

No. 766,885.

PATENTED AUG. 9, 1904.

F. M. JONES.
TRUCK TRANSOM.

APPLICATION FILED MAY 16, 1904.

NO MODEL.

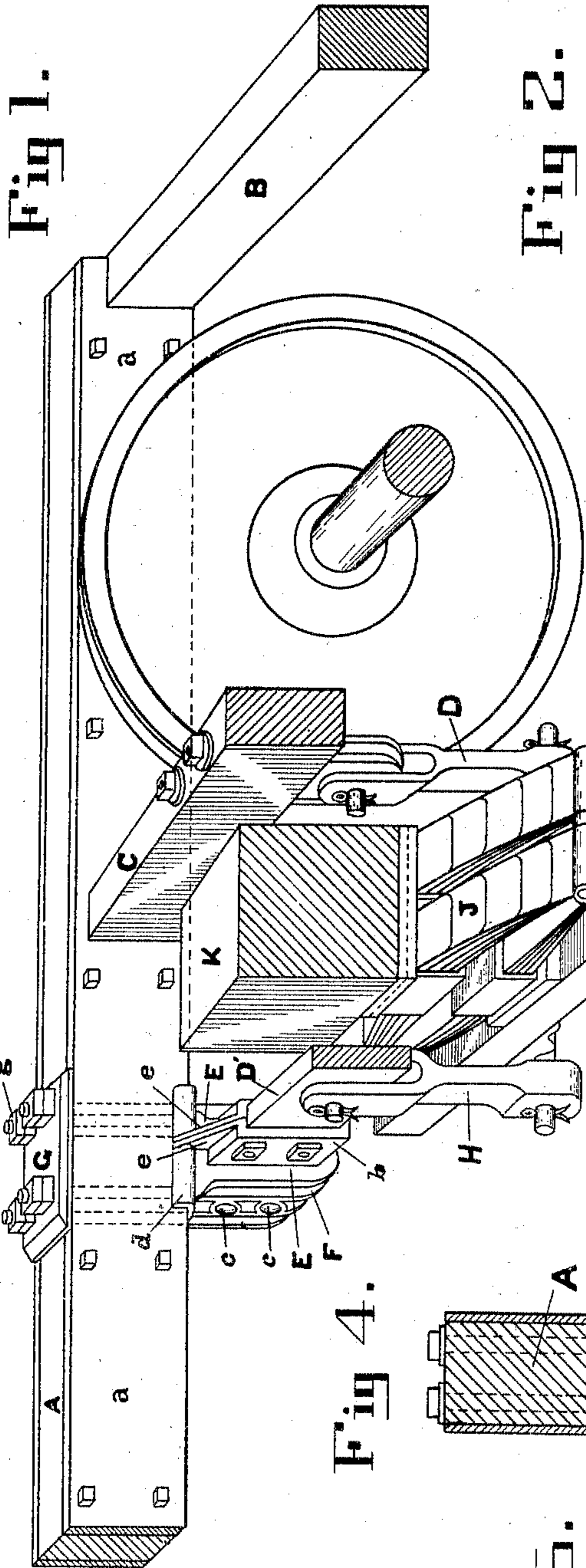


Fig 2.

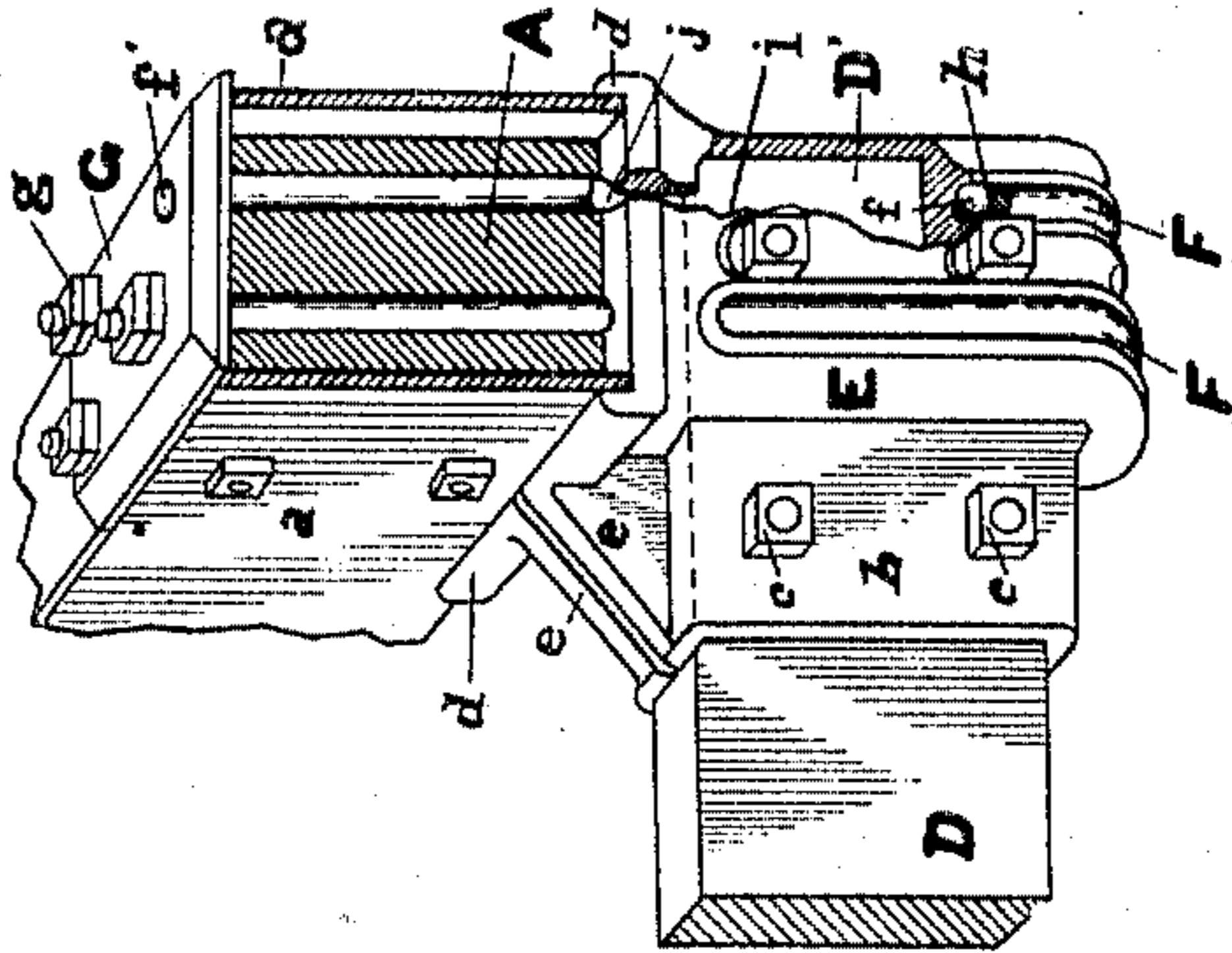


Fig 3.

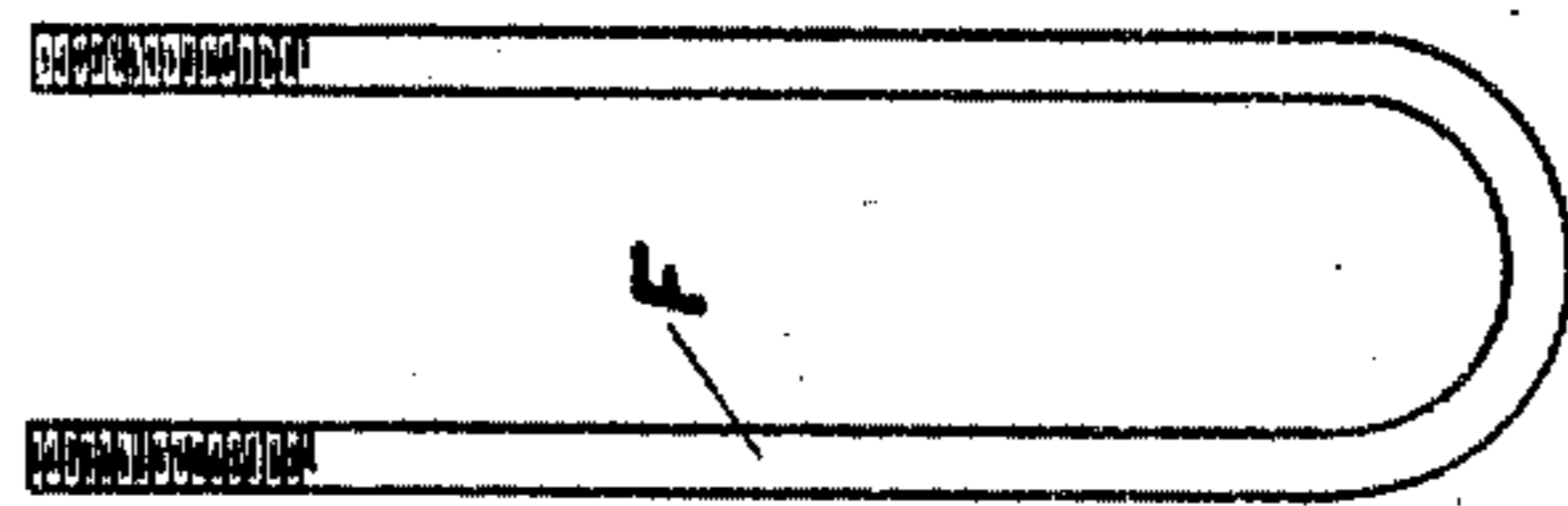


Fig 4.

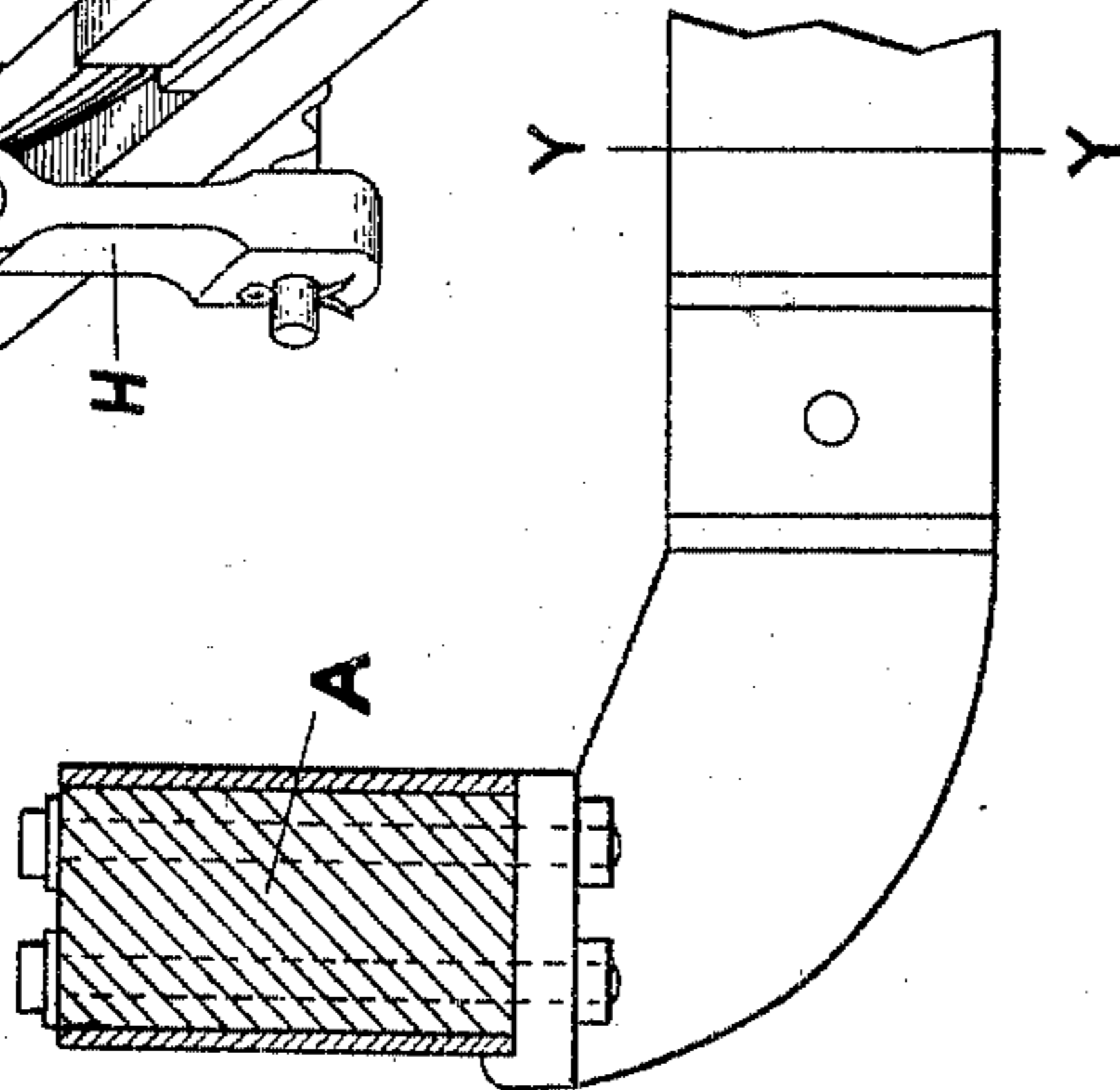
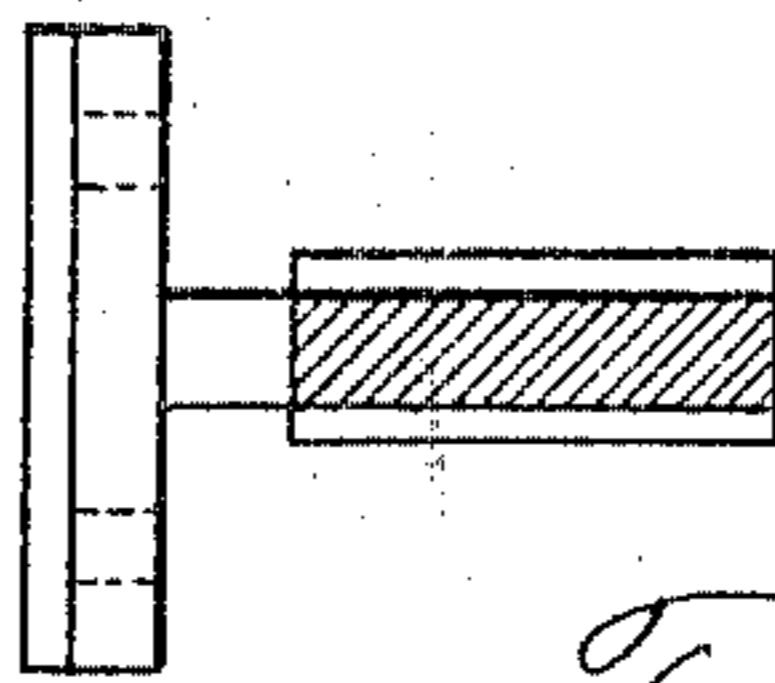


Fig 5.



UNITED STATES PATENT OFFICE.

FRANK M. JONES, OF DAYTON, OHIO, ASSIGNOR TO THE BARNEY AND SMITH CAR COMPANY, OF DAYTON, OHIO.

TRUCK-TRANSOM.

SPECIFICATION forming part of Letters Patent No. 766,885, dated August 9, 1904.

Application filed May 16, 1904. Serial No. 208,277. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. JONES, a citizen of the United States, and a resident of the city of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Truck-Transoms; and I do hereby 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 letters of reference marked thereon, as forming a part of this specification.

My invention relates to improvements in car-trucks, more particularly the class known as "six-wheel" trucks.

The invention has for its object to provide a more simple and efficient construction for the transoms for such trucks, to strengthen the connecting medium between the said transom and the side frames or wheel-pieces, to reduce the cost of manufacture, and to provide a construction which will enable the manufacturer to make up in quantities and carry in stock the several parts which constitute the transom and to assemble the same to suit the variations which occur in the distance between the wheel-pieces of trucks differing in specification.

To these ends the invention consists in the construction, combination, and arrangement of parts as hereinafter fully described, pointed out in the claims at the end of this specification, and which are fully illustrated in the accompanying drawings, of which—

Figure 1 is a reduced perspective inside view of a portion of one side of a car-truck, showing my improved transom attached thereto. Fig. 2 is a broken perspective view of the wheel-piece, showing the transom and its means of attachment thereto. Fig. 3 is a view of one of the U-bolts by which the transom is secured to the wheel-piece; and Figs. 4, 5, and 6 represent the transom as now commonly made and secured to the wheel-piece, Fig. 5

being a cross-section through line Y Y of Fig. 4.

In construction both sides of the truck are alike. Therefore in the drawings and following description reference need only be made to one side thereof.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

The truck-frame consists of the usual side frames, commonly known as and which will be hereinafter called "wheel-pieces" A, end beams B, and center beams C, which carry one of a pair of swing-motion hangers D, the wheel-pieces being plated on each side thereof with steel or iron plates *a*.

The said transoms (two in number) extend across the truck-frame, one on each side of the center wheels, and are secured at their ends to the wheel-pieces A. These transoms have heretofore been formed of a single piece of iron forged to the shape shown in Figs. 4, 5, and 6 and secured to the wheel-pieces by four bolts, as shown in Fig. 4. This manner of forming the transoms is, however, quite expensive. Moreover, it not infrequently happens that in heating the iron preparatory to the forging process it becomes overheated and burned, thereby impairing its strength and is therefore liable to and sometimes does break in service, and in such case the consequences are apt to be very serious. Then, too, the transoms being bolted to the under side of the wheel-pieces the permanency of their connection therewith depends upon the heads of the bolts by which they are secured thereto, and should they give way it is evident that in such event a wreck might result therefrom, and, again, it is obvious that the forming of the transoms in this manner necessitates the making of each lot to suit the particular trucks in which they are to be used. To obviate the aforesaid objections, I form these transoms of flat bars of iron or steel D', which can be cut to any desired length, and unite them to castings E, provided with hollow extension-

sleeves *b*, into which the ends of the bars *D'* are inserted and in which they are secured by bolts or rivets *c*, the castings *E* being preferably formed in two halves, so as to permit of a close union with the sides of the bar *D'*. These castings are provided with upturned flanges *d*, which overlap the sides of the wheel-pieces, and they are also provided with strengthening-webs *e*. Grooves or guides *f* are formed on the outside of the said casting *E* to receive U-bolts *F*, in which the casting hangs and which pass up through the wheel-piece and through holes *f'* in a washer-plate *G* on the top side thereof and by which the transom is secured to the wheel-piece through the medium of nuts *g*.

Two of the said U-bolts are preferably employed, and for the purpose of more clearly illustrating the manner in which they are employed I have shown in Fig. 2 one of them broken off at *h*, and as a further means of illustration I have broken the casting *E* away at *i*, showing holes *j* through the extended upper portion thereof and which holes form continuations of the grooves *f* for the passage of the said U-bolts.

The casting *E* instead of being formed in two parts may be formed in a single piece; but such construction would require more labor in fitting the parts together and would not be as efficient as when formed in two parts, in which latter case a firmer and closer union with the bar *D'* is obtained by drawing the two parts of the casting together by means of the bolts or rivets *c*, as hereinbefore explained. The castings may be of malleable iron of sufficient strength to resist the hardest strains to which they may be subjected; but should they break no serious harm can result, because the U-bolts will still carry the transom.

The said transom carries a swing-motion hanger *H*, the same being the other of the pair hereinbefore referred to. These swing-motion hangers carry a swing-motion plank *I*, upon which is mounted an elliptic spring *J*, carrying a bolster *K*, all of which excepting the transom may be of the usual construction and arrangement, and they form no part of my invention.

While the foregoing is a detail description of my invention as I now prefer to construct the same, yet I do not wish to limit the invention to such exact construction, and I reserve the right to such construction as may properly be included within its scope.

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

1. In a car-truck the combination with the wheel-pieces thereof, of a transom comprising a bar and a casting at each end thereof, said casting having a hollow sleeve within which the end of the bar is secured, and means by which the transom is suspended from the under side of the wheel-pieces and rigidly secured thereto, substantially as set forth.

2. In a car-truck the combination with the wheel-pieces thereof, of a transom comprising a bar and a casting at each end thereof, said casting having an extension-sleeve within which the end of the bar is secured, and U-bolts by which the transom is suspended from the under side of the wheel-pieces and rigidly secured thereto, substantially as set forth.

3. In a car-truck the combination with the wheel-pieces thereof, of a casting provided with a hollow extension-sleeve suspended from the under side of the wheel-piece at each side of the truck, a bar extending crosswise of the truck and having one end secured within each of said sleeves, and swing-motion hangers suspended from said bar, substantially as set forth.

4. In a car-truck the combination of wheel-pieces *A*, castings *E*, bar *D'*, U-bolts *F*, washer *G*, and nuts *g*, all constructed and arranged to operate substantially as set forth.

5. As a new article of manufacture, a truck-transom adapted to be suspended from the wheel-pieces of a car-truck and comprising a bar having a sleeved casting at each end thereof, the ends of the said bar each being secured within the sleeve portion of one of the said castings, substantially as set forth.

6. As a new article of manufacture, a truck-transom adapted to be suspended from the wheel-pieces of a car-truck and comprising a bar having a sleeved casting at each end thereof, and guides formed on the said casting to receive U-bolts for securing the transom to the said wheel-pieces, the ends of the said bar each being secured within the sleeve portion of one of the said castings, substantially as set forth.

In testimony whereof I have signed this specification, in the presence of two subscribing witnesses, this 12th day of May, 1904.

FRANK M. JONES.

Witnesses:

H. B. MUST,

JNO. I. UNDERWOOD.