

(No Model.)

2 Sheets—Sheet 1.

E. E. DEVOLL.
ADJUSTABLE SUPPORT FOR SHAFTS.

No. 420,593.

Patented Feb. 4, 1890.

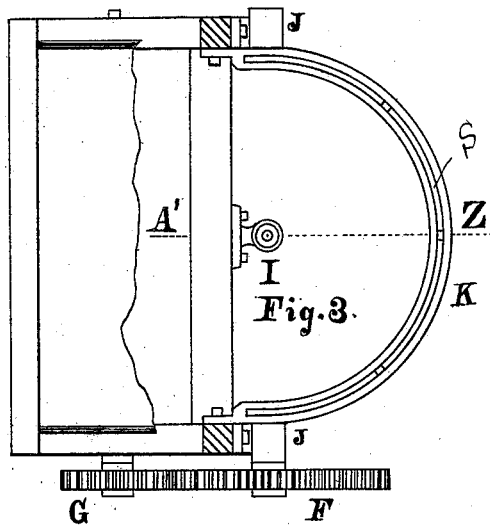


Fig. 1.

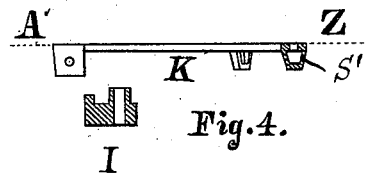
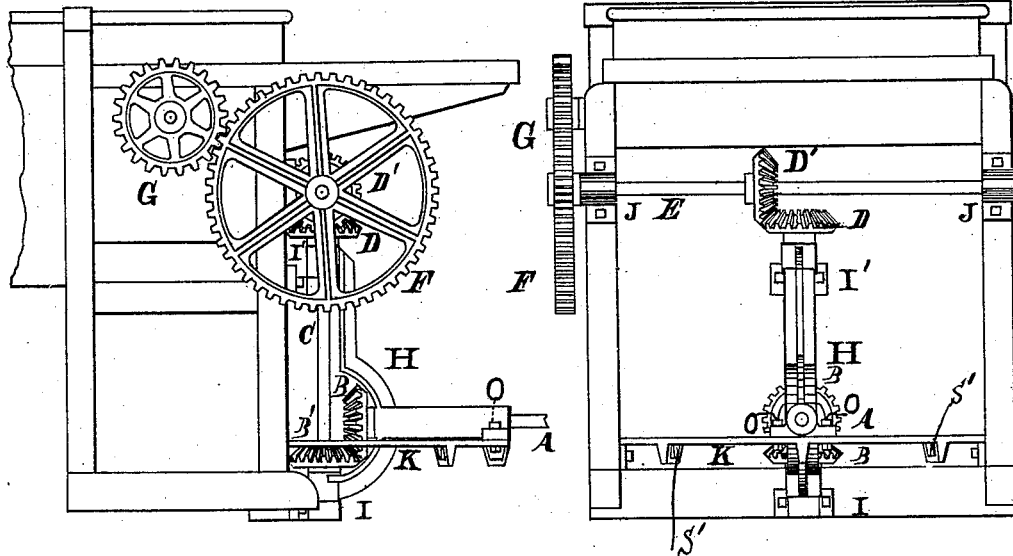


Fig. 2.



Witnesses
J. E. Wakeley
Chas. A. French

Inventor
E. E. Devoll
By his Attorney
J. J. Wakeley

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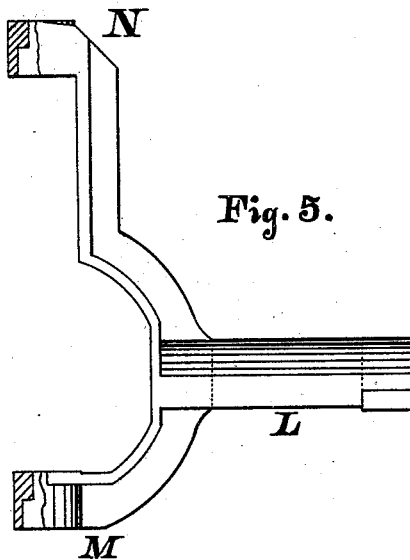


Fig. 5.

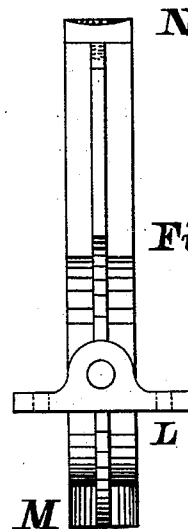
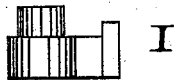
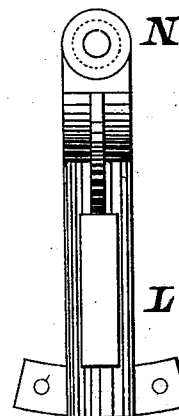


Fig. 6.



I

Fig. 7.



L

Witnesses
J. E. Wakeley,
Charles A. French

Inventor
E. E. Devoll
By his Attorney C. J. Wakeley

UNITED STATES PATENT OFFICE.

EVERETT E. DEVOLL, OF VERONA, WISCONSIN.

ADJUSTABLE SUPPORT FOR SHAFTS.

SPECIFICATION forming part of Letters Patent No. 420,593, dated February 4, 1890.

Application filed June 11, 1889. Serial No. 317,151. (No model.)

To all whom it may concern:

Be it known that I, EVERETT E. DEVOLL, a citizen of the United States, residing at Verona, in the county of Dane and State of Wisconsin, have invented a new and useful Adjustable Support for Power-Shafts, of which the following is a specification.

My invention relates to improvements in adjustable supports for power-shafts where they are geared to vertical shafts; and the objects of my improvements are to provide an improved terminal attachment and adjustable bearings for the horizontal shaft of a horse-power, which admit of such power being set around a circle concentric with the vertical shaft geared to the end of such power-shaft, as far as the machine or support there placed will allow the latter shaft to sweep, and also admit of different presentations of the machine relative to the power.

I have preferred to illustrate and describe my improvement herein as applied in the case of a separator of a thrashing-machine, which is set adjacent to the vertical shaft, upon the journals of which my device is hung.

I attain the object of my improvement by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a left side elevation of the whole device; Fig. 2, a front elevation of the same; Fig. 3, a top view of the boxes J J, lower box I, track K, separator-front, and spur-gearing, all in place; Fig. 4, a section through the line A' A', Fig. 3, showing the track in section and box I also in section; Fig. 5, a left side elevation of the yoke and the box I detached; Fig. 6, a front elevation of the yoke, and Fig. 7 a top view of the yoke.

Similar letters refer to similar parts throughout the several views.

I construct a yoke H to support in bearings the power-shaft A and keep it in gear with the driving-shaft C of the separator at any position in a half-circle concentric with the latter shaft. The yoke extends vertically in the rear of the shaft C from its upper gear-wheel D' to its lower box I. The lower part is bowed around the rear of the gear-wheels B B'. Its upper end is bent forward and terminates in a vertical sleeve N, which receives the vertical shaft C and occupies the space between its upper box I', which is attached to

the separator by a bracket and its upper gear-wheel D'. The bearing of the sleeve is upon the outside of the box I', which is shouldered to receive the corresponding shouldered enlargement in the bore of the lower end of the sleeve. The lower end of the yoke is also bent forward and terminates in the vertical sleeve M, which receives the vertical shaft C and occupies the space between its lower gear-wheel D and lower box I, which is attached to the separator by a bracket.

The bearing of the sleeve is upon the box I, which is shouldered to receive a corresponding shouldered enlargement in the bore of the lower end of the sleeve. Such sleeves will respectively support the upper and lower gear-wheels of the vertical shaft C. The yoke is bored for a bearing for the shaft A in the rear of its gear-wheel B, and has the horizontal arm L extending rearward, inclosing such bore and shaft to and over the track K, where it has a second bearing for the shaft and a bracket on each of its lower sides, which receives a clamping-bolt O O, passing down through the slot in the track K. The track K, which the arm of my yoke rides, is horizontal, flat on the upper surface, and describes a semicircle concentric with the shaft C, and has its two ends extended and fastened to the two front posts of the separator-frame. A vertical slot S extends throughout the center of the track, which admits of the passage of the clamping-bolts O O. U-shaped braces S' S' span the slot below and strengthen the track. The horizontal shaft E is journaled in the boxes J J, attached to the front of the separator, and is geared by miter-gears D D' to the shaft C at its upper end, and is geared at its left end by the spur-gearings F G to the shaft or axle of the separator-cylinder, of which G is the spur-wheel. The shaft C is geared to the horizontal shaft A by the miter-gears B B'. When the power and separator are set in such positions and at such presentations as desired, the clamping-bolts are tightened to prevent the swaying of the power-shafting in operation.

The advantages of my improvement are that it enables the operator to place the power and the machine in such positions and at such presentations relative to each other as to avoid obstacles that may exist upon the

ground, as buildings, stacks, stumps, fences, uneven, precipitous, and sunken surfaces, &c., and to move either power or machine singly to a far greater extent than can be
5 done by the use of knuckle or other joints, or double or triple attachments, or other devices designed for such purposes, and without the friction, cramping, and heating resulting from their use.

10 What I claim as my invention, and desire to secure by Letters Patent, is—

1. An adjustable terminal support for a horizontal power-shaft, consisting of a vertical yoke having vertical end sleeves adapted
15 to bear upon the boxes holding the vertical shaft, and having intermediate its ends a rearwardly-extending horizontal arm for inclosing said power-shaft, in combination with a slotted-semicircular track for said arm, and
20 clamping-bolts passing through the arm and the slot of the track.

2. A terminal support for a horizontal power-shaft, consisting of the vertical yoke H, having vertical end sleeves M N, shouldered inside, bearing upon the outside of the
25 shouldered boxes I I', holding the vertical shaft C, which is geared to the horizontal power-shaft at its end and having a bearing for the latter shaft, and an arm L, inclosing the same and furnishing a second bearing
30 therefor, with the said shouldered boxes I I', the semicircular slotted track K, the clamping-bolts O O, extending through the arm and slot, and said power-shaft A, all said parts combined as set forth.

EVERETT E. DEVOLL.

Witnesses:

CHAS. G. MAYERS,
J. E. WAKELEY.