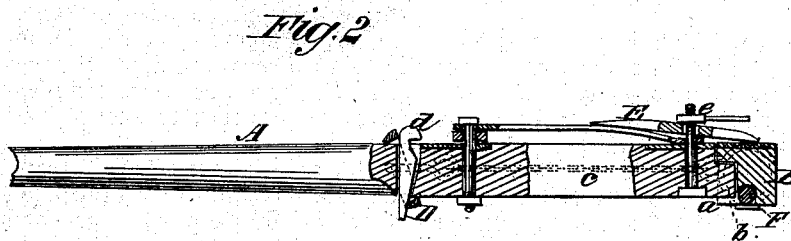
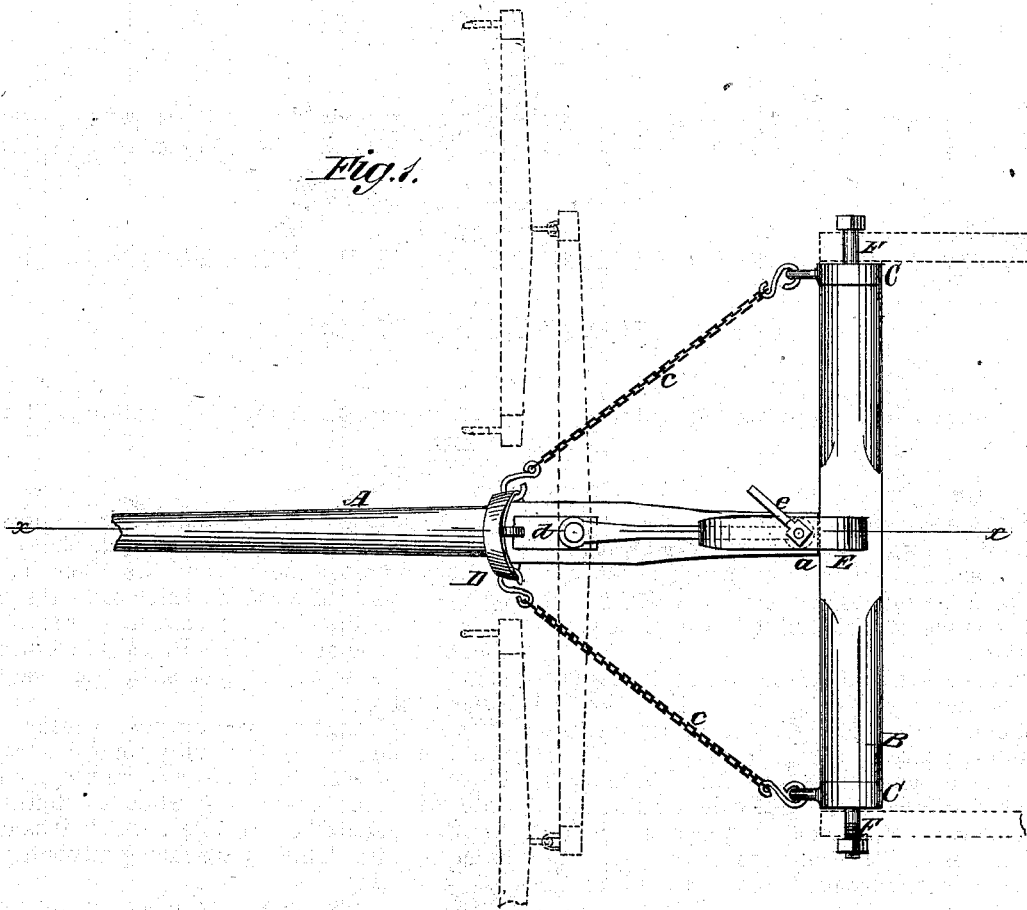


J. P. LAWSON.

SLED-TONGUE.

No. 186,484.

Patented Jan. 23, 1877.



WITNESSES:

Francis McAule.
John Goethals.

INVENTOR:

J. P. Lawson
BY *mmuff*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN P. LAWSON, OF CHANDLER'S VALLEY, PENNSYLVANIA.

IMPROVEMENT IN SLED-TONGUES.

Specification forming part of Letters Patent No. **186,484**, dated January 23, 1877; application filed September 22, 1876.

To all whom it may concern:

Be it known that I, JOHN P. LAWSON, of Chandler's Valley, Warren county, Pennsylvania, have invented a new and Improved Sled-Tongue, of which the following is a specification:

Figure 1 is a top view, and Fig. 2 is a section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention consists of a sled-tongue, in which the tongue is readily detachable from the roller, it being held in place by chains, which answer the purpose of braces, said chains being made taut by a key driven through the tongue against a ring to which the chains are hooked.

A is the tongue, which is cut away at *a*, forming a tenon, which fits a mortise, *b*, in the roller B. C C are bands placed on the ends of the roller B, and provided with eyes, into which the chains *c c* are hooked. D is a ring placed around the tongue in such a manner that the key *d* engages with it on the rear side, on the upper side of the tongue, and passes in front of it, at the lower side of the tongue. The chains *c c* are hooked into the ring D at the sides of the tongue. E is a strap, which is placed on the bolt which holds the back end

of the whiffletree-strap, and is capable of being screwed down by the nut *e*, so that one end bears on the tongue, and the other bears on the roller. The rod F, which connects the tongue with the sled, is placed in a groove in the lower side of the roller B. My invention is applicable to any kind of sled, and also to stone-boats.

The advantage claimed for my invention is that the tongue may be readily detached from the sled by loosening the key *d* and nut *e*, and unhooking the chains *c c*, when the tongue may be attached to any object which it is desired to move. This is particularly advantageous in logging.

The tongue is readily attached by placing the tenon in the mortise on the roller, hooking the chains into the ring D, forcing in the key *d*, and screwing down the nut *e*.

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

The combination of the strap E, and the screw-bolt and nut *e*, with the pole A and roller B, as and for the purpose set forth.

JOHN P. LAWSON.

Witnesses:

D. W. BUEL,
H. D. FRANK.