

A. W. DOTY.  
SIDE-BAR WAGON.

No. 176,605.

Patented April 25, 1876.

Fig. 1

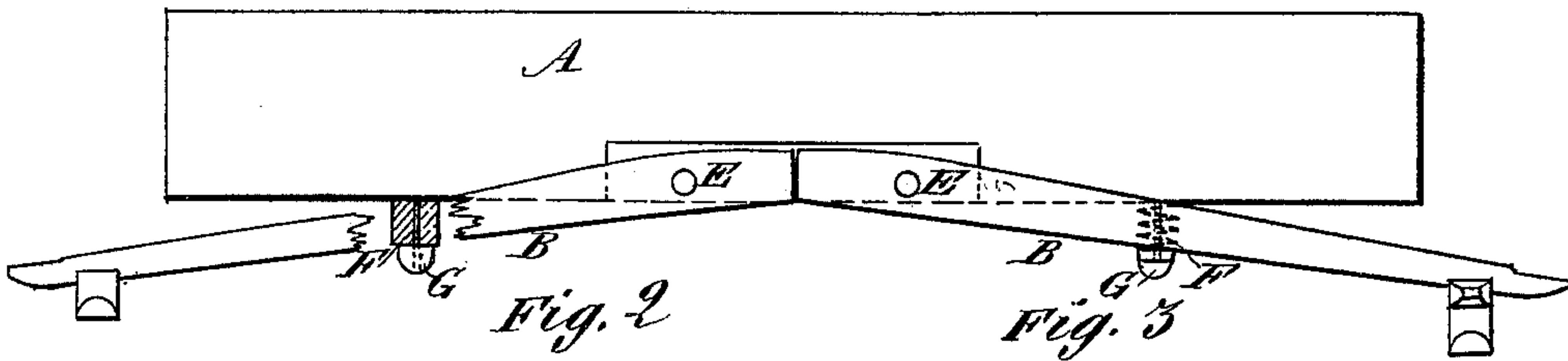


Fig. 2

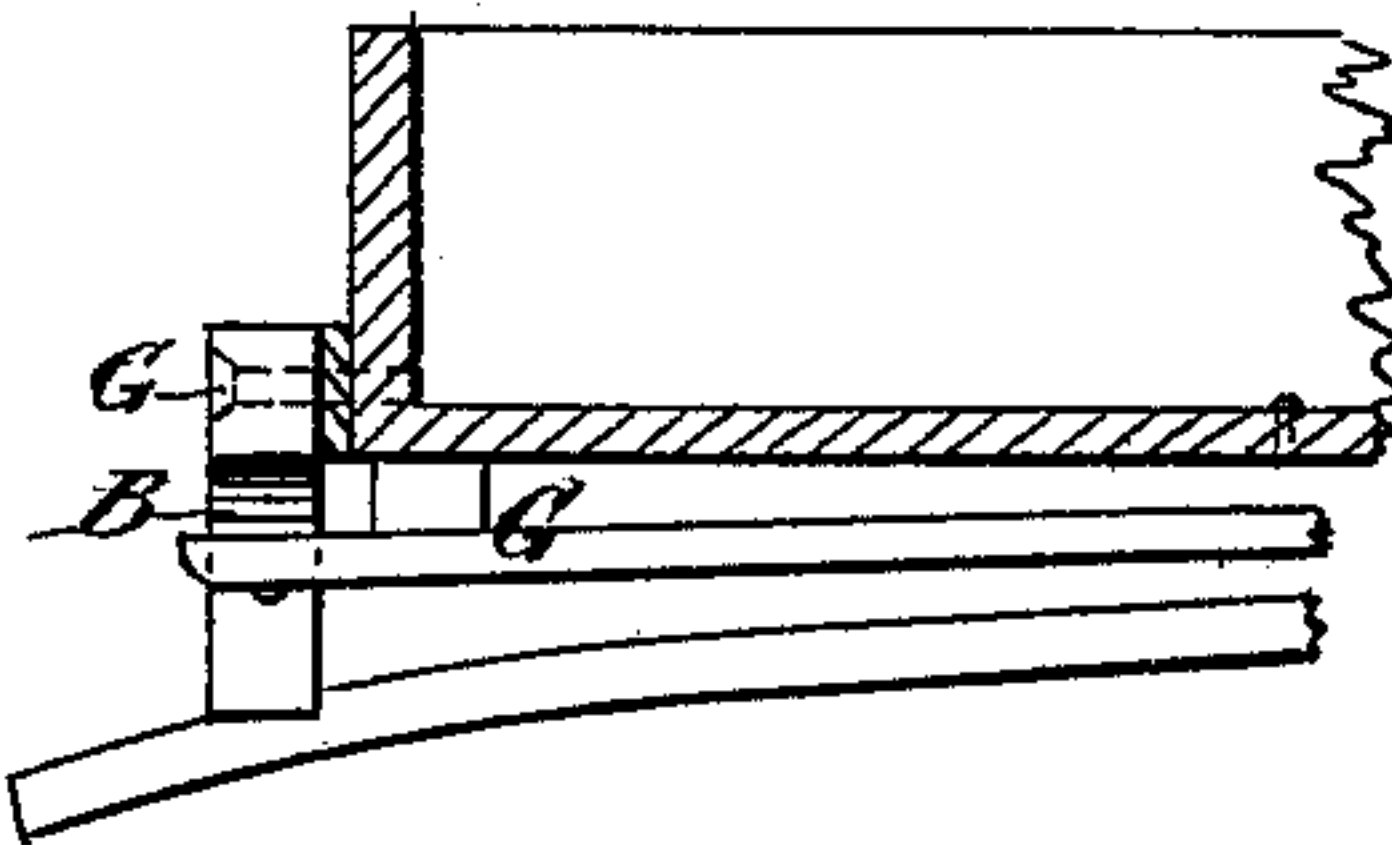


Fig. 3

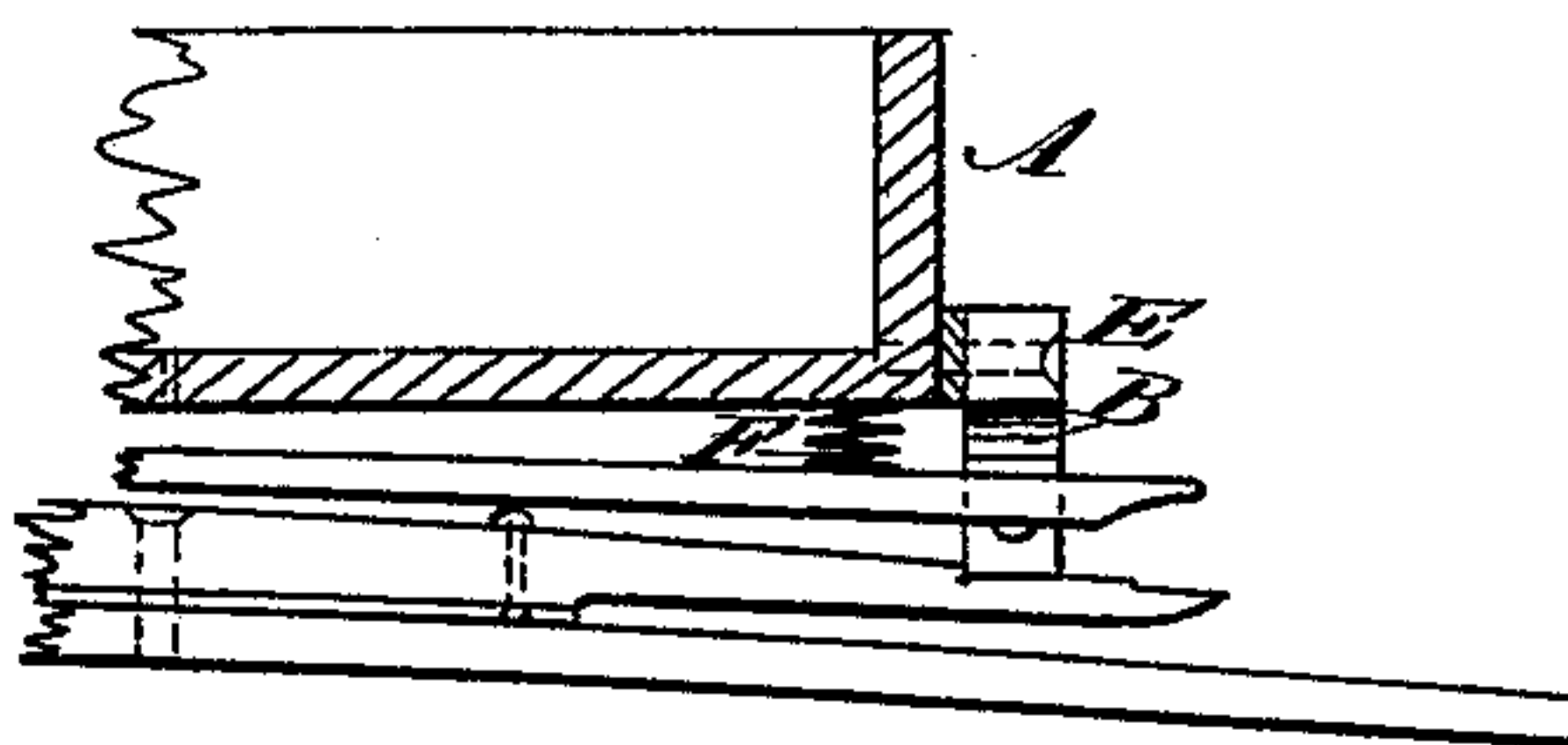


Fig. 4

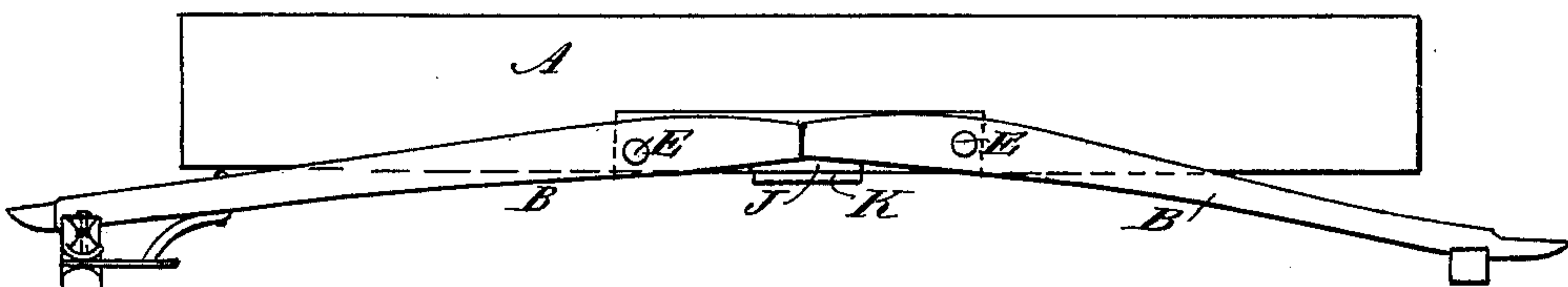


Fig. 6

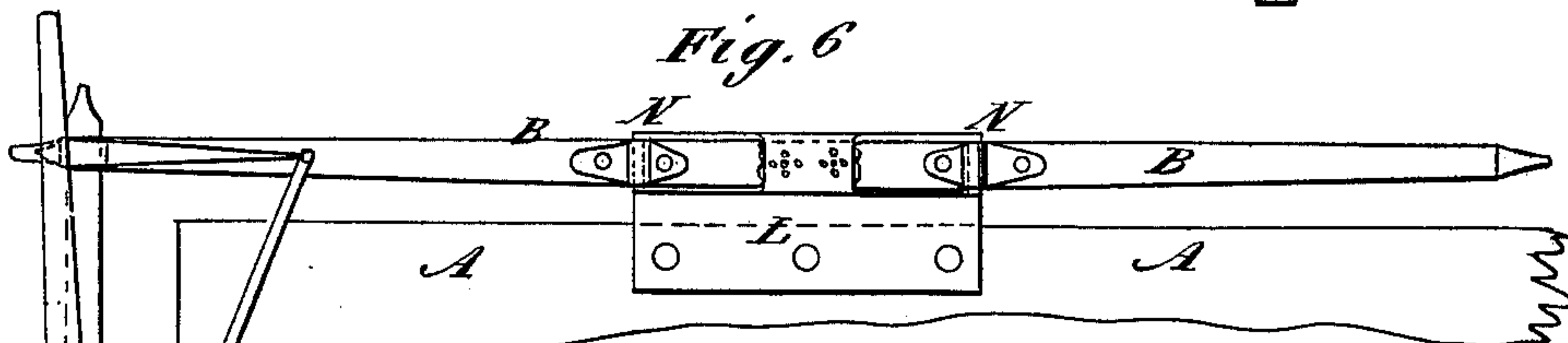


Fig. 7

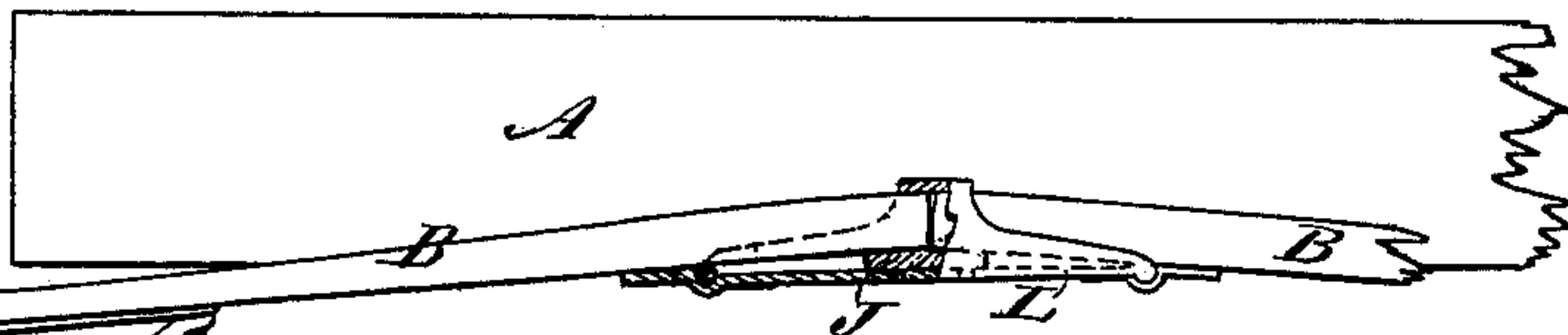
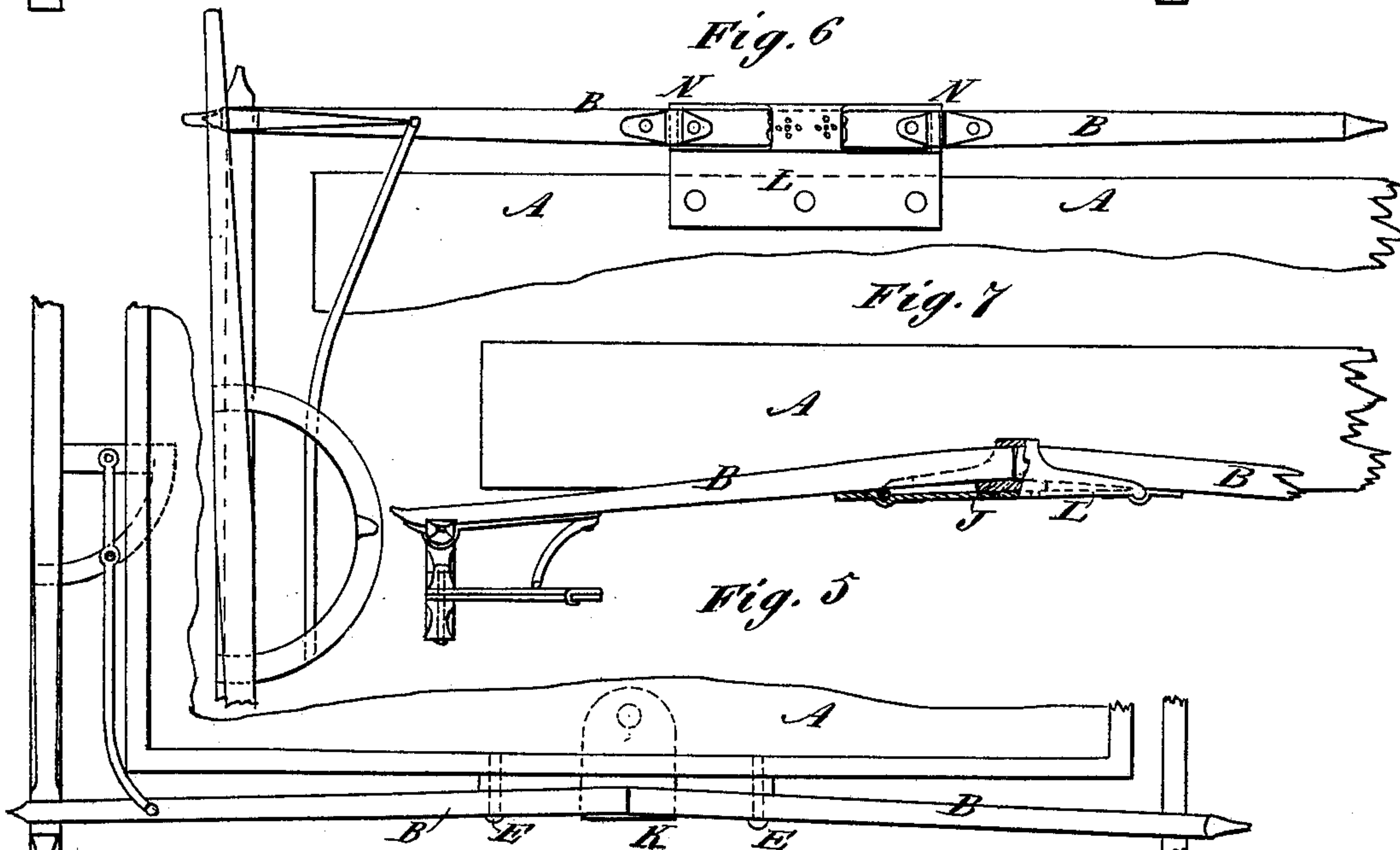


Fig. 5



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# UNITED STATES PATENT OFFICE.

ALFRED W. DOTY, OF WINDHAM, NEW YORK.

## IMPROVEMENT IN SIDE-BAR WAGONS.

Specification forming part of Letters Patent No. **176,605**, dated April 25, 1876; application filed March 25, 1876.

*To all whom it may concern:*

Be it known that I, ALFRED W. DOTY, of Windham, county of Greene and State of New York, have invented a new and useful Improvement in Carriages, of which the following is a specification:

My invention relates to that class of carriages in which the side bars are made in two parts, and connected to the box at the middle or thereabout.

The object of it is to mount the box lower down in this class of wagons; and it consists of the box let down between the side bars, instead of being mounted above them, as heretofore, the bars being pivoted to the sides of the box, or to supports attached thereto.

Figure 1 is a side elevation of one form of my present arrangement, with a part sectioned. Figs. 2 and 3 are transverse sections of the same. Fig. 4 is a side elevation of a modified arrangement of the same invention. Fig. 5 is a plan of Fig. 4. Fig. 6 is an inverted plan, and Fig. 7 is a side elevation, partly in section, of another modification.

Similar letters of reference indicate corresponding parts.

A is the box, and B the side bars, the latter being made in two parts, and connected to the box at the middle, and, according to this invention, being connected to the sides of the box, so as to drop the box lower down than

it can when mounted on the top. The manner of making the connection and arranging the springs may be varied; for instance, the bars may be pivoted to the sides, as at E, Figs. 1 and 2, and the springs supported on cross-bars H under the box, as at F and G, the bars H being suspended from or attached to the side bars, or the spring or cushion may be at J under the ends of the side bars, being supported by a clip, K, hanging down from the box, as in Figs. 4 and 5, or a clip, L, of another form, as in Figs. 6 and 7, the bars being in the latter case pivoted to the clip at N, instead of the box-sides. The bars lap the sides of the box, or other supports to which they are attached, so as to keep the axles square to the body and in proper relation to each other, without other stays or braces.

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

In a side-bar wagon, the combination, with the box A, of the pairs of supporting-bars B, each pivoted to the side of the box at E, above the bottom thereof, and provided with spring-bearings, as shown and described.

ALFRED W. DOTY.

Witnesses:

T. B. MOSHER,

ALEX. F. ROBERTS.