

W. H. COLEMAN.
FOLDING OR COLLAPSIBLE SLED.
APPLICATION FILED MAR. 3, 1909.

980,604.

Patented Jan. 3, 1911.

Fig. 1.

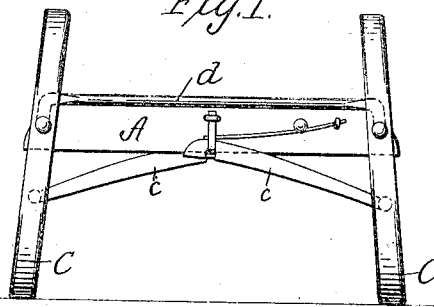


Fig. 2.

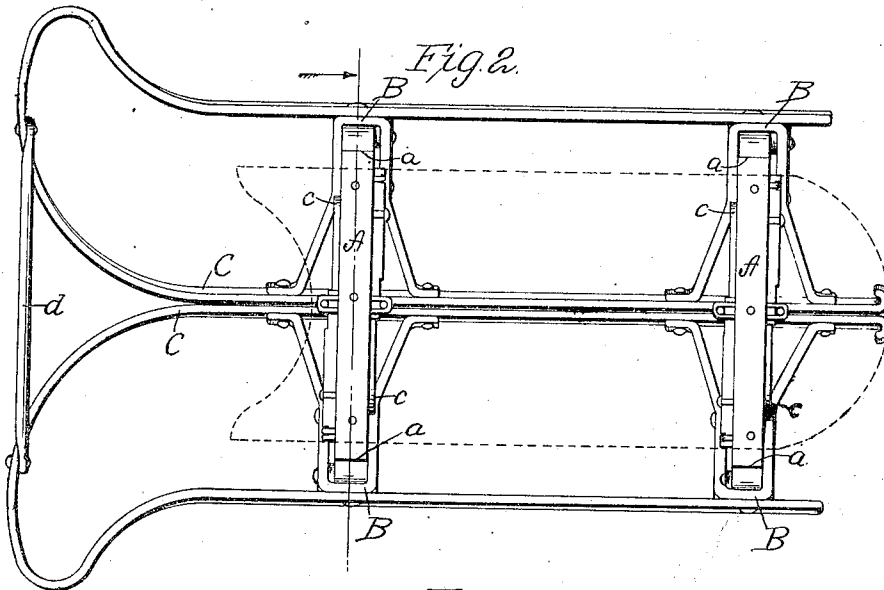


Fig. 3.

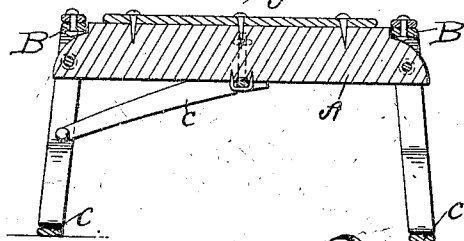
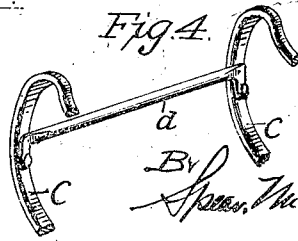


Fig. 4.



ATTEST
Bent McCall
Evel R. Tolson.

INVENTOR.
WILLIAM H. COLEMAN.
By *Spencer, Macdonald, & Duncanson*
ATTYS

UNITED STATES PATENT OFFICE.

WILLIAM H. COLEMAN, OF BINGHAMTON, NEW YORK, ASSIGNOR TO WILKINSON
MANUFACTURING COMPANY, OF BINGHAMTON, NEW YORK.

FOLDING OR COLLAPSIBLE SLED.

980,604.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed March 3, 1909. Serial No. 481,019.

To all whom it may concern:

Be it known that I, WILLIAM H. COLEMAN, a citizen of the United States, residing at Binghamton, New York, have invented certain new and useful Improvements in Folding or Collapsible Sleds, of which the following is a specification.

My invention relates to children's sleds, and is designed to provide a simple form of folding or collapsible sled, in which the runners may be folded inward when the sled is not in use or when it is to be carried to and from the point of use, or when it is stored.

The invention not only includes the collapsible feature, but other details of construction tending to simplicity and economy.

The sled may be made of any design, and may embody any of the features of the sleds now being made, in addition to the features of my present invention.

In the accompanying drawing, Figure 1 is a front view of the sled ready for use. Fig. 2 shows the sled collapsed. Figs. 3 and 4 represent detail views.

The top of the sled constituting the seat, is rigidly secured to one or more cross beams A, and pivoted to these cross beams are four or more metal knees B, made of strap metal bent into the form shown, having flaring lower ends which are secured to the runner while at the upper looped end the straps pass around the cross beams or rather along each side and across the top, having a pivotal connection therewith, the ends of the cross beams being preferably rounded on the top so as to permit of the folding action. The shoulders a, left by rounding the projecting ends of the cross beams serve as a support for the knees when in normal position.

The runner C is made of a single piece of metal extending not only to the front where it is bent in the usual shape, but passes rearward in the plane of the seat serving to connect the knees B at the top as well as at the bottom and making an exceedingly strong construction, or may consist of a metal shoe attached to a wooden runner bent in the usual shape and both shoe and runner connected with and firmly attached to a wooden frame that passes rearward in the plane of the seat serving to connect the knees B at the top as well as at the bottom and making an equally desirable construction.

The sides of the sled having pivotal connection with the cross beams may be folded inwardly and thus collapsed by releasing catches c which are under spring tension and engage staples carried centrally of the cross beams. The catches are pivoted to the knees, one extending from each knee, having their inner edges notched to engage the staples. When these catches are in engagement with the staples the sides of the sled are firmly braced and prevented from collapsing, but as soon as those catches are thrown out of engagement the sides may be readily folded inward.

In order to strengthen and brace the runners at the front, and at the same time render unnecessary the undoing of bolts or the detachment of parts, I extend a rod across the front of the sled substantially on a line with the seat, this rod being shown at d and having right angular ends through which pivots pass into the runners. These pivots are in a line with the pivots between the knees and the cross piece of the sled and hence do not interfere with the folding action, and yet serve as a brace both in the folded position of the sled and in its normal position.

In order to reduce the lateral dimensions of the sled when folded, the runners are swung inward, as shown in Fig. 2.

It is desirable, for neatness of finish and to avoid obstruction on the outside of the runner, to have the brace rod d on the inside of the runners. Furthermore, by having the brace rod on the inner side of the runners the joints will be protected, and if the brace rod is used for attaching a rope for drawing the sled, the strain will not come upon the head of the bolt or rivet, but will be sustained by the inner side of the runner, against which the angular end of the brace rod bears. By placing the rod on the inside of the runners, it is necessary that this rod should be made with ends bent at right angles and arranged with these ends extending downward, so that the runners may fold up under them. This has the further effect of affording another bearing and stop where the runners cross the rods, as shown in Fig. 2.

What I claim is:

A sled having runners with upwardly and forwardly extending front portions, pivotal

connections between the runners and the
frame, permitting the runners to fold, and a
brace rod extending between the runners
and having downwardly extending angular
5 ends pivoted to the inner faces of the up-
wardly and forwardly extending portions of
the runners substantially as described.

In testimony whereof, I affix my signature
in presence of two witnesses.

WILLIAM H. COLEMAN.

Witnesses:

THOMAS J. MANGAN,
GEORGE L. NELSON.