the pivot.

Similar numerals refer to similar parts 50 throughout the views.

In the drawings: 1 is the oil-well post on the bolster case, 2 is the pivot-lug or hinge projection near its top horizontally perforated at 3 for the pivot-pin 4. 55

5 is the oil-well cover. It closely fits and covers the top of the post and its pivot-lug 2.

6 is the doffer-guard, preferably a plane surface, and, when in position with the cover 60 closed upon the oil-well, preferably inclined downwardly and toward the spindle 7.

8 is the flange common to the guard and the cover and preferably downwardly turned and perforated at 9 9 for the pivot-pin 4. This flange is in one piece with the doffer-guard and oil-well cover, gives strength, stability, and stiffness to the article near the pivot and, preferably to the entire article, and is well adapted to be 70 perforated for the pin 4. The inner surface 10 of the doffer-guard constitutes a stop for contacting with the stop 11 of the lug or projection 2 for preventing the raising of the cover through more than a predetermined 75 angle.

The article comprises, in combination, a substantial interior body of steel and a superficial film comprising chemically combined iron and oxygen which is not rust and 80 which prevents rust. Preferably, the film is blue but it may be purple, black, or other color and produced by any well known process.

I claim:

1. A spindle for spinning and the like machines, comprising in combination, a spindle, a bolster case provided with an oil-well post having a hinge projection on the side toward the bolster case and a combined 90 oil-well cover and doffer-guard extending over the upper surface of the oil-well post and projection and beyond said projection toward the bolster case to act as a doffer-guard and having its edge extending downward to embrace the sides of the projection and form pivot pin ears and doffer-guard 95 reinforcement.

2. A spindle for spinning and the like machines, comprising in combination, a spindle, a bolster case provided with an oil-well post having a hinge projection on the
5 side toward the bolster case, and a combined oil-well cover and doffer-guard extending over the upper surface of the oil-well post and projection and beyond said projection toward the bolster case to act as a doffer-

guard and provided with webs or flanges 10 uniting the doffer-guard portion and the top portion to strengthen the doffer-guard.

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

ALBERT H. MORTON.

Witnesses:

CHANNING WHITAKER,
IRVING D. KIMBALL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
