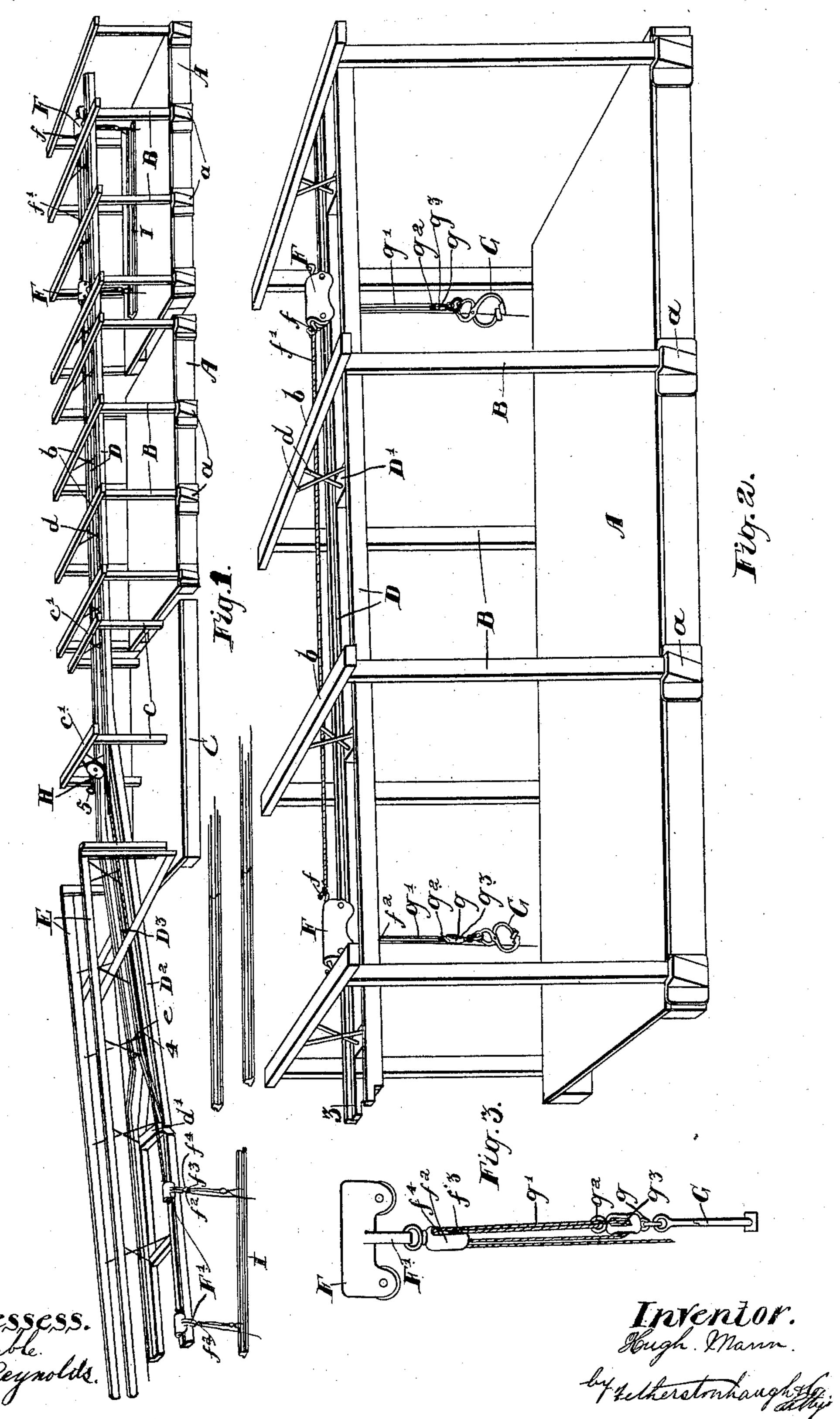
## H. MANN.

### RAILWAY TRACK LAYING MACHINE.

(Application filed Aug. 5, 1901. Renewed July 16, 1902.)

(No Model.)



# United States Patent Office.

### HUGH MANN, OF WINNIPEG, CANADA.

### RAILWAY-TRACK-LAYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 709,641, dated September 23, 1902.

Application filed August 5, 1901. Renewed July 16, 1902. Serial No. 115,837. (No model.)

To all whom it may concern:

Be it known that I, HUGH MANN, railroad contractor, of the city of Winnipeg, in the county of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Railway-Track-Laying Machines, of which the following is a specification.

My invention relates to improvements in to track-laying machines patented to me in the Dominion of Canada, under No. 70,440, on the 5th day of March, 1901, and filed in the United States, under Serial No. 47,075, on the 12th day of February, 1901; and the object of the inven-15 tion is to simplify the means for carrying the rails from the car to the place of deposit on the road-bed and at the same time enable me to use ordinary cars without obstructing-platforms, which have a tendency to limit their 20 carrying capacity; and it consists, essentially, of a plurality of cars having suitable uprights at the sides thereof, with cross-beams extending across between the uprights at the top and suitably connected thereto, and lon-25 gitudinal girders which extend longitudinally and slightly inclined to the pilot-car, where

neath the crane on such car, such girders carrying rails, and carriages having rail-grip30 ping devices depending therefrom, and the parts being otherwise arranged and constructed in detail as hereinafter more particularly explained.

they are more steeply inclined, to a point be-

Figure 1 is a perspective view of my im-35 proved track-laying machine. Fig. 2 is an enlarged view of the car, showing the girders and rails and carriages. Fig. 3 is a detail of a carriage and gripping-tongs supported thereby.

In the drawings like characters of reference indicate corresponding parts in each figure.

A A are the ordinary cars, which are provided with side sockets a to receive the uprights B, which are connected together at the top by the cross-beams b.

C is the pilot-car, which is provided with the uprights c and the cross-beams c'.

D D are longitudinal girders which extend longitudinally from the cars A A and are supported centrally by the hangers d, extending into the cross-bar b and into the cross-bars

D', which connect the girders together and are located at any desired distances apart.

E is the crane, which is constructed in any suitable manner, and  $D^2$  represents the in- 55 clined girders, which are supported by suitable rods or hangers e, extending into crossbars d', which connect the girders together.

The girders D and D<sup>2</sup> are provided with rails, as also are the internal switch-back 60 girders D<sup>3</sup>.

The rails I designate as 3.

F represents the carriages, which are carried on the rails 3 and provided with wheels arranged in alinement. The carriages are 65 also provided with end hooks f. I provide two carriages connected by a rope or chain f', and from such carriages are suspended the gripping-tongs G, which are connected to the lower ends of the pulley-blocks g.

The carriages F are provided with a lower extension F', and suspended from such extension is the double block  $f^2$ .

g' is a rope which is connected to an eye  $g^2$  at the top of each block g and extends up 75 over the lower pulley  $f^3$  in the block  $f^2$ , then down over the pulley  $g^3$  in the block g, thence up again over the pulley  $f^4$ , through which such rope extends downwardly.

Each pair of tongs G is lowered and raised, 80 as will now be readily understood, by means of the rope G', so as to grasp the rail and to raise it again into the position for transferring it from the rail-car onto the road-bed. The connected carriages F on the rails and the 85 girders D at the one side are moved along by the workmen in any suitable manner so as to bring the rear end of the rearmost carriage into proximity with the pulley H, suspended from the cross-bar c'.

The pair of carriages on the rail of the parallel girders is provided with a rope 4, which extends from the hooked end of the carriage F around the pulley H, both ends of the rope being provided with eyes 5 for connecting it 95 to the hooks f on the end of the carriage F.

It will now be seen that when one set of carriages F, carrying a rail I, has reached the outermost end girder D<sup>2</sup>, supported on the crane at one side, such rail may be lowered and delivered onto the road-bed. As soon as the opposite set of carriages con-

nected by the rope f' are brought into proximity with the pulley H the eye 5 may be connected to the rearmost hook of the carriages, and the rail being supported on such 5 carriages the weight of such rail will serve to draw the light carriages F on the opposite side up to the top of the incline as such carriages descend the inclined girders to the position for depositing its respective rail upon the road-bed. This operation is repeated in succession, so that a rail is carried first down on one side and then on the opposite side, so that the track may be built up evenly upon the road-bed.

What I claim as my invention is—

1. The combination with the rail-cars and pilot-car and crane, of the uprights and cross-bars and parallel longitudinal girders and inclined girders supported thereby and the rails supported on the girders and the carriages having lower extensions and the blocks and

ropes and tongs supported thereby and the rope connecting the carriages as and for the

purpose specified.

2. The combination with the rail-cars and pilot-car and crane, of the uprights and cross-bars and parallel longitudinal girders and inclined girders supported thereby and the rails supported on the girders and the carriages having lower extensions and the blocks and ropes 30 and tongs supported thereby and the rope connecting the carriages and a supplemental rope designed to be connected to the rearmost carriage on each rail alternately and a pulley at the upper end of the incline through which 35 such rope extends as and for the purpose specified.

HUGH MANN.

Witnesses:

B. BOYD, L. TRIMBLE.