

No. 700,416.

Patented May 20, 1902.

J. B. GRAHAM.  
TAIL BOARD FASTENING FOR WAGONS.

(Application filed Mar. 7, 1902.)

(No Model.)

Fig. 1.

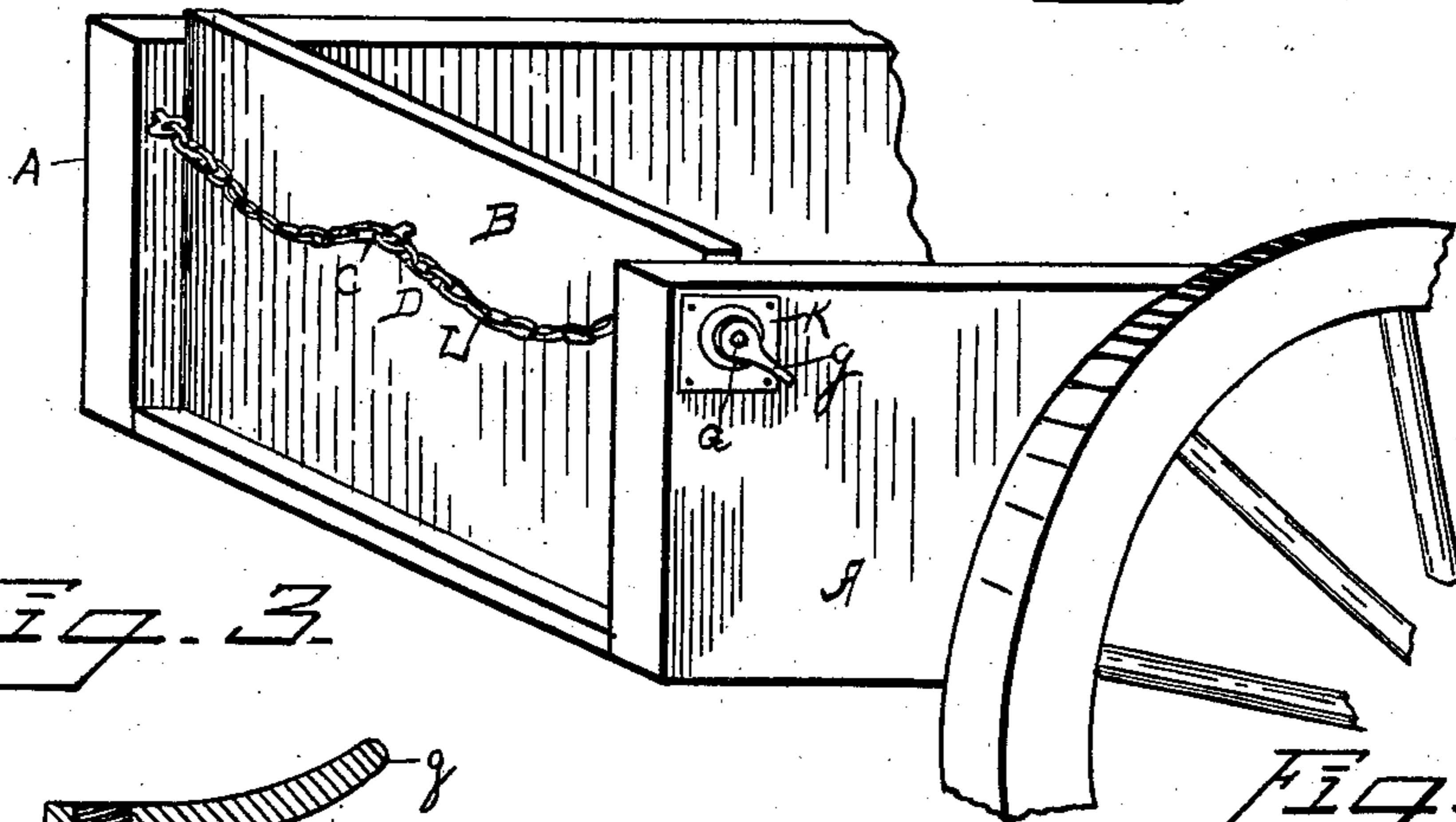


Fig. 3.

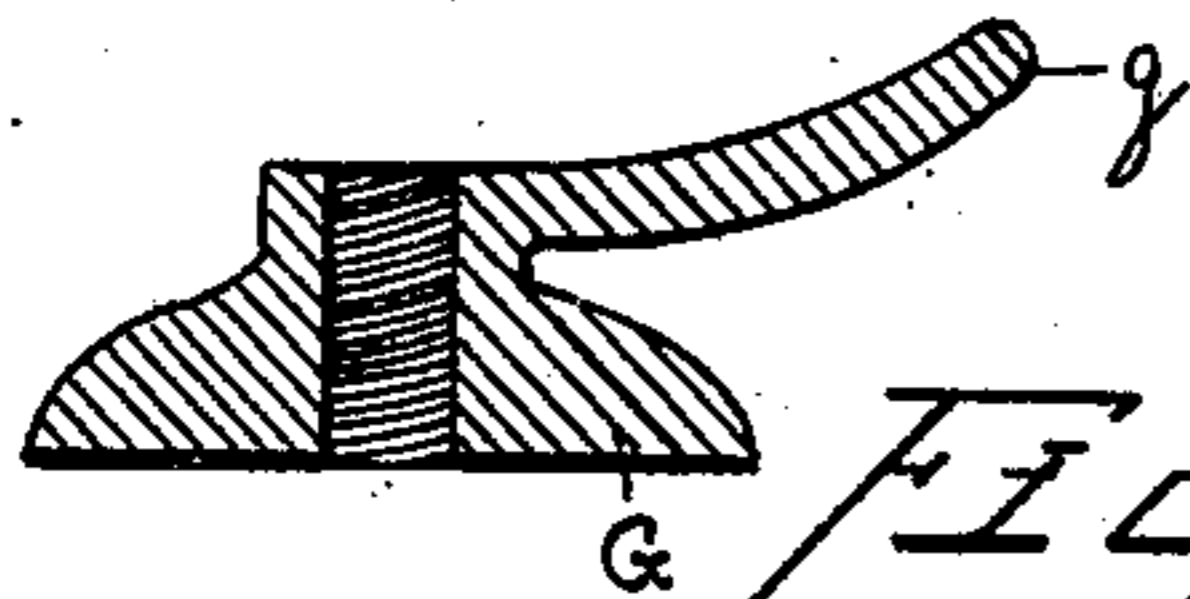


Fig. 2.

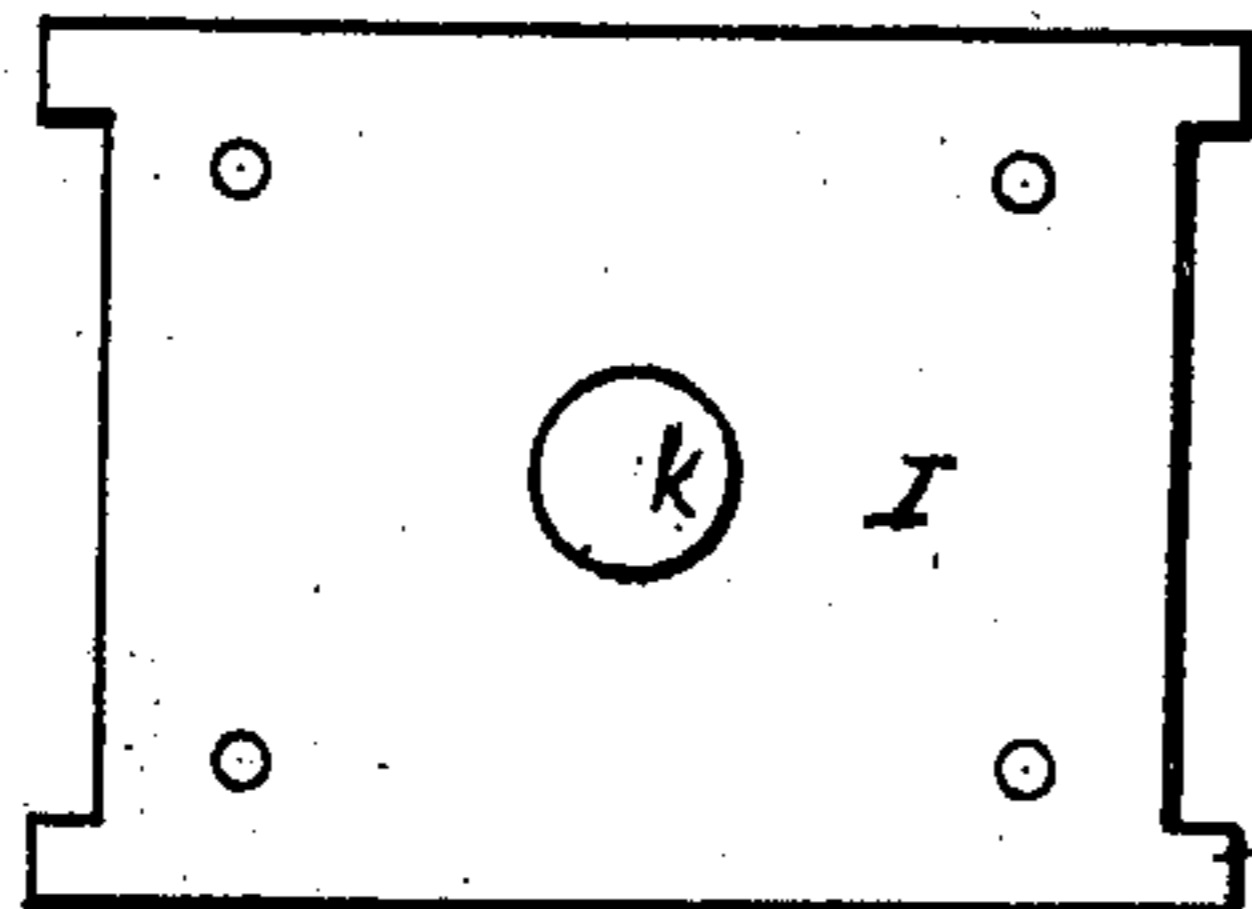
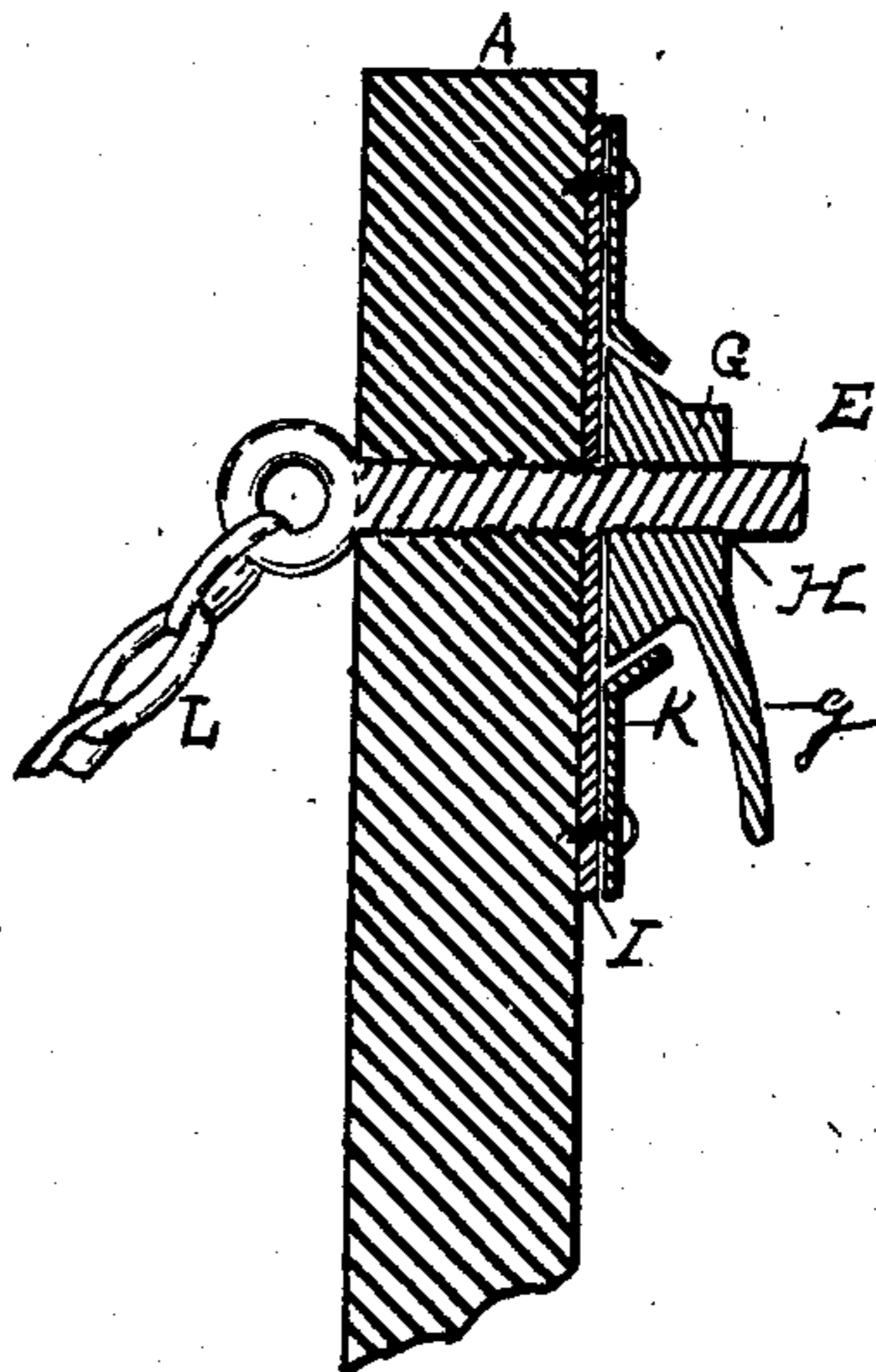


Fig. 4.

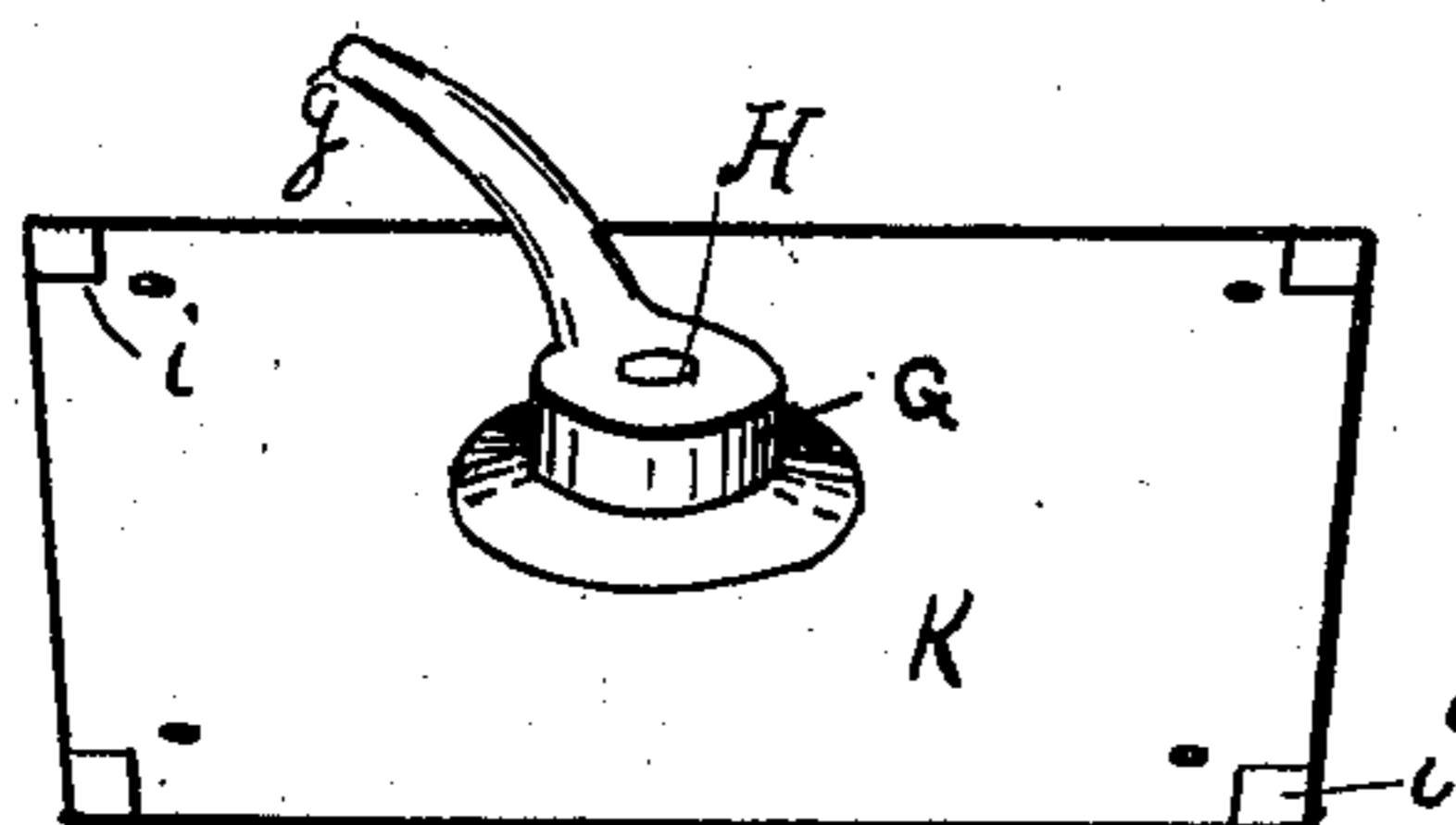


Fig. 5.



WITNESSES:

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## TAIL-BOARD FASTENING FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 700,416, dated May 20, 1902.

Application filed March 7, 1902. Serial No. 97,141. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH B. GRAHAM, a citizen of the United States, residing in the city and county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Tail-Board Fastenings for Wagons; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The leading object of my invention is to provide convenient means for securing the end or tail boards in wagon-boxes, more especially in what are known as "lumber" or "farm" wagons.

Another object is to arrange the fastening devices in such a manner that they can be quickly adjusted and cannot be lost.

For the better understanding of my invention and the mode of its operation attention is called to the following specification, which is to be considered in connection with the drawings accompanying the same and forming a part thereof.

Figure 1 is a perspective of my device attached to a wagon-box with end-board therein. Fig. 2 shows a section through the end of the connecting-chain and wagon-box and bur. Fig. 3 is a section of the bur removed. Fig. 4 shows a perspective of the plate and bur therein. Fig. 5 shows a plan view of the back side of the attaching-plate, and Fig. 6 shows the fastening-chain removed.

Like letters of reference denote corresponding parts in all of the drawings.

Referring to the drawings, A designates the side-boards of a wagon-box, and B the end or tail board. For connecting the two side-boards of the wagon together I use a chain L, which is formed in two parts C and D and each part terminating in a short rod E. These rods E are screw-threaded and adapted to engage the threads in burs G, presently to be described. The other ends of the chain are fastened to the center of the tail-board by a staple or in any well-known manner. It is manifest that the two parts of the chain might be united together and the chain attached at its center to the tail-board.

The bur G for tightening and holding the

chains is preferably made in the form of a truncated cone, having a handle *g* cast integral therewith and provided with a screw-thread in the center, with which the screw-threaded rods E engage.

For the purpose of conveniently attaching the bur to the wagon-box a preferably sheet-metal plate I (shown in Fig. 5) is used, which is provided with a hole in the center through which the end of the chain passes. This plate is provided with clips *i*, which project from each corner for the purpose of fastening it to another plate, presently to be described. To this plate I is attached another plate K, consisting, preferably, of sheet metal and also provided with a hole *k* in the center. Around this hole the metal is raised up into the form of a truncated cone and conforms to the shape of the bur G, which operates therein. These two plates I and K are placed together with the bur G between them, and the clips *i* are bent over the top of the plate K. In this manner they are fastened together with the bur G between them and the handle *g* of the bur projecting from one side of the top of the bur. It will be readily seen that the bur G may be turned by the handle *g* in its position between the two plates I and K. These two plates thus united together with the bur between them are secured to the opposite sides of the wagon-box near the top. It is manifest that the plate I may be dispensed with and only the plate K used with the bur; but I prefer to use both plates, as they are more convenient to use, and as an article of manufacture the bur and the plate will not become separated or lost when shipped.

When the chains are in use to hold the tail-board in, the rods E are inserted through the sides of the wagon-box through the burs G, and then by turning the handle *g* the chains are brought taut and the end-board is fastened securely. When it is desired to remove the end-board, the burs are unscrewed and the chains drop down and hang from the end-board. It is manifest that the burs being fastened to the sides of the wagon-box and not removable cannot be lost, and the chains when not in use will hang down from the center of the tail-board and always remain with it.

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

1. The combination of a wagon-box, tail-  
5 board, a chain fastened to the center of said tail-board and provided with screw-threads upon its outer ends, a casing attached to the wagon-box, and a bur within the casing adapted to engage the ends of the chain, for the  
10 purposes shown.
2. The combination of a wagon-box, tail-board, a chain fastened to the center of the tail-board and provided on each end with an

eyebolt, a casing attached to the wagon-box and formed of the plates I and K and a bur 15 G set within the casing and adapted to engage the eyebolt upon the chain, for the purposes shown.

In testimony whereof I have signed my name to this specification in the presence of 20 two subscribing witnesses.

JOSEPH B. GRAHAM.

Witnesses:

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