R. E. GLEASON.

Saw-Mill Appliance.

No. 207,267. Patented Aug. 20, 1878.

Fig. 4

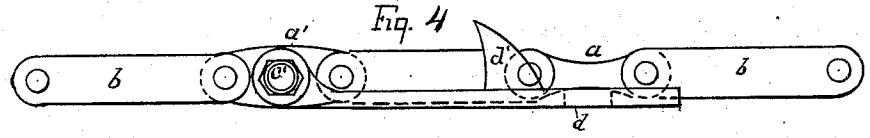


Fig. 2

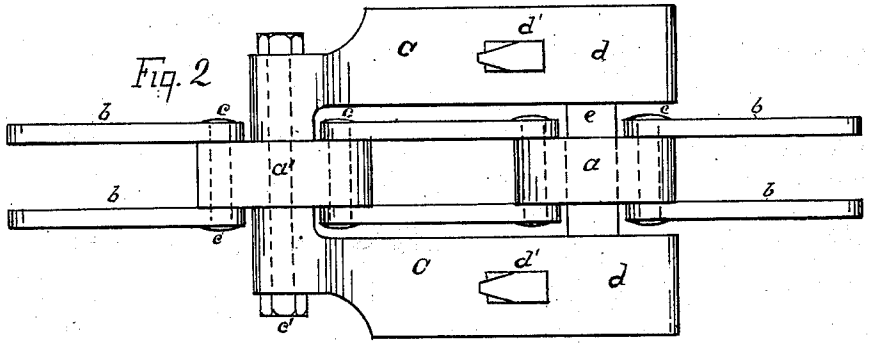


Fig. 3

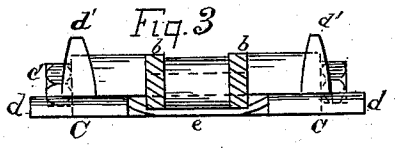
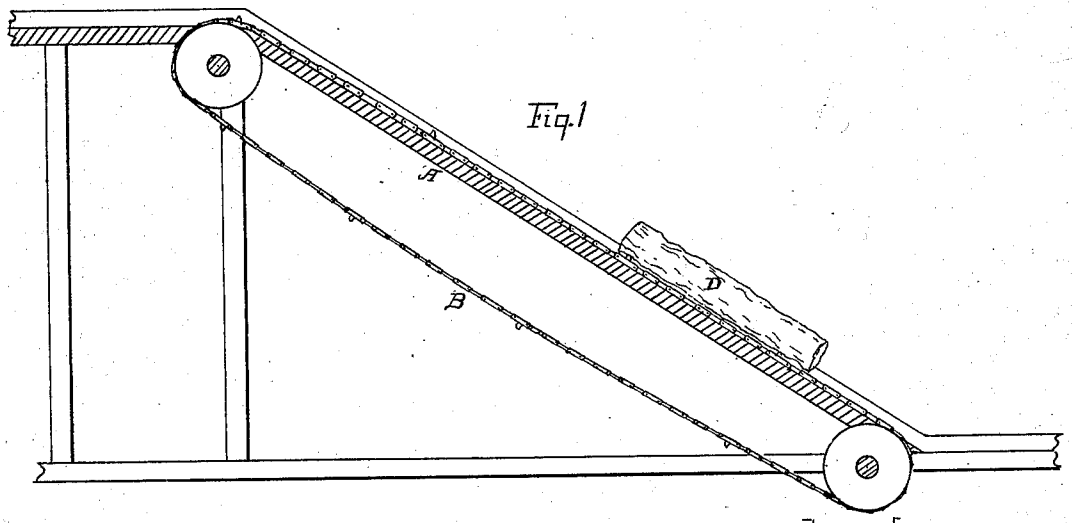


Fig. 1



Attest.

Edward Chandler

M. Tenney Jr.

Inventor.

Robert E. Gleason

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UNITED STATES PATENT OFFICE.

ROBERT E. GLEASON, OF MUSKEGON, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO ALEXANDER RODGERS, OF SAME PLACE.

IMPROVEMENT IN SAW-MILL APPLIANCES.

Specification forming part of Letters Patent No. **207,267**, dated August 20, 1878; application filed July 15, 1878.

To all whom it may concern:

Be it known that I, ROBERT E. GLEASON, of Muskegon, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Saw-Mill Appliances, the especial character of which will be hereinafter fully described.

The object of this invention is to furnish saw-mill men with a device for attachment to the chains by which logs or timber may be hauled from the booms into the mill, that shall obviate the necessity of driving dogs into them to such an extent as to injure the lumber, which frequently happens in the ordinary method of operation; and, further, much time is saved, as it is only necessary that the device attached to the chain should be placed in the water upon the slip, and then haul the log over it, when, as the chain moves forward, the log will be caught upon the upwardly-projecting dogs of the device or appliance, and carried forward, the weight of the log being sufficient to embed the dogs to such a depth as will prevent the log from slipping backward as it is drawn up the slip; and the invention is an improvement on patent to R. E. Gleason, November 27, 1877, No. 197,465; and consists in attaching to the jack-chain shoes or carriers of peculiar construction, which will be hereinafter fully described, and then specifically claimed.

In the drawings, Figure 1 is a side view of a portion of a slip, with the jack-chain and shoe, upon which rests a log. Fig. 2 is a plan view of one of the shoes with part of the chain attached. Fig. 3 is a rear-end view of the shoe, and Fig. 4 is a side view of the shoe and part of the chain.

The slip is represented by the letter A, the jack-chain by the letter B. C is the shoe or carrier, and D the log. The chain shown is formed of a series of single links, *a*, connected by the pairs of links *b* and the bolts *c*, thus forming a chain that is in common use for many purposes. At such points in this chain as may be necessary are placed the links *a'*, perforated at midlength for the reception of a bolt, *c'*, by which it is connected to the two side pieces *d* of the shoe. The rear end of these side pieces is connected by a cross-bar, *e*, bent downward in the middle, so as to allow the logs to rest upon the dogs *d'* as they move forward.

Any other form of chain may be used which furnishes proper links for the attachment of the shoes; but I prefer that described, as it is in general use where a pitch-chain or chain running on sprocket-wheels is used, being found to do its work satisfactorily.

It will be seen that the shoes or carriers are connected to the chain in such a way that the latter is allowed to work freely while the log is resting on them, and also allows the log to ride easily independent of any irregularities of the surface; and, further, the weight of the log upon the shoe being carried at a point behind the point of connection to the jack-chain avoids that tendency of the chain to buckle or twist, so troublesome when the log is carried upon a bunk or shoe rigidly attached to the chain.

The use of the cross-bar which connects the two opposite sides of the shoe, may be dispensed with, if desired, when knotty logs are being operated upon.

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

1. The log carrier or shoe consisting of the two side pieces, provided with upwardly-projecting dogs, and connected at their rear ends by the curved cross-piece, and at their forward ends to the jack-chain by a pivotal connection, substantially as and for the purpose described.

2. The shoe C, in combination with a centrally-perforated link, *a'*, and bolt *c'*, arranged so as to give freedom of movement to the shoe upon the jack-chain, as set forth.

In testimony that I claim the above as my invention I have hereunto affixed my signature in the presence of two witnesses.

ROBERT E. GLEASON.

Witnesses:

HENRY B. W. VAN ZALINGER,

THOMAS WHEELER.