(No Model.)

J. H. HULBURT.

SPOKE SETTING MACHINE.

No. 293,174. Patented Feb. 5, 1884.

Fig. 1.

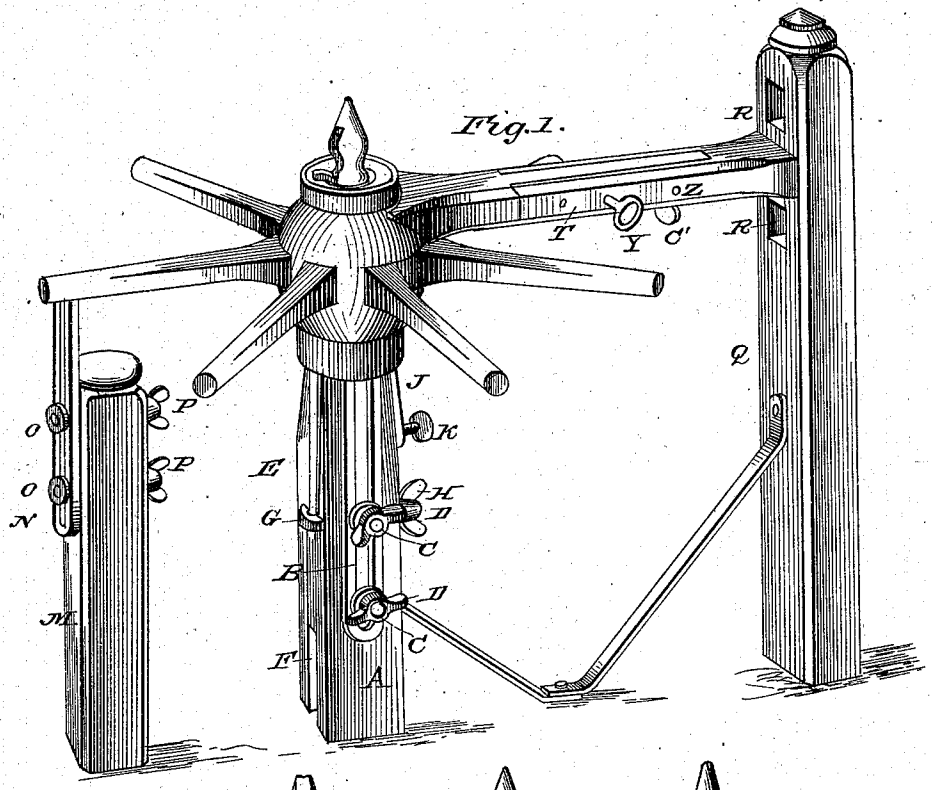


Fig. 2.

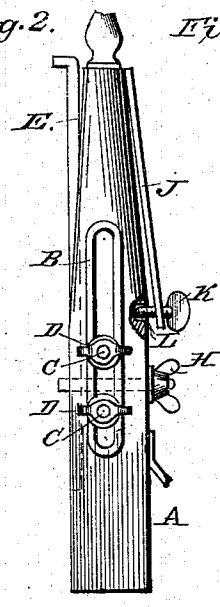


Fig. 3

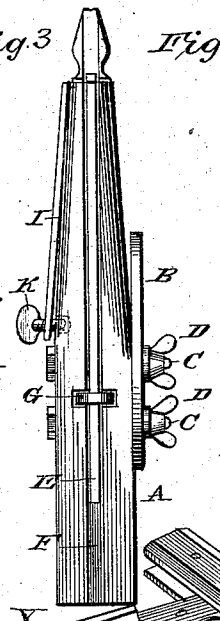


Fig. 4.

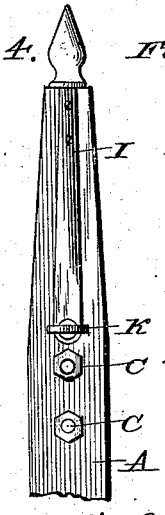


Fig. 5.

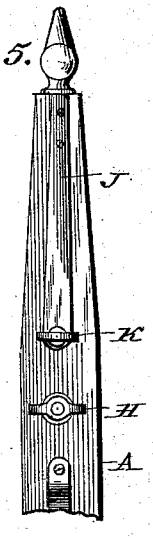
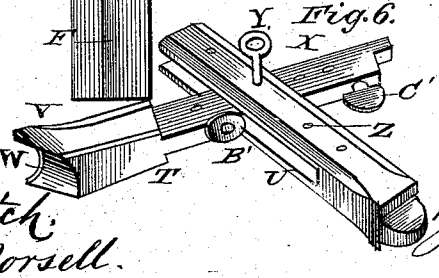


Fig. 6.



WITNESSES:

Fred. L. Dieterich.

Arthur L. Morsell.

INVENTOR.

James H. Hulburt

By Louis Bagger & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES H. HULBURT, OF MILLBROOK, MICHIGAN, ASSIGNOR OF ONE-HALF TO GEORGE HAGGIT, OF SAME PLACE.

SPOKE-SETTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 293,174, dated February 5, 1884.

Application filed November 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. HULBURT, a citizen of the United States, and a resident of Millbrook, in the county of Mecosta and State of Michigan, have invented certain new and useful Improvements in Devices for Adjusting Spokes in Wagon-Hubs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved machine for adjusting spokes in vehicle-hubs. Figs. 2, 3, 4, and 5 are side views of the central post, and Fig. 6 is a detail view of the adjustable prop for the hub.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to machines for adjusting spokes in vehicle-hubs; and it consists in the improved construction and arrangement of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates an upright post tapering toward the top, upon the upper end of which the hub is placed. A slotted flat bar, B, slides upon two, or more or less, screw-bolts, C, passing through the post, and provided with thumb-nuts D, bearing against the outer side of the bar, and supports the hub from sliding down upon the bar, the upper end of the slotted bar bearing against the inner end of the hub under the sand-band, and a bar, E, having its upper end bent outward at a right angle, slides in a vertical groove, F, in one of the other sides of the post, and is held clamped to the post in the groove by a hooked clamp, G, clamping around the bar and passing with its screw-threaded end through the post, where it is provided, at the other side of the post, with a thumb-nut, H, by means of which the clamp may be drawn to clamp the bar tighter, or be released to allow the bar to slide freely. The upper bent end of this bar bears upon the upper end of the hub and prevents the same from being raised off the post, and two flat bars, I and J, are secured at their upper ends to the upper end of the post, while their lower ends have set-screws K turning in perforations L, and bearing with their inner ends against the sides of the post, serving to adjust the lower ends of the bars nearer to or farther from the sides of the post, bearing against the inside of the bore in the hub and preventing it from rocking upon the same. An upright post, M, is placed at a distance from the post A, or the hub-supporting post, and is provided with a slotted plate, N, upon the side farthest away from the hub-supporting post, which plate slides upon the ends of two, or more or less, bolts, O, passing through the post, and provided with thumb-nuts P, which bear against the plate and serve to adjust the same, and the upper end of this plate is flat, and may be brought to bear against the lower side or edge of a spoke inserted into its appropriate socket in the hub, serving to support the same while being driven into the same. At the other side of the hub-supporting post, opposite to the spoke-supporting post, is placed another post, Q, which has a number of notches, R, upon the side facing the hub-supporting post, into which the reduced shouldered or tenoned end S of a brace or prop, T, may be inserted; and the said brace consists of a longitudinally-slotted tenoned portion, U, and an outer portion, V, having a concaved and enlarged end, W, adapted to bear against the side of the hub, and a reduced shouldered end, X, sliding in the slot in the tenoned end. A pin or bolt, Y, passes through one of a series of perforations, Z, in the sides of the slot in the tenoned portion, and through one of a series of perforations, A′, in the reduced end of the shouldered portion, thus hinging the two portions together, and a plate, B′, secured upon the under side of the reduced end, and bearing with its sides against the lower edges against the sides of the slot, prevents the outer shouldered portion from swinging upward when the ends of the brace are braced against the notched post and against the hub, while a turn-button, C′, upon the under side of the same end, but at the other side of the bolt, may be turned to bear against the lower edges of the sides of the slot or to stand turned

longitudinally, allowing the inner tenoned end to be raised, the two portions of the brace acting as two toggle-arms, when the tenoned end may be forced down into position, and the turn-button turned into its transverse position, when the two portions of the prop are rigid.

It will be seen that the hub may be placed upon the hub-supporting post and secured from rocking upon the same, when the outer end of the spoke may be placed upon the upper end of the bar sliding upon the spoke-supporting post, which bar has been adjusted at its proper height, when the spoke may be driven into its socket, and the prop, bearing against the hub and against the notched post, will offer resistance while the spoke is driven into its socket.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a machine for adjusting spokes in vehicle-hubs, a hub-supporting post having a slotted plate sliding adjustably upon one side, having a bar having its upper end bent sliding in a vertical groove in the other side, having means for clamping it, and provided with two flat bars secured at their upper ends to the upper end of the post, and having means for adjusting their lower ends nearer to and farther from the sides of the same, as and for the purpose shown and set forth.

2. The combination of a hub-supporting post, an upright post having notches in the side facing the hub-supporting post, and a prop consisting of a tenoned portion adapted to engage one of the notches, and having a longitudinal slot, a reduced shouldered portion adapted to bear against the hub and to slide and rock in the slot, a bolt passing through a series of perforations in the sides of the slot and in the reduced end, and a turn-button and a plate attached to the under side of the reduced end, each at one side of the bolt, as and for the purpose shown and set forth.

3. A machine for adjusting spokes in vehicle-hubs, consisting of a hub-supporting post having means for holding the hub and for securing it from rocking, a post having a slotted bar sliding adjustably upon it, adapted to support the outer end of a spoke, a notched bar, and a jointed prop adapted to bear with one end into one of the notches and with the other end against the hub, as and for the purpose shown and set forth.

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

JAMES H. HULBURT.

Witnesses:

DAVID C. FULLER,

ANDREW J. DOLE.