

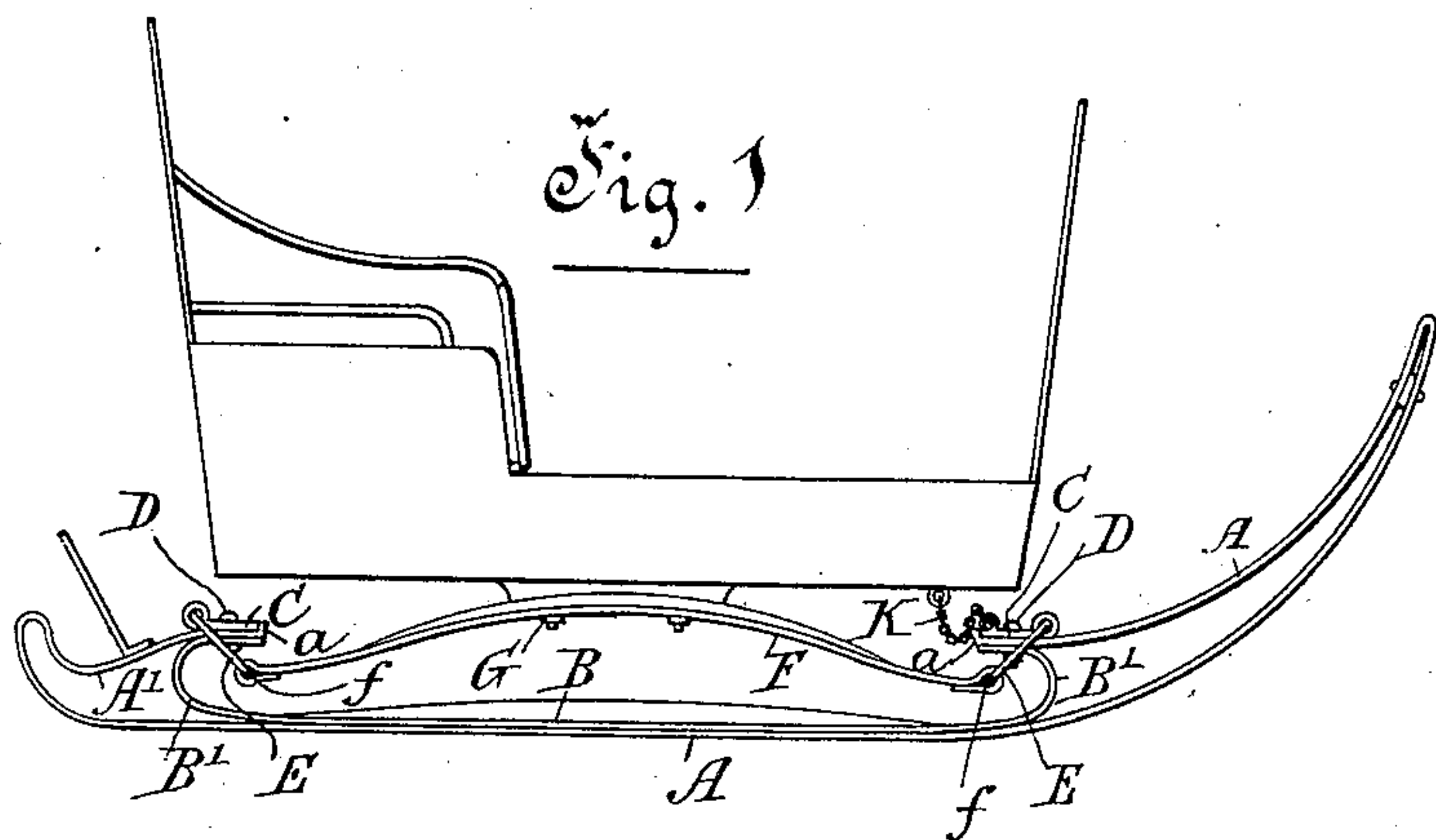
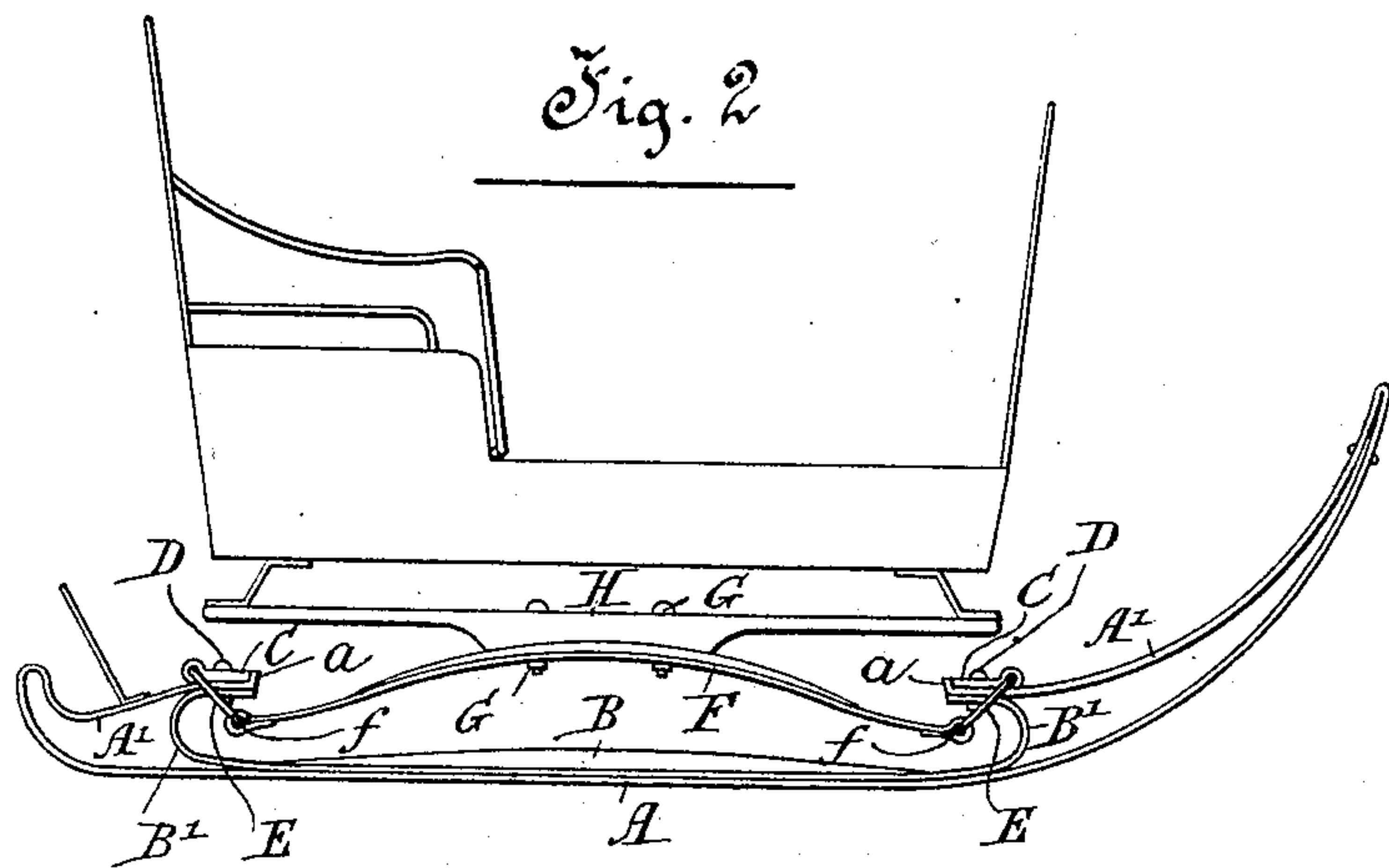
(No Model.)

A. BERRY.

SLEIGH.

No. 389,869.

Patented Sept. 25, 1888.



Witnesses
Olo M. Evans
V. M. M. Seal

Inventor

A. Berry

By his Attorneys

Charles H. Kellum

UNITED STATES PATENT OFFICE.

AUSTIN BERRY, OF WARDEN, QUEBEC, CANADA.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 389,869, dated September 25, 1888.

Application filed February 15, 1888. Serial No. 264,066. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN BERRY, of Warden, in the county of Shefford and Province of Quebec, Canada, have invented certain new and useful Improvements in Sleighs; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has reference to the construction of sleighs in which springs are interposed between the body of the sleigh and the runners, and embodies devices by which such springs are connected directly to the runners and at the same time act as the sole support of the sleigh-body. It may be thus briefly described: The ends of the runners are returned far enough to be just about under the front and rear of the sleigh-body, and to these ends are secured the turned-over ends of stiffening-pieces attached centrally on the upper side of the runners. To the junction, both front and rear of the runners and the stiffening-pieces, are hung on both sides and by links the ends of bow or elliptic springs secured centrally, either directly to the bottom of the body or to side bars upon which the body is mounted in the same way as a wagon-body. The front of the body is attached to the junction of the runners and stiffening-pieces, and cross-pieces may be riveted on the runners to prevent them from spreading.

For full comprehension of the invention reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a side view of what is termed a "Quebec cariole" to which my invention is applied, and Fig. 2 a similar view of a modification of the same with side bars.

Similar letters of reference indicate like parts.

A A are the runners, of any usual section and type, A' A' being their returned ends, which may either be made in one with the runners themselves or separately and secured to the ends of the runners proper by rivets or equivalent fastenings, *a a* being the turned-up ends of A'.

B B are the stiffening-pieces of any section desired, and secured in any way on the top of

the runners A and having their ends turned over, as shown at B' B'.

C C are blocks laid on the ends of A' A' and butting against the turned-up ends *a a*, and D D are bolts securing together C, A', and B'.

E E are links either passing through eyes formed on the outer ends of C C or simply resting against them. These links pass through eyes *f* on the ends of the springs F, which serve as the actual supports of the sleigh-body and are attached thereto by bolts or rivets G. In Fig. 2 these springs F F are shown as attached to side bars, H H, upon which the sleigh-body is mounted.

K K are chains or other jointed or flexible connections attaching the front of the sleigh-body to the junction of A', B', and C for the purpose of preventing a backward tip of the body in case of a sudden start of the horse or a jar from any other cause.

The invention, as above described, may be used in connection with any ordinary and approved type of sleigh-body.

What I claim is as follows:

1. The combination of a sleigh-body, runners with returned ends, and elliptical springs secured to under side of body and hung to returned ends of runners, all as herein shown and set forth.

2. In combination with a sleigh-body, the runners with returned ends, stiffening-pieces secured on top of the runners and having their ends turned over and attached rigidly to the returned ends of runners, and springs hung at both ends to the junction of the runners and stiffening-pieces and carrying the body of the sleigh, all as herein set forth.

3. The combination, with the sleigh-body, springs supporting same, and runners to which such springs are secured, of jointed connections from front of sleigh-body to runners, as and for the purposes set forth.

A. BERRY.

Witnesses:

FRAS. HY. REYNOLDS,
OWEN N. EVANS.