

No. 631,900.

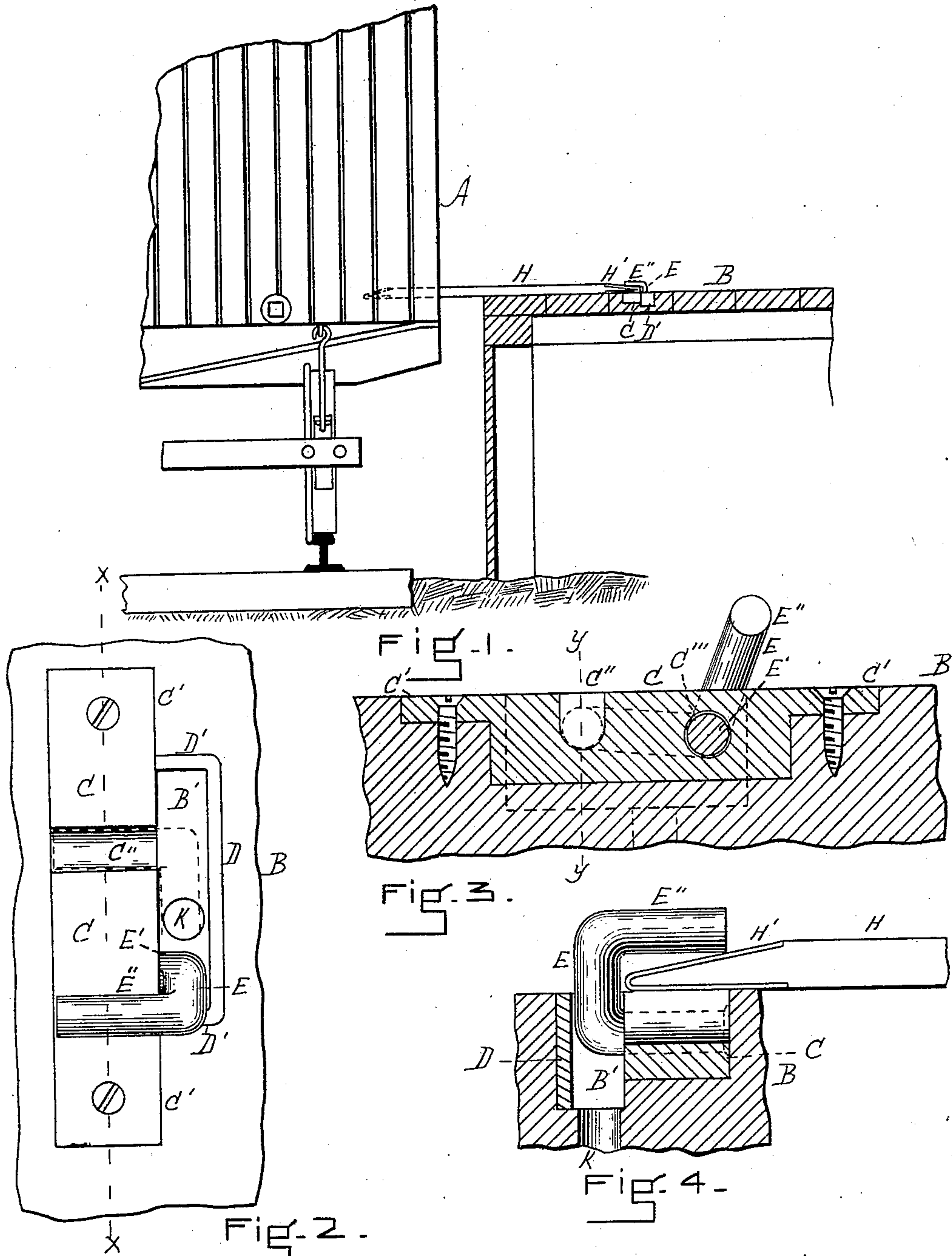
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DEVICE FOR ENGAGING ENDS OF RUNNING PLANKS.

(Application filed Dec. 10, 1898.)

(No Model.)



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DEVICE FOR ENGAGING ENDS OF RUNNING-PLANKS.

SPECIFICATION forming part of Letters Patent No. 631,900, dated August 29, 1899.

Application filed December 10, 1898. Serial No. 698,846. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. MORGAN, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Device for Engaging the ends of Running-Planks in Freight-Houses, &c., of which the following is a specification.

In transferring freight from cars to freight-houses, from freight-houses to cars, and from one car to another a running-plank is used to bridge the space and the freight is carried over the plank by means of trucks. It is of course necessary that there should be some device for preventing the plank from moving or creeping in the direction in which the freight is being transferred. The device commonly in use is a broad low staple termed a "dog," such staple being driven into a plank in the freight-house floor or in the car-floor. The end of the plank is set against this dog in order to prevent it from creeping. It is found in practice, however, that the plank is very apt to jump or be lifted at the end next the dog and then to ride over it and precipitate the person handling the truck to the ground between the car and the freight-house. Such accidents are quite common and frequently result in broken limbs and other serious injuries.

It is the object of the present invention to obviate this difficulty and provide a device in place of the ordinary dog now in use, which will so engage the end of the running-plank that it cannot jump, creep, or override the contrivance by longitudinal movement.

The nature of my device is fully described, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in vertical section of a portion of a floor of a freight-house provided with my invention and a view in elevation of a portion of a freight-car with a running-plank extending therefrom to the freight-house floor. Fig. 2 is a plan view of my device applied to the floor, the dog being raised. Fig. 3 is a vertical section taken on line X, Fig. 2. Fig. 4 is a vertical section taken on line Y, Fig. 3, showing the end of a plank in position and engaged by the dog.

Similar letters of reference indicate corresponding parts.

A represents a portion of an ordinary freight-car, and B the floor of a freight-house or freight-house platform.

C represents a metallic block made preferably longer than it is wide and provided at its opposite ends with the flanges or lips C', Fig. 3, whereby it is screwed to one of the planks in the platform B, said plank being recessed for the purpose, and said block with its flanges being set into the plank flush with its surface. The plank is further recessed or cut away on the rear side of the block C at B' in order to receive the vertically-placed metallic guard D, whose ends D' abut against the rear side of said block. The depth of this guard-plate is substantially the same as that of the block and its surface is flush with the surface of the plank. The metallic block and guard are usually set about three feet from the edge of the freight-house or freight-platform or about three inches from the edge of a car. This block is horizontally bored at C'', Fig. 3, to receive one member E' of a U-shaped or staple-shaped dog E, and the surface of the block is grooved at C'' to receive the other member E''. The end of the member E' is slightly flanged or headed, as indicated in broken lines in Fig. 4, in order to prevent longitudinal movement within the bore C'', but said member is sufficiently loose in the bore to be free to rotate therein, so that the dog may be swung up from the position in which the member E'' lies in the groove C'' to a raised position, as indicated in the drawings. When in this raised position, it is swung over, as shown in Figs. 2 and 3, and rests against the adjacent wall D' of the guard D, which is set at a sufficient distance from the block to allow of the free swinging of the dog.

H represents an ordinary running-plank provided with the usual beveled and protected ends H'. When freight is to be transferred by trucking it over the running-plank from the car to the platform, or vice versa, the dog is swung up from the groove C'' into the raised position indicated in Figs. 2 and 3, in which position the free end of its member E'' faces the space which is bridged by

the running-plank. The beveled end H' of the running-plank is then thrust under the member E'', with the effect of raising the dog into a vertical position, as indicated in Figs. 1 and 4. It will readily be seen that if that end of the plank which rests on the structure which is to receive the freight is thus caught in the dog the travel of the freight over the plank tends to crowd it farther and farther under the member E'', with the effect that that end of the plank is effectually caught and held down, so that it cannot jump or slip over the dog. Of course the end of the plank toward which the freight is moving is the end which it is most desirable to hold down. When the plank is withdrawn, the dog is swung down, with its member E'' in the groove C'', which is made deep enough to prevent said member from projecting above the surface of the block C, so that no portion of the dog or the structure in which it moves is above the surface of the plank.

A drainage-hole K is preferably provided in the plank B between the guard and the block in order to prevent water from being retained around the bearing of the dog or within the groove C''.

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

1. A device for engaging the ends of running-planks, comprising a supporting and bearing structure secured to the floor; and the substantially U-shaped or staple-shaped dog E, one member of which has its bearings in said structure whereby the open end of the U-shaped dog faces the running-plank and,

when the dog is swung up receives one end of the running-plank under the other member of the dog, substantially as described. 40

2. A device for engaging the ends of running-planks, comprising the block C provided with the horizontal bore C'''; and the substantially U-shaped dog E, one member of which lies within said bore and the other above the block, whereby said dog may be swung up into a vertical position to receive the end of a running-plank under its uppermost member, substantially as set forth. 45

3. A device for engaging the ends of running-planks, comprising the block C provided with the horizontal bore C''' and the horizontal groove C'' on its upper surface; and the substantially U-shaped dog E, one member of which lies within said bore and the other above the block, whereby the uppermost member may lie within said groove or be swung up therefrom to receive the end of a running-plank, substantially as described. 50

4. The herein-described device for engaging the ends of running-planks, comprising the block C provided with the bore C''' and horizontal groove C'' on its upper surface; the guard D inclosing a space next the rear surface of said block; and the substantially U-shaped dog E, the central portion of which lies within said space, one member E' of which lies within said bore and the other member E'' of which extends over the surface of the block, substantially as set forth. 60

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