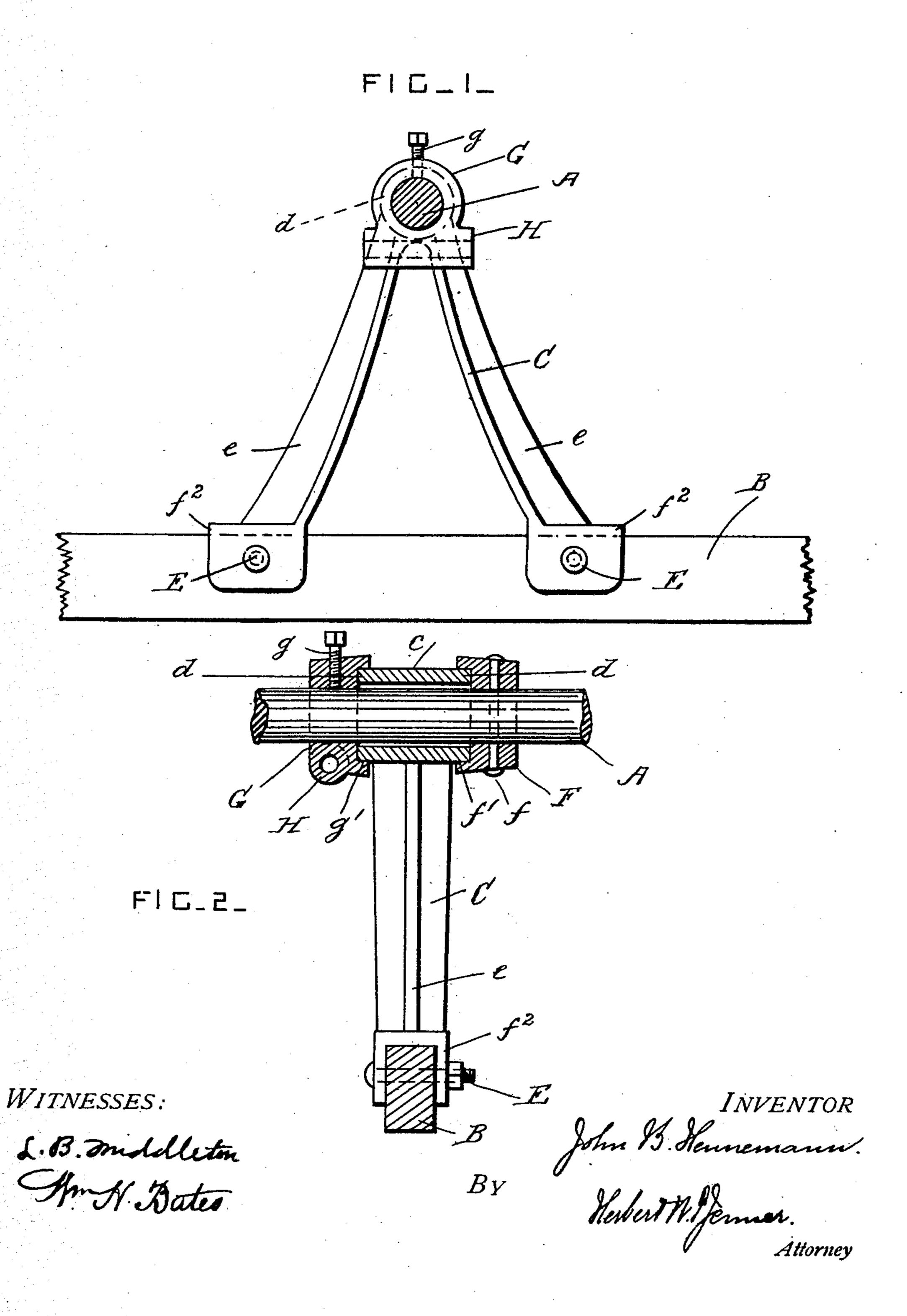
J. B. HENNEMANN. SLEIGH KNEE. APPLICATION FILED MAR. 13, 1907.



UNITED STATES PATENT OFFICE.

JOHN B. HENNEMANN, OF BLOOMER, WISCONSIN.

SLEIGH-KNEE.

No. 860,294.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed March 13, 1907. Serial No. 362,204.

To all whom it may concern:

Be it known that I, John B. Hennemann, a citizen of the United States, residing at Bloomer, in the county of Chippewa and State of Wisconsin, have invented certain new and useful Improvements in Sleigh-Knees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to oscillating knees for sleighs; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the knee and the parts connected to it. Fig. 2 is an end view, 15 partly in section.

A is a portion of the sleigh beam which is of any approved construction.

B is one of the runners, which also is of any approved form and construction.

C is the knee which is provided at its upper end with a boss c having circular end portions d. The boss c is provided with a hole which is a little larger than the beam A, so that the said tubular boss does not bear directly on the said beam which it encircles. The main portion of the knee consists of two curved and diverging arms provided with stiffening ribs or flanges e, and provided with sockets f^2 at their free ends.

E are bolts for securing the runner in the said sockets.

F is a collar which is secured on the beam by a rivet f or other fastening device. This collar is provided 30 with a circular chamber f' in which one of the circular end portions d of the boss of the knee is journaled. G is a second collar provided with a set-screw g and secured on the beam on the opposite side of the knee from the collar F. The collar G is provided with a 35 circular chamber g' in which the other circular end portion of the boss c is journaled.

H is a socket on one side of the collar G provided with a hole for the spring.

The collars hold the knee in position and permit it to 40 oscillate. The collar G can be set up and adjusted as often as necessary.

What I claim is:

The combination, with a sleigh-beam, of a knee having a tubular boss which encircles the said beam, collars secured 45 to the said beam and provided with circular chambers in which the end portions of the said boss are journaled, and a runner secured to the said knee.

In testimony whereof I have affixed my signature in the presence of two witnesses.

JOHN B. HENNEMANN.

Witnesses:

JOHN HENNEMAN, H. M. STEWART.