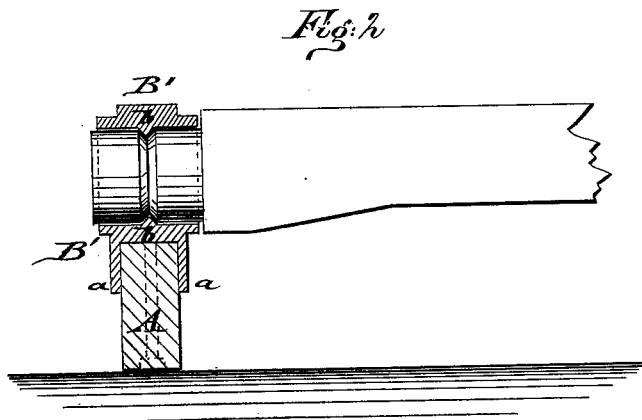
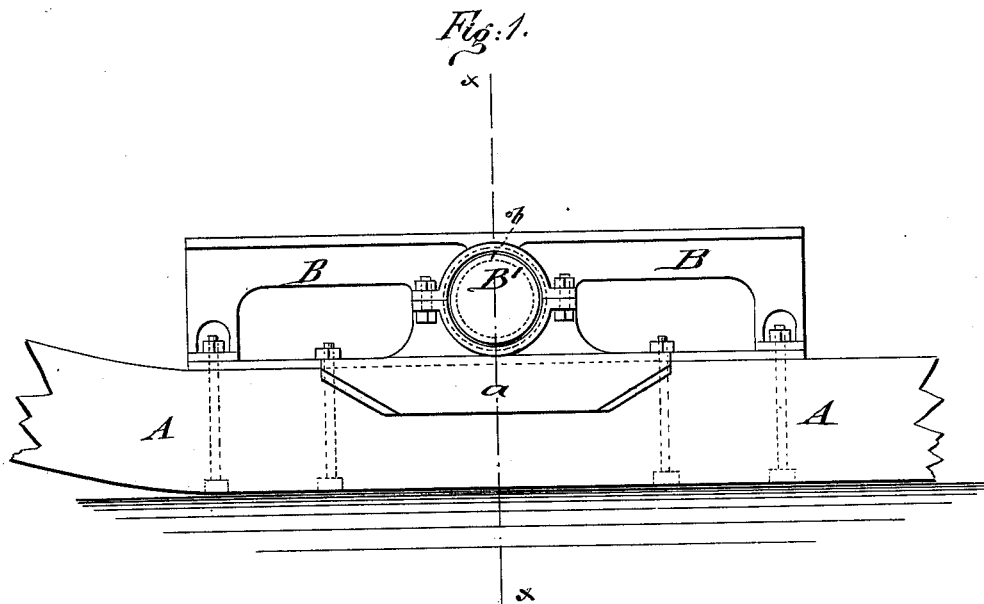


J. CONNIFF.  
Logging-Sled.

No. 208,572.

Patented Oct. 1, 1878.



WITNESSES:

*Chas Nida*  
*W. Sedgwick*

INVENTOR:

*J. Conniff*  
BY *Munroe*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JAMES CONNIFF, OF OCONTO, WISCONSIN.

## IMPROVEMENT IN LOGGING-SLEDS.

Specification forming part of Letters Patent No. **208,572**, dated October 1, 1878; application filed September 6, 1878.

*To all whom it may concern:*

Be it known that I, JAMES CONNIFF, of the city and county of Oconto, and State of Wisconsin, have invented a new and Improved Axle-Box and Attachment for Sleds, of which the following is a specification.

In the accompanying drawings, Figure 1 represents a side view of my improved axle-box and attachment for sleds; and Fig. 2, a vertical transverse section of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish for sleds of all kinds employed in hauling logs and other heavy loads an improved axle-box and attachment, by which the axle and sled-body are supported in a strong, durable, and reliable manner; and the invention consists of an axle-box and attachment made of two horizontal sections, that are bolted to the runner at their ends and to each other at the box part, the box part having an interior rib or thread that is fitted into a corresponding annular groove of the axle.

In the drawing, A represents a sled-runner, to which the axle-box and attachment B are applied. The axle-box and attachment are made of two horizontal sections, of which the lower has side flanges or stays *a*, that extend downward at both sides of the runner, and the upper section a bearing or top flange for supporting the sled-body. The lower section is bolted to the runner, together with the upper section, at the ends, and it is also bolted thereto

at intermediate points, as shown in Fig. 1. The box and attachment B are made of malleable iron or other suitable material, and the sections of the same connected to each other at the flanged box parts or hub-sections B' by means of fastening screw-bolts. The axle-box or hub-section B' is cast with an annular central rib or thread, *b*, of V or other shape, that projects into a corresponding groove of the axle, and retains the same thereby firmly in position against lateral strain without interfering in the least with the turning of the axle. The box attachment renders the sleds stronger and more durable, and dispenses with the objectionable wooden hubs and stays that are at present employed, substituting a more effective and reliable support for the axle and sled-body therefor.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. An axle-box and attachment for sleds, made of a lower section with side flanges binding on runner, and of an upper section with top flange, both sections being bolted to runner at the ends and to each other at the box parts, substantially as described.

2. An axle-box for sleds, having an annular rib or thread that projects into a corresponding groove of the axle, substantially as and for the purpose described.

JAMES CONNIFF.

Witnesses:

GEO. BEYER,  
M. CUNNINGHAM.