

(No Model.)

F. J. LARKIN.

SLEIGH RUNNER.

No. 294,136.

Patented Feb. 26, 1884.

Fig. 1.

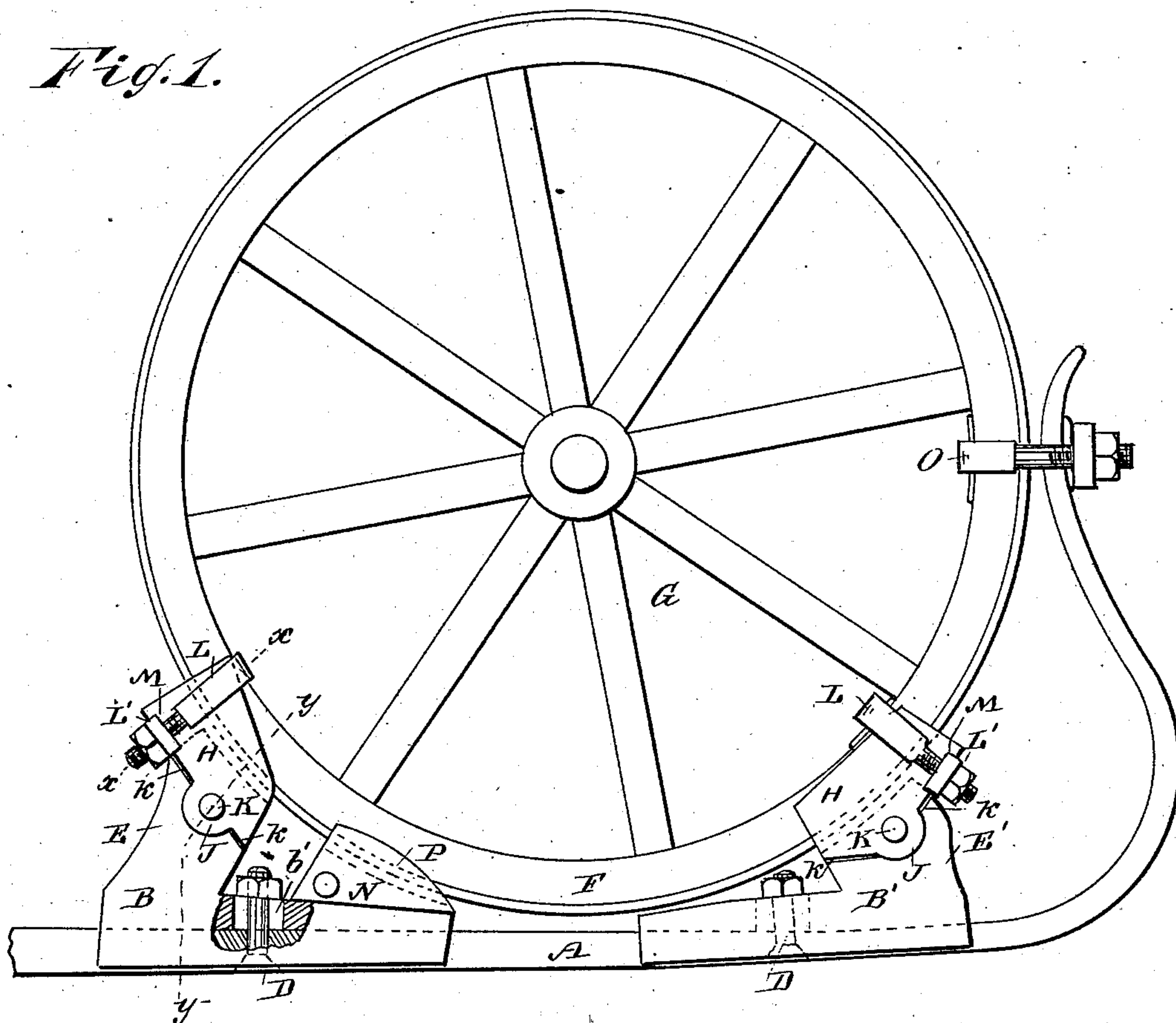


Fig. 2.

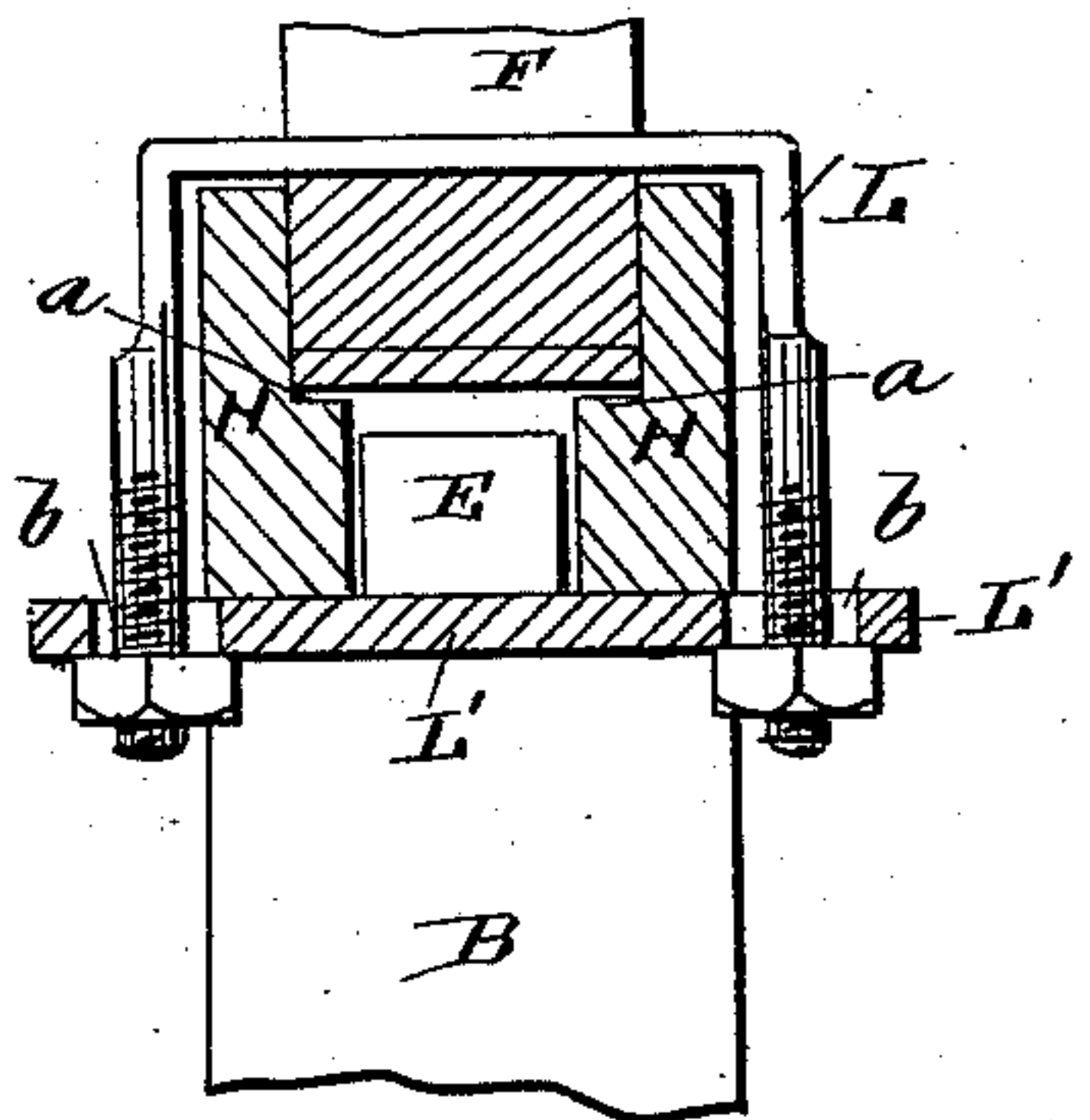


Fig. 3.

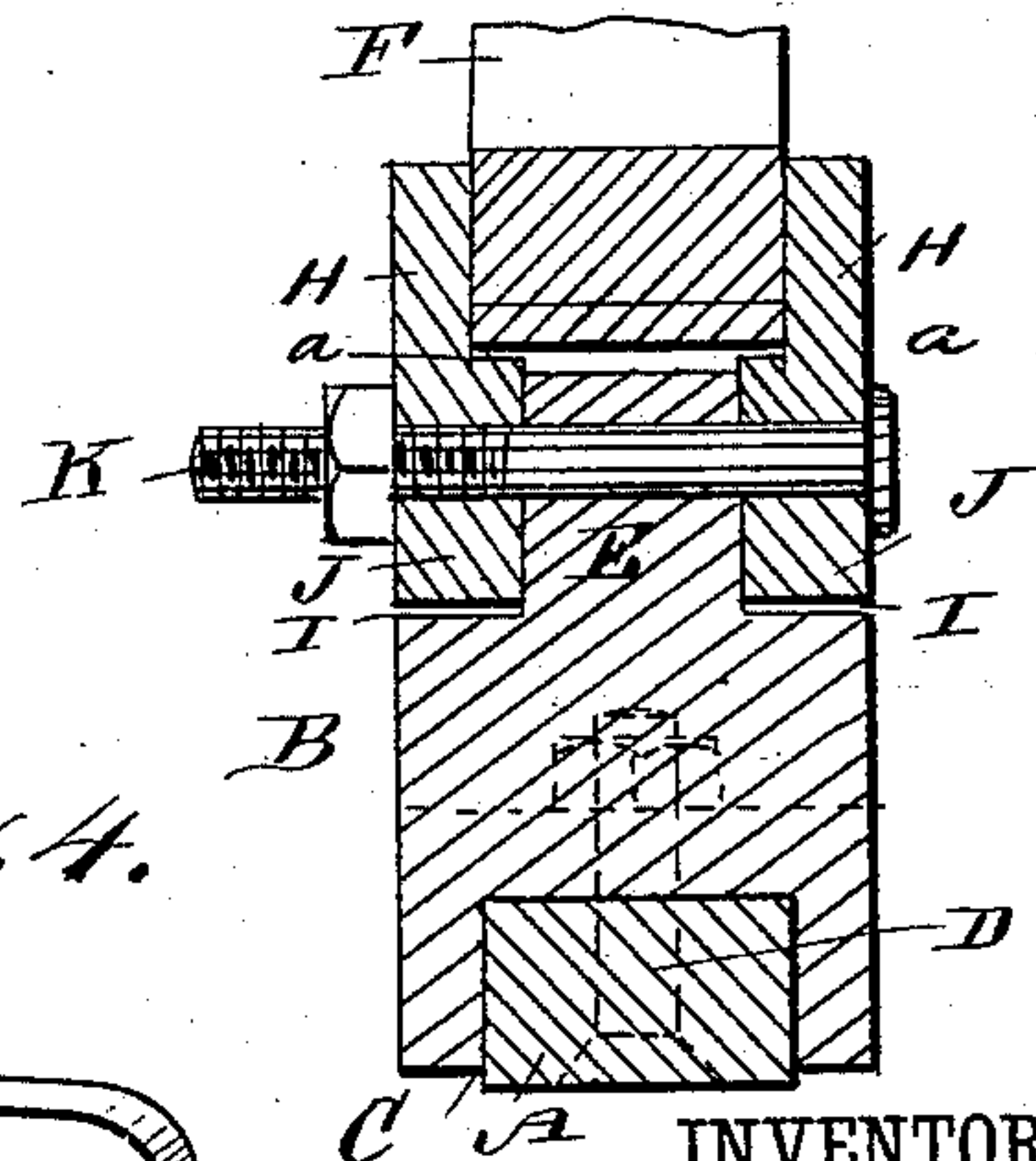
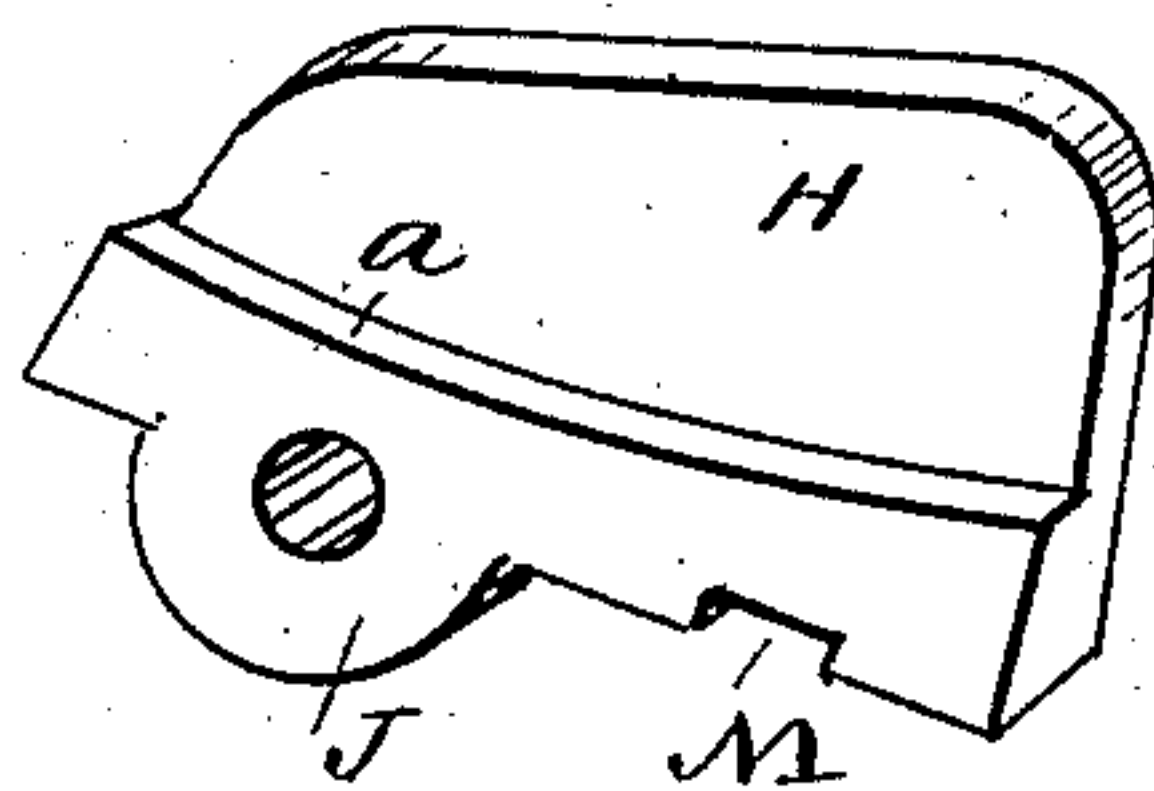


Fig. 4.



WITNESSES:

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FRANK J. LARKIN, OF KENOSHA, WISCONSIN.

SLEIGH-RUNNER.

SPECIFICATION forming part of Letters Patent No. 294,136, dated February 26, 1884.

Application filed August 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. LARKIN, of Kenosha, Kenosha county, Wisconsin, have invented a new and Improved Sleigh-Runner Attachment for Vehicle-Wheels, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved sleigh-runner attachment adapted to be attached to wheels of a vehicle, so that the vehicle can be used as a sleigh.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of a wheel provided with my improved sleigh-runner attachment. Fig. 2 is an enlarged cross-sectional view of the same on the line *x x*, Fig. 1; Fig. 3, an enlarged cross-sectional view of the same on the line *y y*, Fig. 1; and Fig. 4 is a perspective view of one of the jaws for holding the wheel on the wedge on the runner.

A runner, A, made of wood or metal, is shaped the same as a sleigh-runner. Two wedge-shaped pieces, B B', are each provided in the bottom with a longitudinal groove, C, adapted to receive the runner A, on which runner the pieces are held by bolts D, having their bottom heads countersunk in the bottom surface of the runner, as shown. The pieces B B' are provided with longitudinal slots b', through which the bolts D pass, these slots permitting of an adjustment of the pieces B B' according to the diameter of the wheel. At one end each piece B B' is provided with an upwardly-projecting part, E E', the upper ends of which may be rounded or beveled to fit closely against the outer curved edge of the rim F of the wheel G. The sides of the parts E E' are each provided with a recess, I, at the upper end for receiving jaws H, which are to rest against the sides of the wheel-rim, the lower parts of the jaws H having a greater thickness than the upper parts, and thereby forming internal curved shoulders a, or, in other words, those parts of the jaws fitting in the recesses I have a greater thickness than the parts resting against the sides of the rim of the wheel. The lower parts of the jaws H are provided

with lugs J, through which and the parts E E' bolts K are passed to hold the jaws H on the parts E E'. The adjacent faces k of the pieces B or B' and jaws H at each side of the lugs J are held apart by the lugs, so that the jaws H may rock on the lugs to allow wheels of different sizes to seat themselves solidly on the jaws. The clips L are passed around the rim F of the wheel, and the cross-plates L', through which the ends of the clips are passed, pass into recesses M in the lower edges of the jaws. Two jaws, P, are held on one end of the piece B, and receive the rim F of the wheel between them, the piece N, to which the jaws are held, being shaped to fit against the outer edge of the rim of the wheel. The pieces B B' are fastened on the runner, as shown, with their thinner ends toward each other, the jaws H being held on the parts E E'. The wheel is placed on the pieces B B' and their parts E E', and the clips L are fastened and clamped in place. The upper end or neck of the runner A is held to the rim of the wheel by a clip, O. The runner will thus be held securely on the wheel, and the vehicle can be used as a sleigh. The runner can be fastened to the wheel or detached from the same easily and rapidly. The cross pieces or plates L' are provided with elongated holes or slots b, so that they can be used on felloes or wheel-rims of different widths. The runner can be adjusted to wheels of any diameter. The wheel-rim rests upon the shoulders a of the jaws H, as shown. If desired, the jaws can be made integral with or rigidly united to the pieces B B', in place of being held thereto by bolts K.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with suitable bolts and clips, of the runners A A, the wedges B B', having longitudinal runner-grooves C and top projection, E, and the jaws H H, rabbeted at a, as shown and described.

2. The combination, with a runner, of the grooved pieces B B', having upwardly-projecting parts E E', fitting against the rim or felly of the wheel, the jaws H, fitting partly in recesses in the parts E E', the bolts K, and the clips L, substantially as herein shown and described.

3. The combination, with a runner, of grooved pieces B B', the jaws H, the bolts K, the clips L, and the jaws P, held on the piece B, substantially as herein shown and described.
- 5 4. The combination, with the runner A and wheel G, of the grooved pieces B B', the jaws H, provided with lugs J and notches M, the bolts K, and the clips L, substantially as herein shown and described.

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Witnesses:

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