

G. A. & H. J. GILBERT.  
Sleigh-Knee.

No. 209,251.

Patented Oct. 22, 1878.

Fig 1.

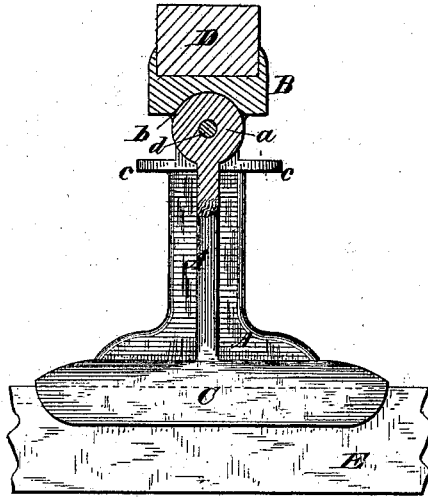


Fig 2.

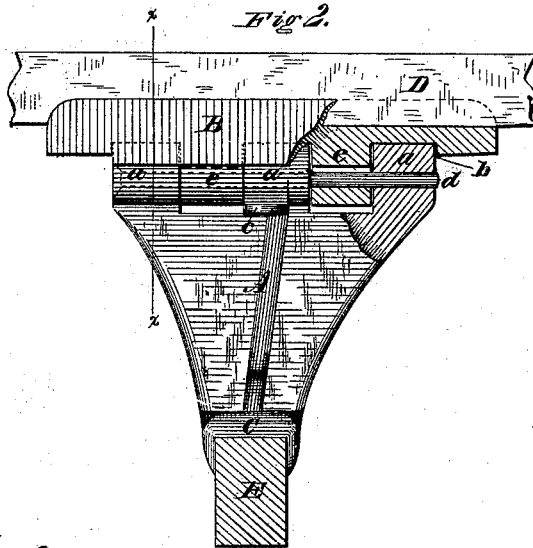
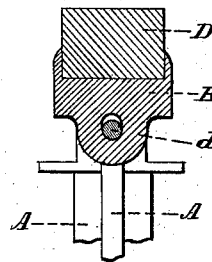


Fig 3



Inventor.

George A. Gilbert,  
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by C. S. Bundy  
attorney in fact.

Witnesses

Harry King  
W. Milloughky

# UNITED STATES PATENT OFFICE.

GEORGE A. GILBERT AND HENRY J. GILBERT, OF MENOMONEE, WISCONSIN.

## IMPROVEMENT IN SLEIGH-KNEES.

Specification forming part of Letters Patent No. **209,251**, dated October 22, 1878; application filed June 20, 1878.

*To all whom it may concern:*

Be it known that we, GEORGE A. GILBERT and HENRY J. GILBERT, of Menomonee, in the county of Dunn and State of Wisconsin, have invented certain new and useful Improvements in an Attachment for Fastening Sleigh-Knees to the Beam; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of our invention is to supply a flexible attachment for fastening sleigh-knees to the beam, so as to allow each runner sufficient play to accommodate itself to the uneven surfaces of the track on which it is running, and at the same time to preserve the required strength at the point of attachment.

Figure 1 in the accompanying drawing represents a side elevation of our invention as it will appear upon a sleigh when ready for use. Fig. 2 represents a front elevation of the same with part of the joint displayed in section, the same letters indicating corresponding parts in each.

A is the standard; B, the beam-clamp. C

is the runner-clamp. D is the beam. E is the runner. *a* is the knuckle on the standard. *b* is the recess or socket in B. *c c* are the stops; *d*, the pivot or bolt; *e*, the knuckle on B.

This attachment combines the advantages of a knuckle and hinge joint. The principal bearing being upon the knuckle and socket, very little strain is thrown upon the bolt or pivot. We thus secure great strength where it is required, and at the same time sufficient flexibility for the use designed.

The eyes in the knuckles *e* are elliptical, as shown in Fig. 3, whereby the entire weight is thrown upon the knuckles *a*.

We claim as new and desire to have patented—

The beam-clamp B, having knuckles *e* and sockets, in combination with standard A, having knuckles *a* and a bolt, *d*, said bolt fitting loosely in the knuckles *e*, substantially as shown and described.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

GEO. A. GILBERT.  
HENRY J. GILBERT.

Witnesses:  
E. B. MANWARING,  
SAMUEL OMDAHL.