(No Model.)

W. H. TAYLOR.

BEARING BOX FOR WINDMILL SHAFTING.

No. 453,221. Patented June 2, 1891.

FIG. 1.

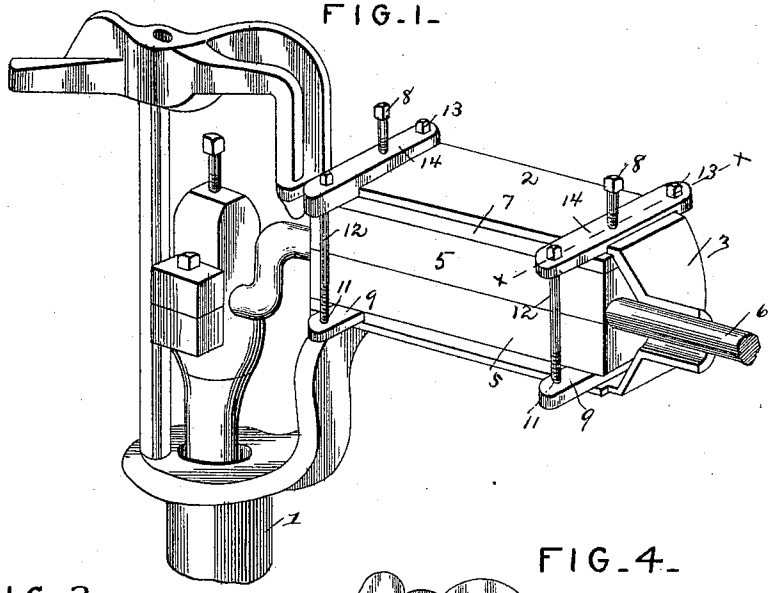


FIG. 2.

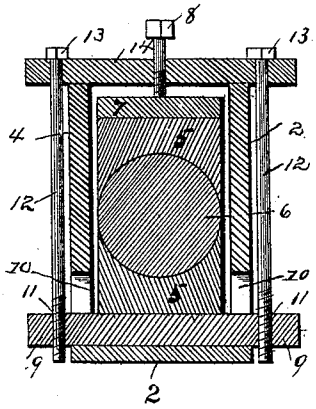


FIG. 4.

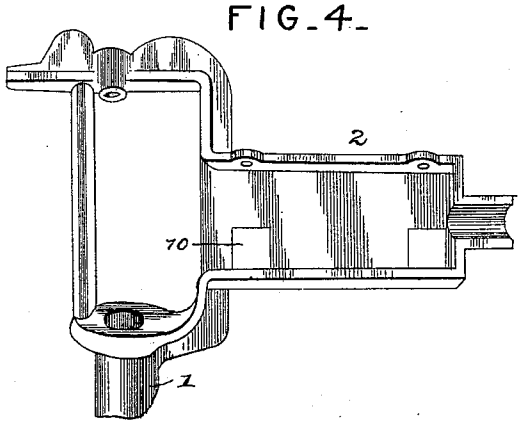
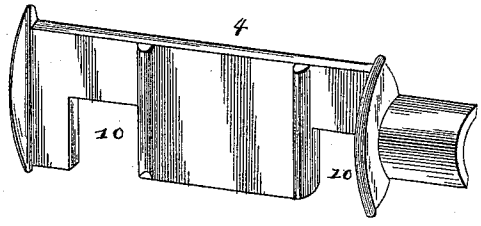


FIG. 3.



Witnesses
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By his Attorneys,
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM H. TAYLOR, OF KEWANEE, ILLINOIS.

BEARING-BOX FOR WINDMILL-SHAFTING.

SPECIFICATION forming part of Letters Patent No. 453,221, dated June 2, 1891.

Application filed January 7, 1891. Serial No. 377,006. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. TAYLOR, a citizen of the United States, residing at Kewanee, in the county of Henry and State of Illinois, have invented a new and useful Bearing-Box for Windmill-Shafting, of which the following is a specification.

The invention relates to improvements in bearing-box for windmill-shaftings.

The object of the present invention is to provide a simple and inexpensive bearing-box adapted for windmill-shaftings and capable of enabling wooden bushings to be adjusted against shafting until entirely worn out.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a windmill-casting provided with a bearing-box constructed in accordance with this invention, one of the sections of the bearing-box being removed. Fig. 2 is a transverse sectional view with both sections of the box applied on the line x x of Fig. 1. Fig. 3 is a detail view of one of the sections of the bearing-box. Fig. 4 is a perspective view of the casting and the integral section of the bearing-box.

Referring to the accompanying drawings, 1 designates a windmill-casting designed to be rotatively mounted in a tower (not shown) and provided with an integral section 2 of a bearing-box 3, which is composed of the said integral section 2, and a removable side or section 4, and is adapted to contain wooden bushings 5. The wooden bushings 5 have been found by experience to give the greatest satisfaction for windmill-shafting, and they are prepared by boiling hard wood in oil, and thus render frequent oiling unnecessary, and are composed of two similar sections arranged above and below the shaft 6, and adapted to be adjusted against the same to take up wear and to enable them to be used until they are entirely worn out. A metal plate 7 is arranged above the upper section of the bushing, and is adjusted by means of set-screws 8, which force the plate 7 and upper section downward, and the lower section is supported on vertically-movable transverse bars 9, arranged in slots 10 at the ends of the bearing-box, and provided in their ends with threaded openings 11, which are engaged by bolts 12. The bolts 12 have squared heads and are arranged in openings 13 of stationary transverse bars 14, formed integral with the section 2 of the bearing-box, and arranged on top of the same, and at the ends thereof in the same vertical plane as the vertically-adjustable transverse bars 9. By means of the bolts 12 and the set-screws 8 the wooden bushing can be adjusted against the shaft, and can be used until entirely worn out, thereby rendering frequent oiling of the parts unnecessary.

I desire to be understood that I do not limit myself to the precise details of construction herein shown and described, as I may without departing from the spirit of the invention make minor changes therein, such as adapting the adjustable bearing-box for pitmen and similar parts of a windmill.

The bushings are designed to be the same width as the shaft for which they form bearings, thereby enabling the entire surface of the inner imposed faces of the bushings to be equally worn, and preventing the formation of strips or projections at the sides of the shaft, which projections or strips might interfere with the adjustment of the bushings.

What I claim is—

1. The combination of the bearing-box constructed of sections and provided with slots, the bushing arranged within the box, the transverse bars arranged in the slots, the bolts engaging the transverse bars and adapted to force the bushing upward, and the set-screws to force the same downward, substantially as described.

2. The combination of the bearing-box composed of sections and provided with slots, the bushing arranged within the box and consisting of sections, the vertically-adjustable transverse bars arranged in the slots and

supporting the lower section of the bushing, the plate 7, arranged above the upper section of the bushing, the bolts 12, engaging the ends of the adjustable transverse bars, and the set-screws engaging the plate 7, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM H. TAYLOR.

Witnesses:
W. H. REMICK,
HENRY GIVEN.