

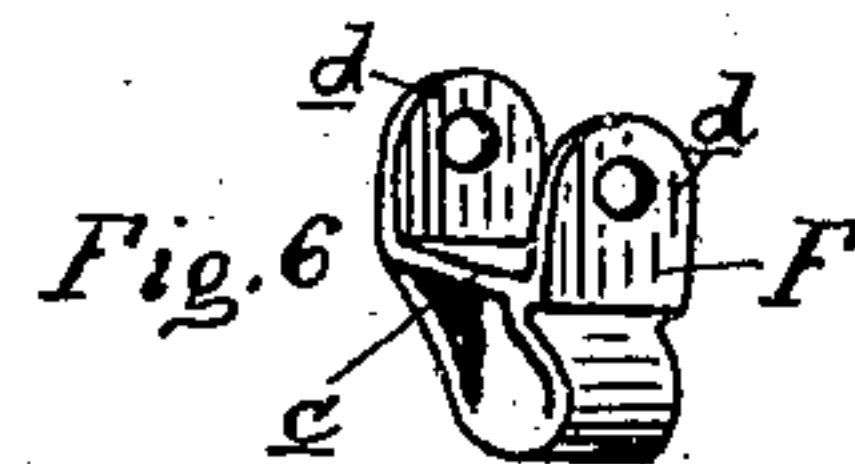
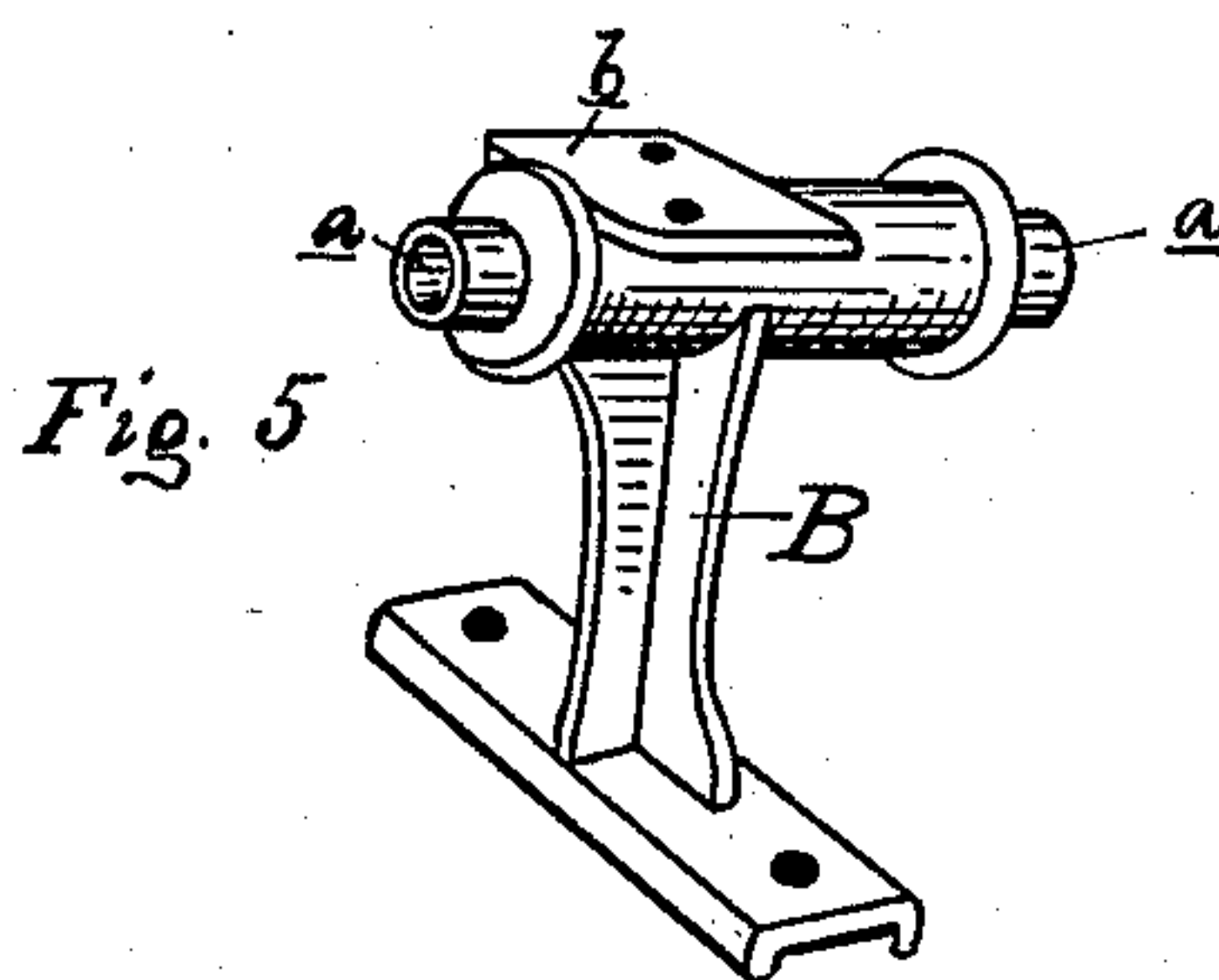
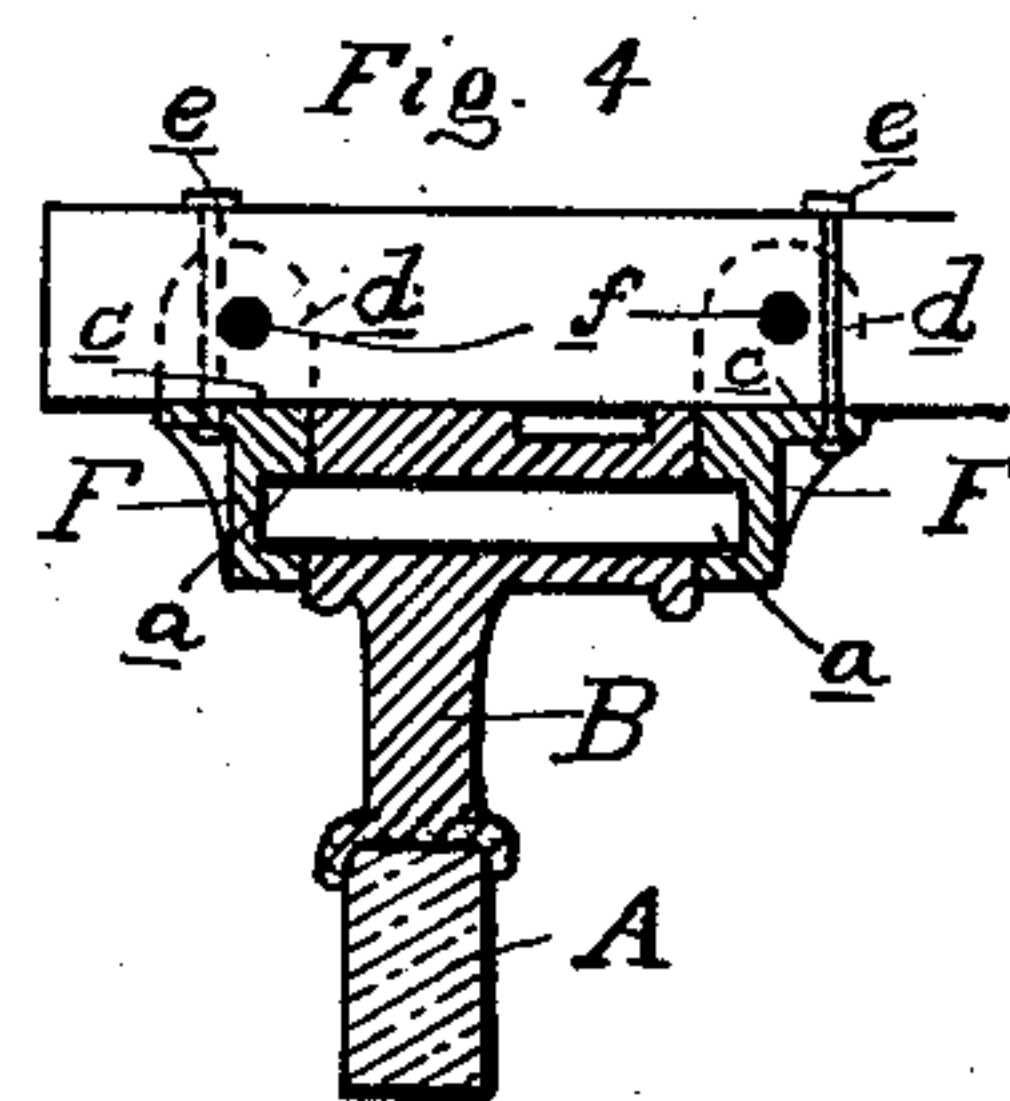
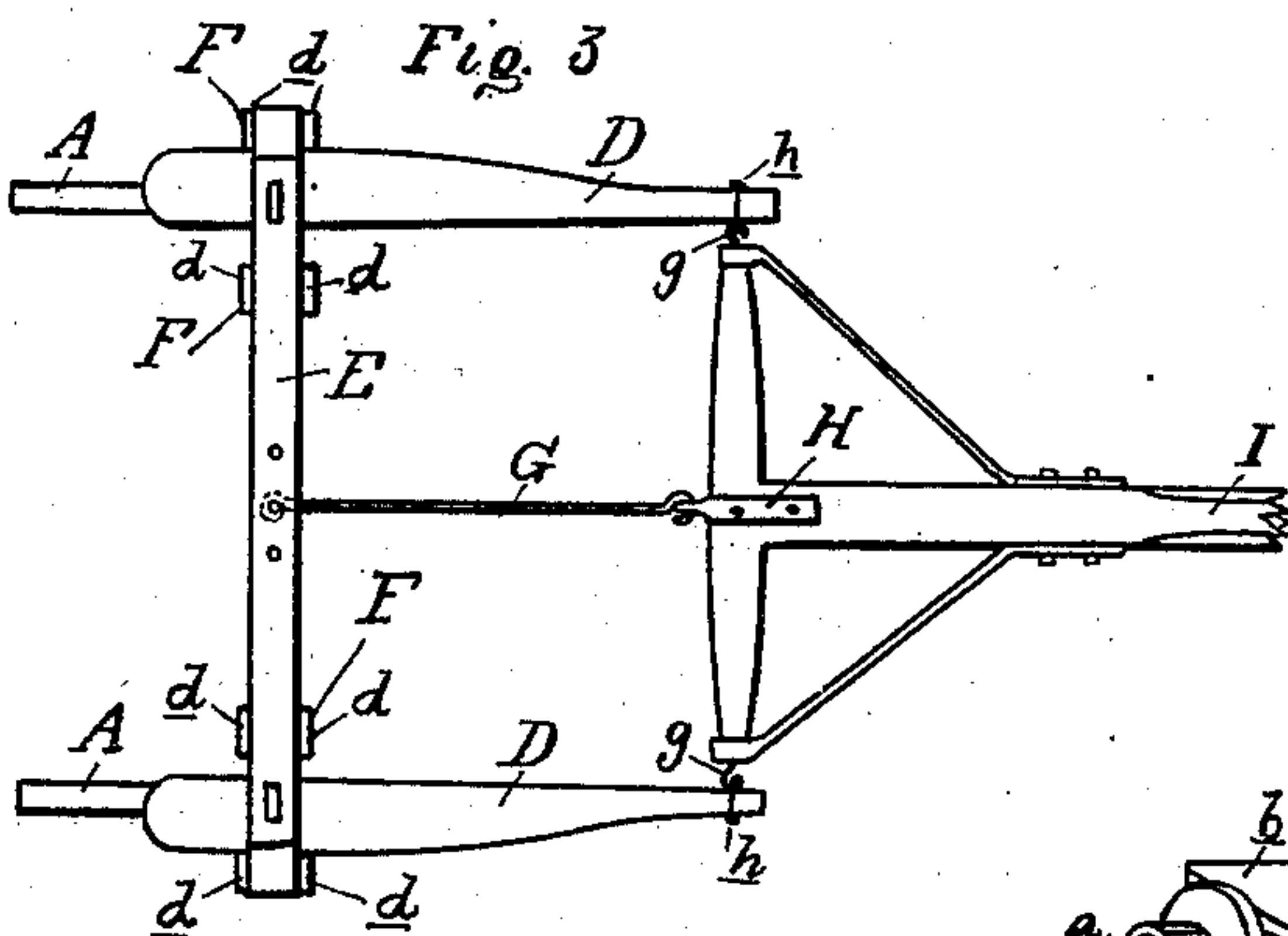
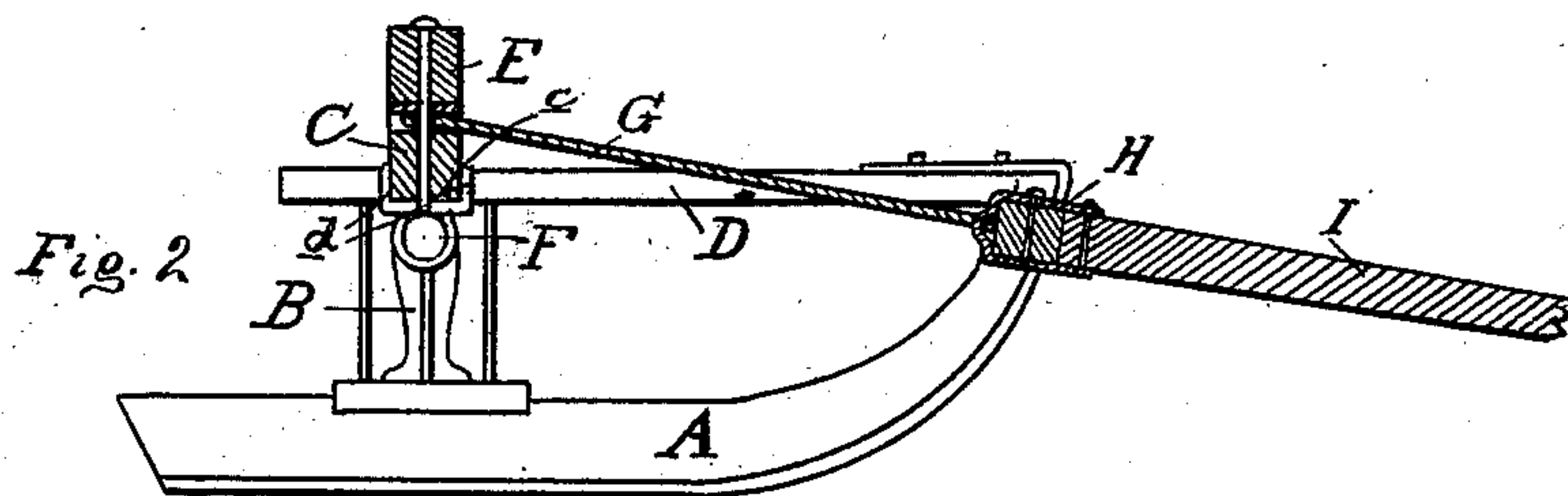
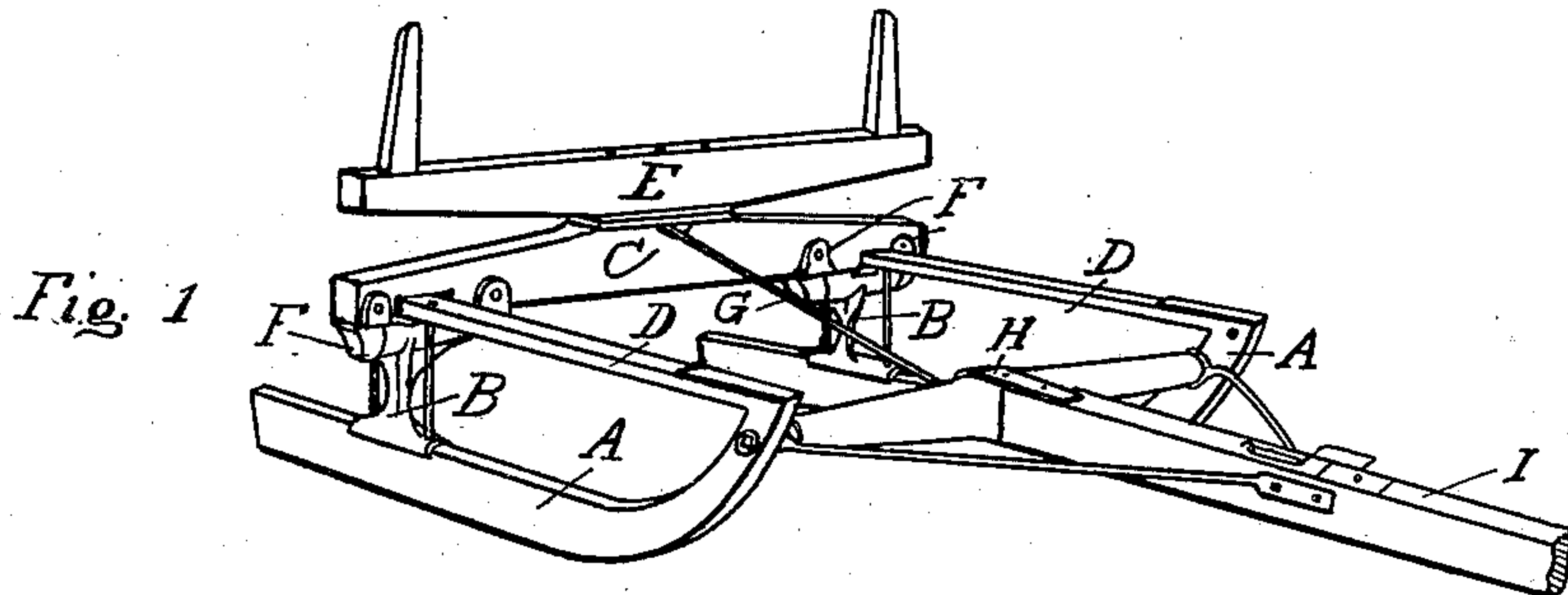
(No Model.)

M. S. TYLER.

BOB SLED.

No. 376,492.

Patented Jan. 17, 1888.



Witnesses:

P. M. Hulbert.
H. J. Mayne

Inventor:

Morris S. Tyler
By J. W. Robertson
Atty.

UNITED STATES PATENT OFFICE.

MORRIS S. TYLER, OF LANSING, MICHIGAN.

BOB-SLED.

SPECIFICATION forming part of Letters Patent No. 376,492, dated January 17, 1888.

Application filed June 27, 1887. Serial No. 242,636. (No model.)

To all whom it may concern:

Be it known that I, MORRIS S. TYLER, of Lansing, in the county of Ingham and State of Michigan, have invented new and useful Improvements in Bob-Sleds; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to new and useful improvements in bob sleds; and the invention consists in the peculiar construction of the parts, as more fully hereinafter described.

Figure 1 is a perspective view of a bob. Fig. 2 is a vertical central longitudinal section. Fig. 3 is a plan. Fig. 4 is a cross-section through one of the mortised standards. Fig. 5 is a detached perspective of one of the standards. Fig. 6 is a perspective view of the boxes in which the standard is pivotally secured to the cross-beam.

In the accompanying drawings, which form a part of this specification, A A are the runners. B are standards rigidly secured to the runners. C is the cross-beam supported by said standards. D are raves, and E is a bolster pivotally secured upon the cross-beam, all the parts being constructed and operating in the usual manner, except as hereinafter described.

The standards, one of which is shown detached in Fig. 5, are cast in one piece, preferably of the form shown, and integrally with a piece of pipe of sufficient length to form short trunnions *a*, projecting laterally from the head of the standard, and with a bearing-plate, *b*, on top of the standard.

F are caps adapted to fit into the trunnions *a* to form bearings for the same, and these caps have bearing-faces *c* to fit on the under side of the cross-beam, and upwardly-projecting

ears *d* on the front and rear side of the cross-beam. By means of a vertical bolt, *e*, and transverse bolt *f*, each cap is secured to the cross-beam in such manner as to permit the free oscillation of the standard.

The draft-pole I connect to the forward ends of the runners by means of flexible connections, such as formed by two eyebolts, *g h*, hooked into each other; and I further provide a draft-rod, G, furnished with hook-eyes at its ends, one end being hooked on the king-bolt, and the other into an eye formed in the strap H, which is secured at the rear end of the draft-pole.

It will be seen that by the construction described the runners are independently pivoted to the cross-beam and adapted to independently adjust themselves to all the irregularities of the ground, while at the same time the connection is simple and has all the elements of strength.

What I claim as my invention is—

1. The standard B, comprising in a single element the upright, the head, the trunnions *a a*, projecting laterally from said head, a flanged base to engage the runner, and a bearing-plate, *b*, on top of the standard, substantially as and for the purposes specified.

2. In a bob sled, the combination, with the cross-beam C, of standard B, rigidly secured to the runner and rave and having laterally-projecting trunnions *a*, and the caps F, adapted to form pivotal bearings for the trunnions of the standards, and provided with bearing-faces *c* and upwardly-projecting ears *d*, all arranged substantially as described.

MORRIS S. TYLER.

Witnesses:

W. DONOVAN,
J. N. ALEXANDER.