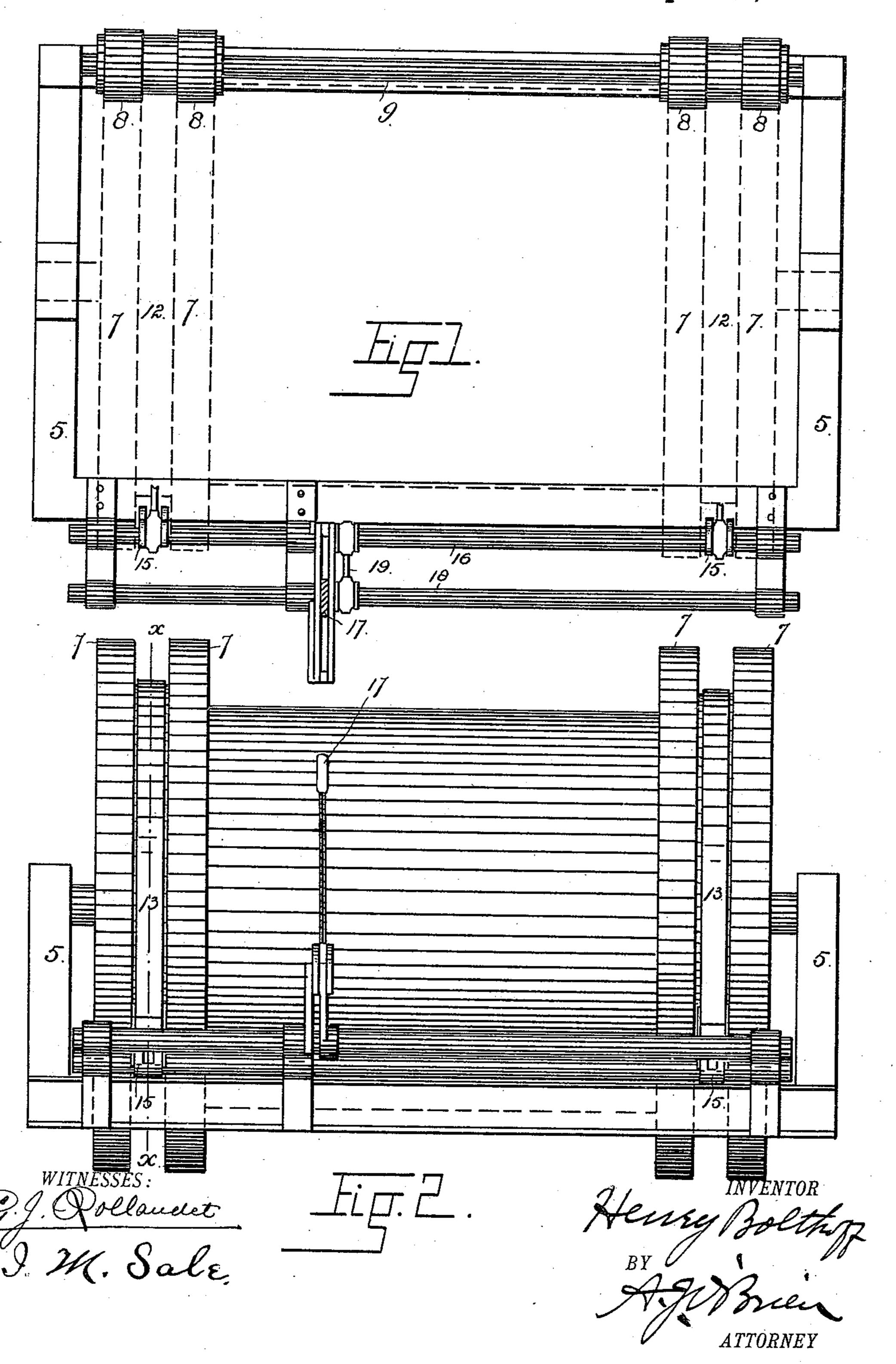
(No Model.)

H. BOLTHOFF.
HOISTING DRUM.

No. 526,007.

Patented Sept. 11, 1894.



## UNITED STATES PATENT OFFICE.

HENRY BOLTHOFF, OF DENVER, COLORADO.

## HOISTING-DRUM.

SPECIFICATION forming part of Letters Patent No. 526,007, dated September 11,1894.

Application filed May 31, 1893. Serial No. 476,171. (No model.)

To all whom it may concern:

Be it known that I, Henry Bolthoff, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Hoisting-Drums; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in hoisting drums, and consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is o illustrated an embodiment thereof.

In the drawings:—Figure 1. is a top or plan view of my improved drum. Fig. 2. is a front view of the same.

As will be seen from the views the invention consists in dividing the enlarged drum extremities to which the friction rolls are applied, and forming a depressed brake face between the two parts of these divided ends.

This invention is more especially designed of for use in connection with large drums. Its object is to prevent the heating of the drum extremities or face rims which would result from applying the brake strap directly to said rims, and which in connection with the centrifugal force of the revolving drum has a tendency to destroy the cohesion of the atoms, weaken the parts and shorten the life of the drum.

In my improved construction, the brakeface being located below the rim face, a free circulation of air is allowed between the two faces, and the heat generated by friction in the brake-face passes off by radiation before it can reach the outer face by convection or conduction.

Another point of advantage consists in the fact that in this construction the power of the brake strap is more advantageously utilized since it is centrally located between the two parts of the rim-face.

The views of the drawings heretofore briefly described will now be considered in detail. Similar reference characters indicate cor-

responding parts.

Let the numeral 5 designate the frame in 55 which is journaled the drum 6, provided with the divided face-rims 7, which are engaged by the friction rolls 8, on the power shaft 9.

Located between the two parts of each outer rim and separated therefrom but attached to 60 the spokes 10 of the drum is the brake-face 12 depressed below the plane of the rim face whereby a free circulation of air is permitted between the brake-face and the divided rimface. The brake strap 13 surrounds this brake 65 face and its extremities are attached to arms mounted on the shaft 16. The brake is applied by means of a hand lever 17 mounted on a shaft 18, connected with the shaft 16, as shown at 19.

Having thus described my invention, what I claim is—

A hoisting drum having a centrally divided friction face at each end thereof, and a depressed brake face between the two parts of 75 each friction face, in combination with correspondingly divided friction pulleys engaging the divided friction faces of the drum, and suitable brake straps engaging said brake faces, substantially as described.

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

HENRY BOLTHOFF.

Witnesses:

BRINTON GREGORY, I. M. SALE.