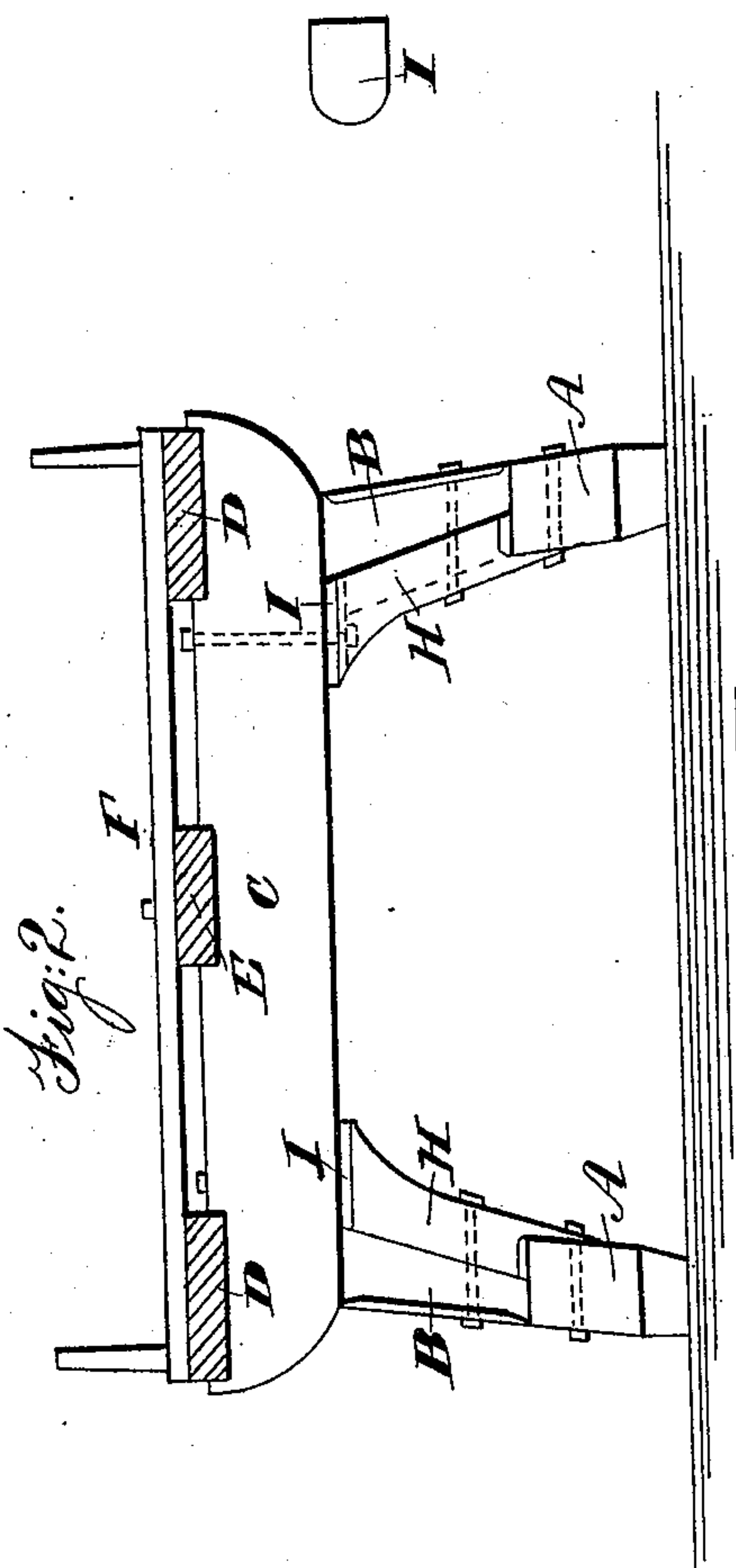
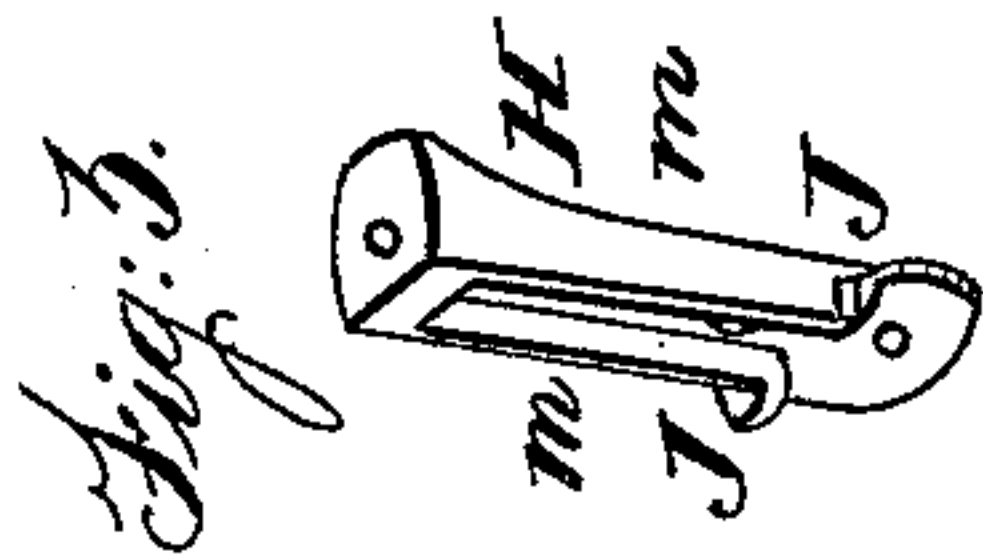
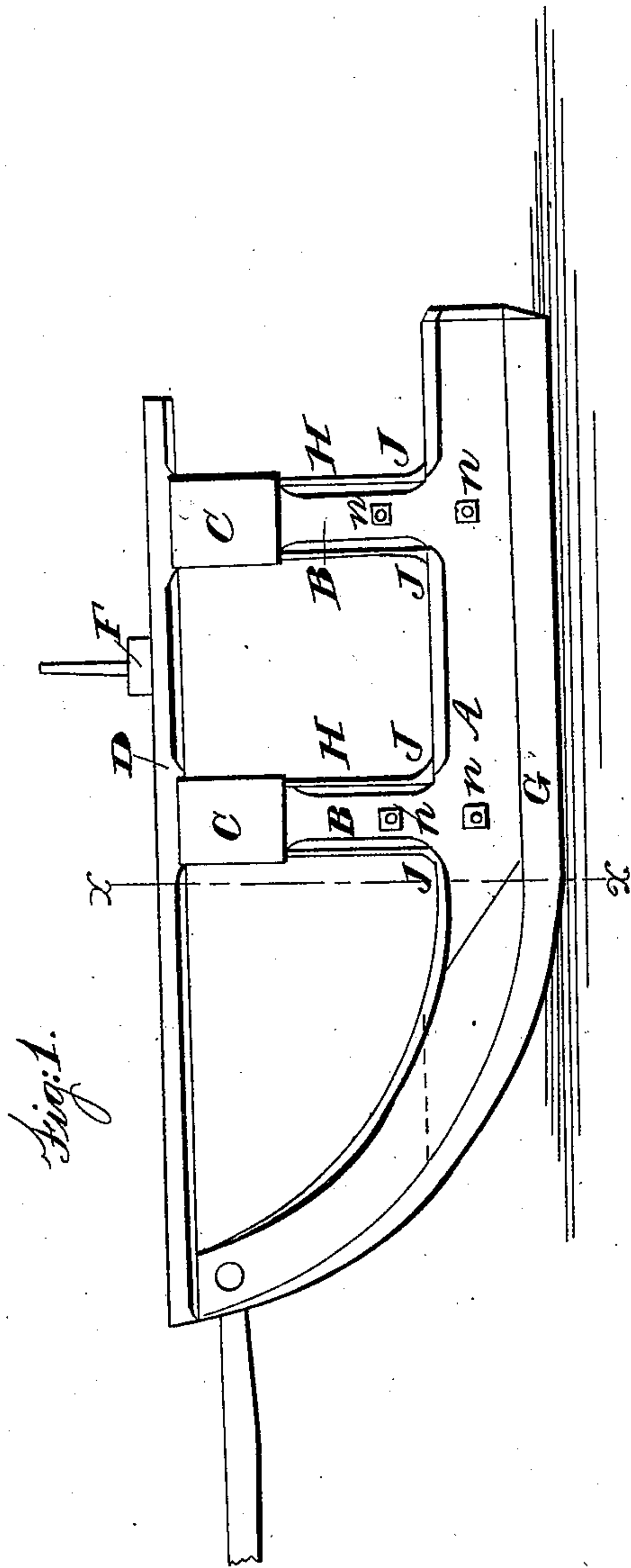


S. H NOBLE

Sleigh.

No. 62,771.

Patented Mar. 12, 1867.



Witnesses:
Geo L Chapin
A. Hayward

Inventor
S. Henry Noble.

United States Patent Office.

S. HENRY NOBLE, OF CHICAGO, ILLINOIS.

Letters Patent No. 62,771, dated March 12, 1867.

IMPROVEMENT IN SLEIGHS.

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

TO ALL WHOM THIS MAY CONCERN:

Be it known that I, S. HENRY NOBLE, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Sleighs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure I is a longitudinal elevation of my improvement in sleighs.

Figure II is a transverse sectional elevation of the same taken through the red line *x x*, Fig. I.

Figure III is a perspective representation of the metallic knee support.

The nature of my invention consists in providing for the knee of the sleigh an additional support, which has a recess for receiving the inner side of the knee, the lower ends of the sides of the recess terminating in feet which rest on the top of the runner; and further, in adjusting a rubber plate between the upper end of the support and the under side of the beam for the purpose of relieving the shock when the runner comes in contact with some unyielding body, as when sliding sidewise. This is a very important consideration, as the force of the blow is, in a great measure, neutralized, and the liability of breakage is very much lessened.

To enable others skilled in the art to make and use my invention, I will describe the method of construction and operation.

A represents the runner; C the beams; D the rave; E the bearer, and F the bolster of the common bob-sleigh. B is the knee, which is not made as wide at the top as when the common brace is used as a support. H shows the support, which is of cast iron, and has the flanges *m m* passing on to the sides of the knee which is adjusted closely in the recess. The feet J are turned outward, and rest on the runner A, preventing the same from being turned inward. *o* is the cap of the support on which the rubber is adjusted and held in place by means of the bolt P passing through the beam C, rubber spring I, and cap *o*. *r* shows small bolt passing through the knee B and support H, and holding them together. S is the bolt which secures the lower part of the support to the runner A.

Operation.

It is a well-known fact, in the construction of sleighs for supporting heavy loads, that the joints must be made to yield enough to allow the runners to pass over uneven surfaces, in which case the rubber will materially relieve the strain. No directions seem necessary to show how the sleigh may be used.

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

1. The rubber spring I or its equivalent, placed in the joint between the knee and the cross-beam of a sleigh, substantially as and for the purpose set forth.

2. The combination of the support H with the runner A, knee B, rubber I, and beam C, substantially as described.

S. H. NOBLE.

Witnesses:

GEO. L. CHAPIN,

A. HAYWARD.