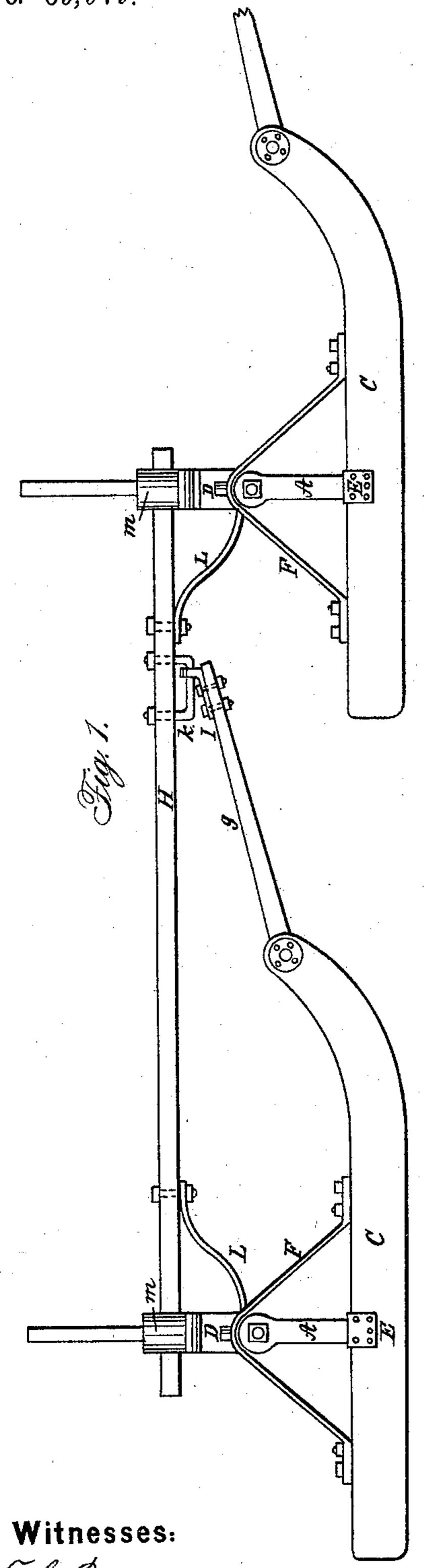
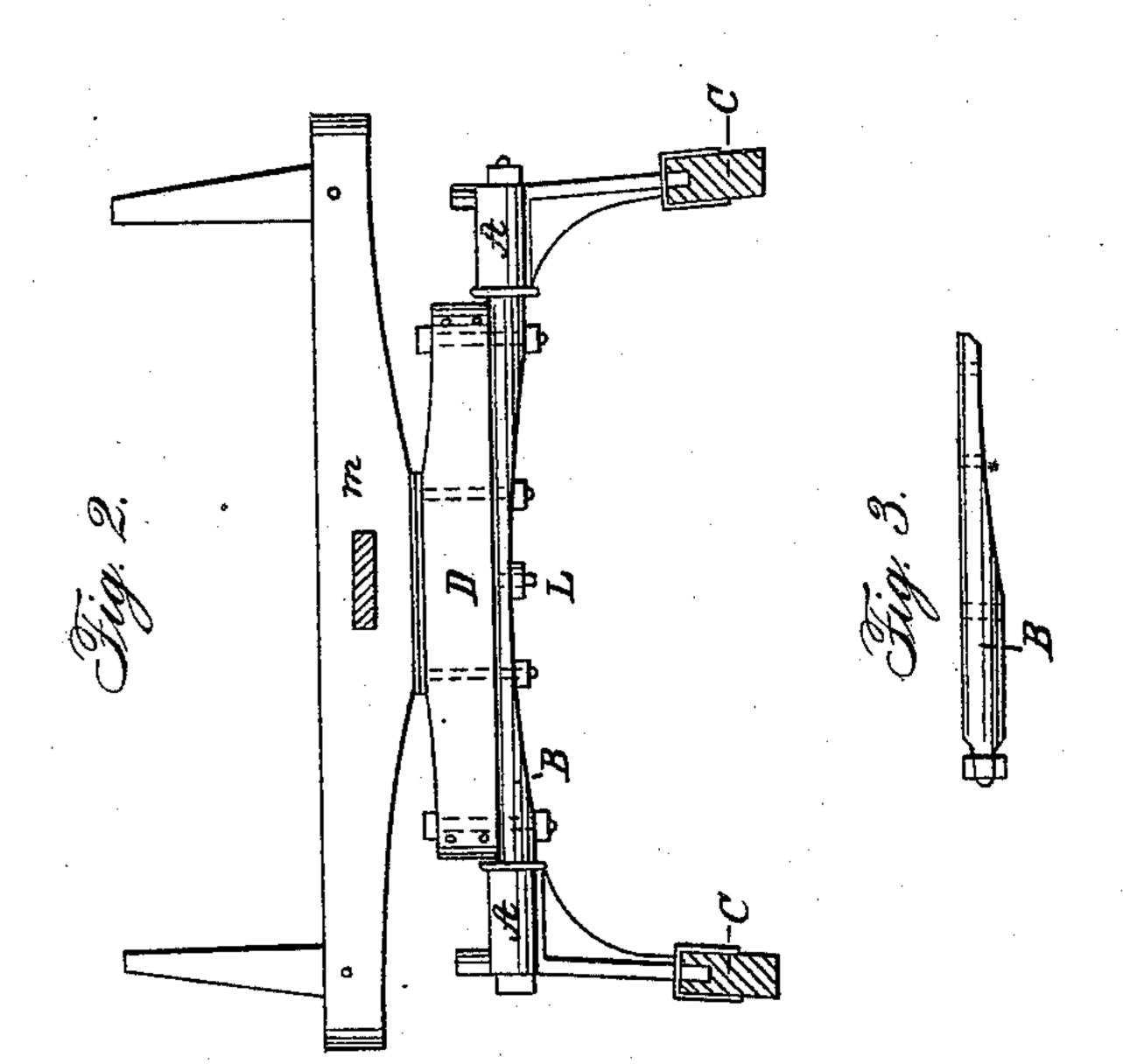
## FISHER & MEILI.

Sled.

No. 69,979.

Patented Oct. 22, 1867.





J. G. Brown Budolph Jehmicke Inventor:

John Frishe Tacob Meile

## Anited States Patent Office.

## JOHN FISHER, OF ST. JOSEPH, WISCONSIN, AND JACOB MEILI, OF STILL-WATER CITY, MINNESOTA.

Letters Patent No. 69,979, dated October 22, 1867.

## IMPROVEMENT IN SLEDS.

The Schedule referred to in these Xetters Patent and making part of the same.

Be it known that we, John Fisher, of the town of St. Joseph, county of St. Croix, and State of Wisconsin, and Jacob Meill, of Stillwater City, Washington county, and State of Minnesota, have invented a new and useful Improvement in the Construction of Sleds.

Our invention consists mainly in a "flexible knee" and "slide coupling."

We do hereby declare that the following is a clear and exact description of the construction and operation of the same, reference being had to the drawing hereto annexed, and being a part of this specification, in which—

Figure 1 is a side view,

Figure 2 is a front view, and

Figure 3 is an iron arm.

The flexible iron knee A works on and around the iron arm B. It sets on the iron gripe E, with a pivot through the said gripe. On the top the said iron knee works by a pivot through the iron rave F, which is bolted to and supports the runner C. The iron arm B is bolted to the bar D, and passes through the knee, holding the same to its place by a nut screwed on to the end of said arm on the outside of the knee. By the use of this flexible knee the runner is enabled to pass over any unevenness of the road without straining the bar D, and without affecting the position of its fellow-runner. The slide-fastening of the coupling-tongue and reach consists of the loop-iron I, which is bolted to the coupling-tongue J, and works forward and backward on the slide iron, according to the position of the runner C. The slide-iron K is bolted to the reach H. This reach passes through each bolster, M, and is supported by iron braces L, thus holding the bolsters to their position as inflexibly as those of a common lumber-wagon. The double bobs, or sled with four runners, have been in use many years, though we do not know of any being in use with stationary bolsters. We arrive at the inflexible bolster by the combined use of the "flexible knee" and the slide-fastenings of the coupling-tongue and reach. The hind bob or hind runners being drawn by the reach, the slide-fastenings guard the same in its proper bounds. This sled is stronger, works with greater ease to both the sled and the team, and is consequently less liable to get out of repair.

We claim as our invention-

1. The flexible knee A, constructed as described, fitting and turning loosely upon the end of the iron axle B bolted to the bolster D, its lower end stepped in the gripe E, and held in position by means of the iron rave F, whose centre passes over the top of the said knee, and whose ends are secured to the top of the runner C, as herein described, for the purpose specified.

2. The slide-coupling, constructed as described, consisting of the loop-iron I bolted to the coupling-tongue g, and sliding upon the slide-iron K bolted to the under side of the reach H, the latter being rigidly secured to the front and rear bolsters D by the braces L, all operating as described, whereby the hind runners are allowed a longitudinal play, while the bolsters are inflexible, as herein shown and described.

3. The inflexible bolsters, formed by the combination of the flexible knees A, raves F, slide-fastenings I K, coupling-tongue g, and immovable reach H, substantially as described, for the purpose specified.

JOHN FISHER, JACOB MEILI.

Witnesses:

RUDOLPH LEHMICKE, F. G. BROWN.