

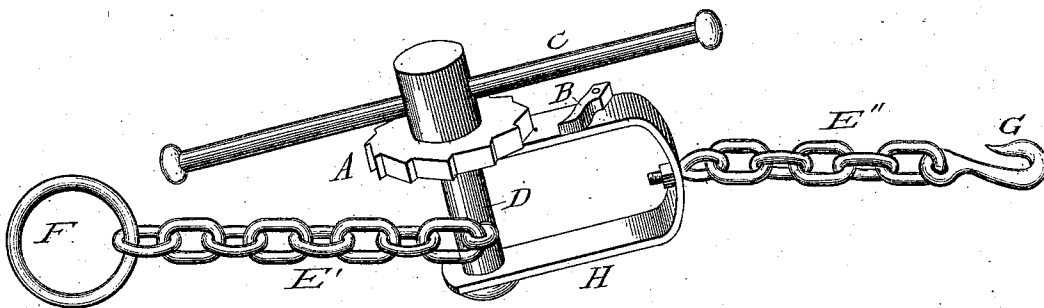
(No Model.)

H. B. BANKER.

LOAD BINDER.

No. 299,506.

Patented June 3, 1884.



Witnesses:

William M. Clark
Millard F. Bowen

Inventor.

Horace B. Banker.

UNITED STATES PATENT OFFICE.

HORACE B. BANKER, OF MINNEAPOLIS, MINNESOTA.

LOAD-BINDER.

SPECIFICATION forming part of Letters Patent No. 299,506, dated June 3, 1884.

Application filed November 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, HORACE B. BANKER, of the city of Minneapolis, county of Hennepin, and State of Minnesota, have invented a new and useful Improvement in Binders for Tightening Loads of Lumber or Other Materials, of which the following is a specification.

The invention relates to a machine for tightening binding chains or ropes around loads of lumber or other material. Heretofore such binding chains or ropes have been tightened by means of long wooden levers at the sides of such loads. This method is objectionable, for the reasons that such levers soon wear out, and additional fasteners are necessary to hold such levers in place.

The object of my invention is to provide a quick, sure, strong, and permanent tightener for binding chains or ropes, and to do away with the necessity for wooden levers and additional chains.

The invention consists in the combination of the ratchet-wheel and pawl with the lever, spindle, and chains in a simple, strong, and effective manner. All the parts may be made of iron, or a combination of iron, wood, and ropes.

In the accompanying drawing, which shows a perspective view, A is the ratchet-wheel. B is the pawl to prevent backward motion of the ratchet-wheel. C is the lever to apply power. D is the spindle, around which E' is made to revolve. E' E'' are the chains to connect the binding-chain to the clevis or bolster of the wagon or other conveyance. F is the ring to be attached to the clevis or bolster of the wagon. G is the grab-hook to be attached to the binding-chain. H is the frame holding together all the parts.

The operation of the device is as follows: When power is applied through the lever to

the spindle, the spindle is made to revolve and wind around itself the chain attached to it. By these means the slack is taken out of the binding-chain, and backward movement of the spindle is prevented by the ratchet and pawl. When the binding-chain is sufficiently tight to hold the load securely, the machine is left in that position until the binding-chain is ready to be slackened, when, by a backward movement of the lever, the pawl is released from the ratchet, and the ratchet and spindle revolve backward until the binding-chain is loosened. The frame H holds the parts securely together.

I am aware that prior to my invention hay-binding machines have been made with a combination of winding-lever, rope-rollers, and ratchet device operating in conjunction with a hay-rack. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in a log and lumber binder, with the lever C, spindle D, ratchet A, and pawl B, attached to the frame H, of the chains E' and E'', with their ring F, and grab-hook G, substantially as described, to operate in the manner and for the purpose set forth.

2. The combination, in a log and lumber binder, of the ratchet A, pawl B, lever C, spindle D, chains E' and E'', ring F, grab-hook G, and frame H, all combined for operation with the long binding-chains thrown around the logs or lumber, and with the clevis or bolster of the wagon or other conveyance, as described.

HORACE B. BANKER.

Witnesses:

MILLARD F. BOWEN,
WILLIAM W. CLARK.