

L. MAYER.
TRAVELING EXCAVATOR FRAME STRUCTURE.
APPLICATION FILED MAR. 12, 1908.

916,347.

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Fig. 1.

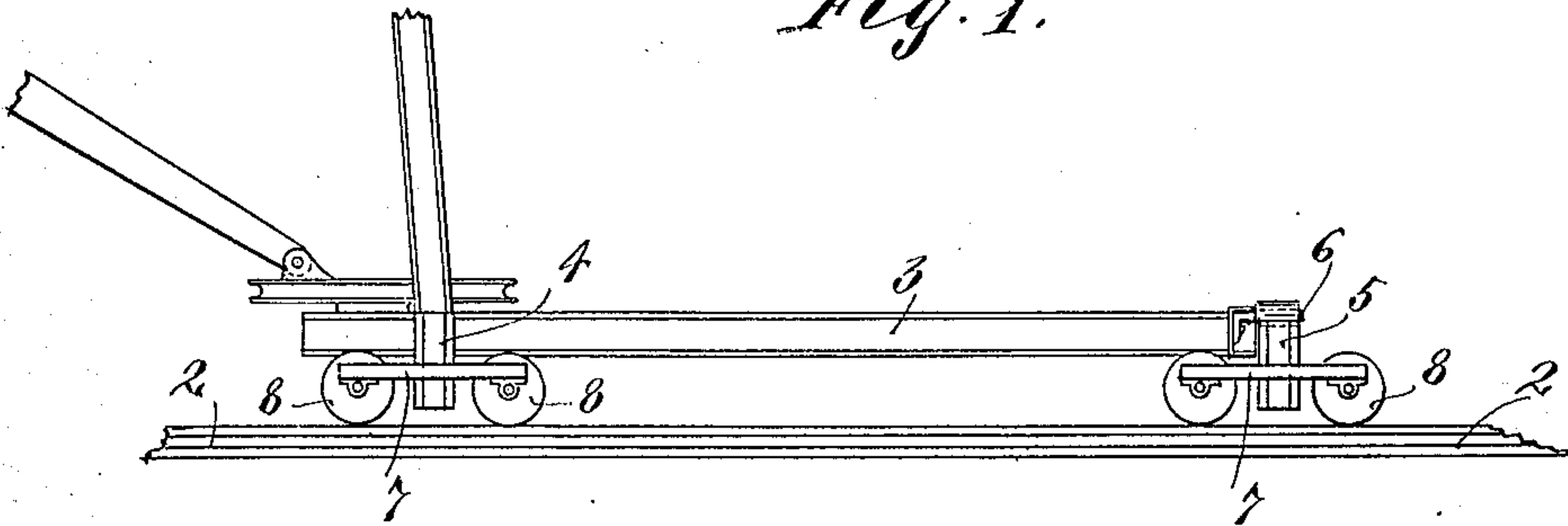


Fig. 2.

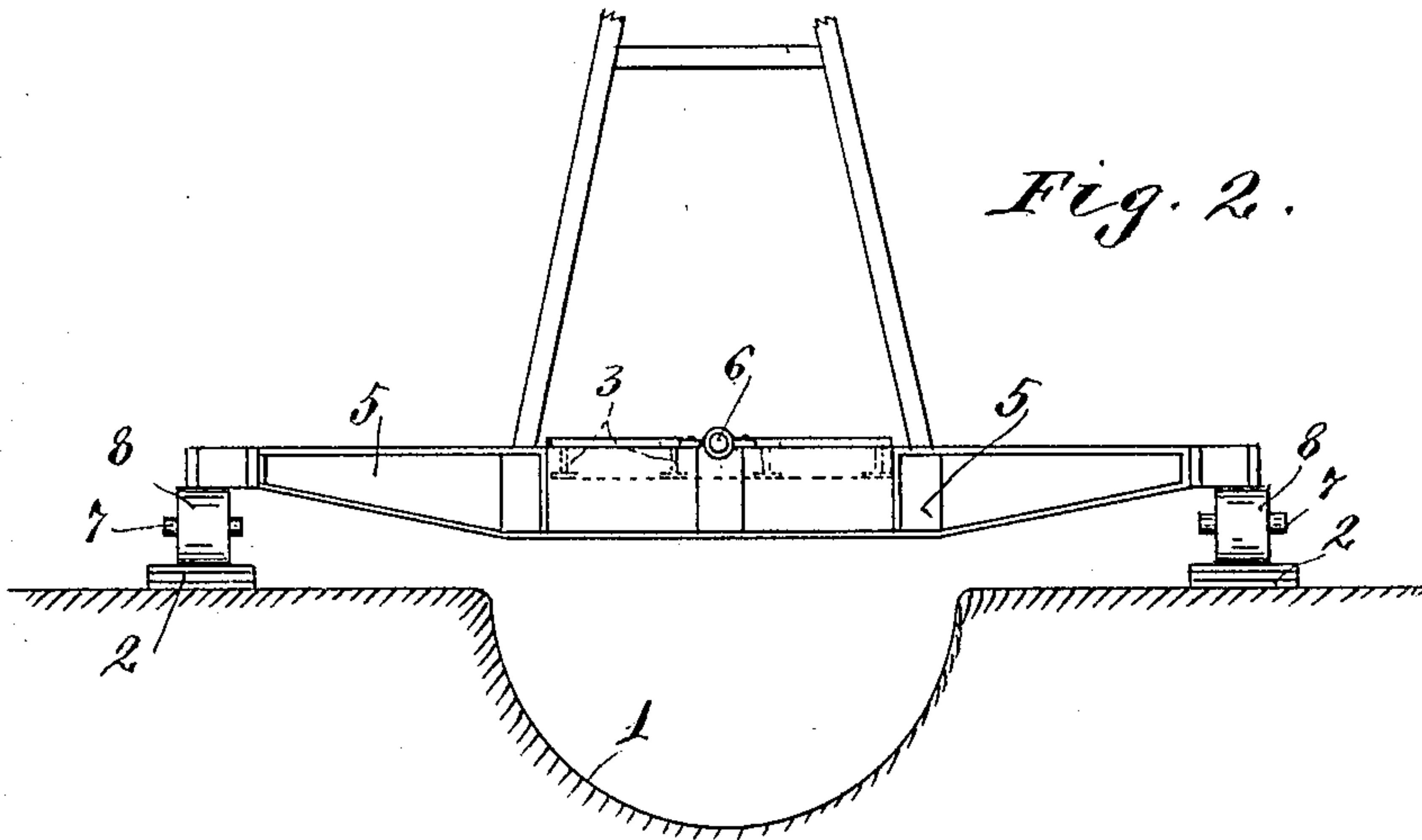
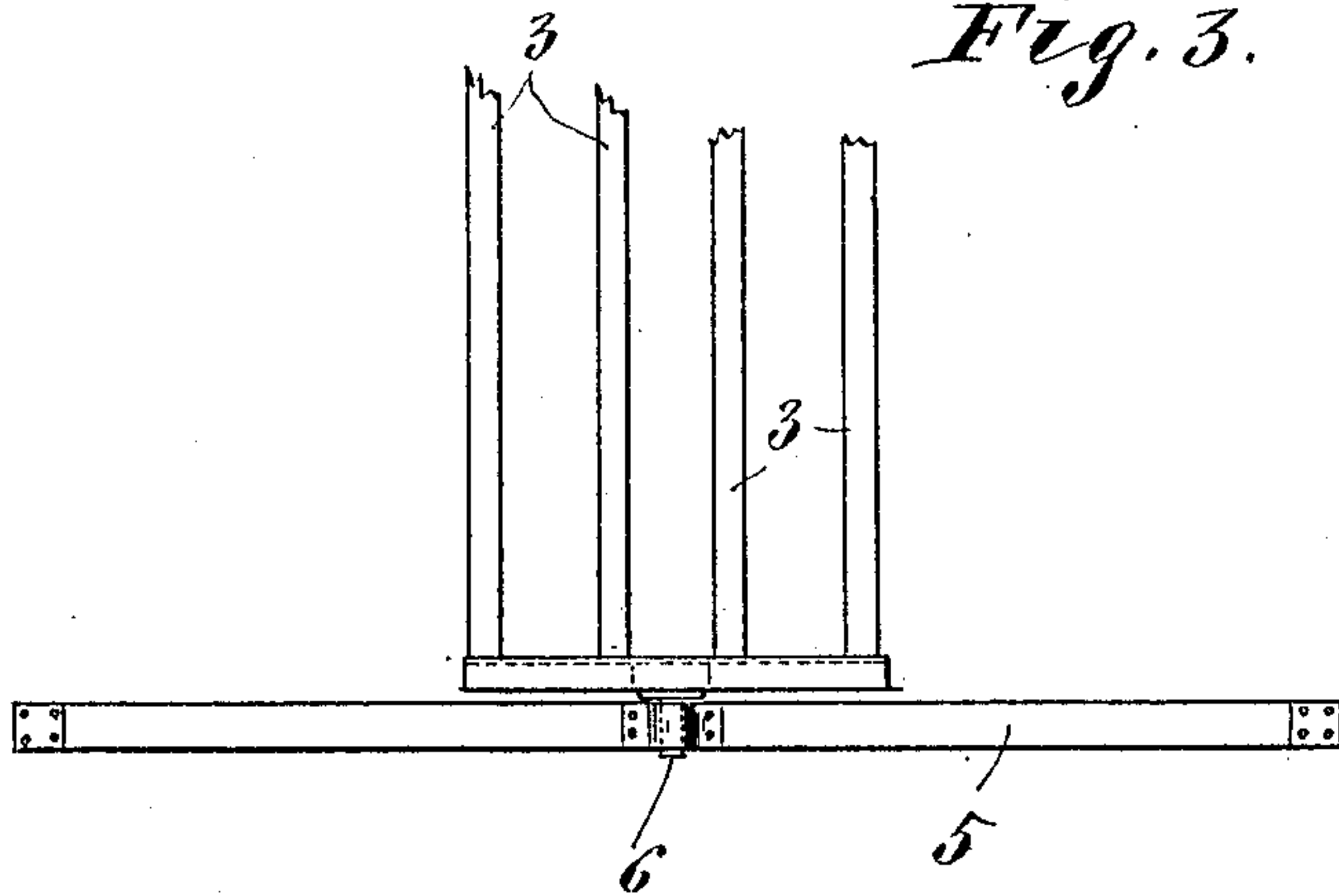


Fig. 3.



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UNITED STATES PATENT OFFICE.

LOUIS MAYER, OF MANKATO, MINNESOTA.

TRAVELING-EXCAVATOR-FRAME STRUCTURE.

No. 916,347.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed March 12, 1908. Serial No. 420,579.

To all whom it may concern:

Be it known that I, LOUIS MAYER, a citizen of the United States, residing at Mankato, in the county of Blue Earth and State of Minnesota, have invented certain new and useful Improvements in Traveling-Excavator-Frame Structures; 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.

My invention relates to excavating apparatus of the general character disclosed and claimed in my prior U. S. Patent No. 835,029, Serial Number 304,678, issued of date November 6th, 1906. In an excavating apparatus of this character, the entire machine is supported by four small trucks applied to the ends of long transverse beams that are arranged to span the ditch or excavated channel, and the said wheels of the said trucks are arranged to run on temporary tracks usually formed in sections placed upon the ground. These sectional tracks necessarily are more or less irregular, and vary considerable in respect to horizontal positions, so that when a rigid frame structure is employed, such frame will be very greatly strained and distorted as the several trucks run over the irregular tracks.

My invention has for its especial object to provide a frame structure that will not be strained by the trucks running over irregular tracks, and to this end I pivotally connect at least one of the long transverse ditch spanning beams to the main frame of the excavating machine so that the pivoted beam may oscillate vertically and allow the several trucks to freely adapt themselves to all irregularities in the tracks.

In the accompanying drawings, which illustrate my invention, like characters indicate like parts through the several views.

Referring to these drawings; Figure 1 is a diagrammatic side elevation, showing the frame and truck structure of an excavating machine embodying my invention, some parts being broken away. Fig. 2 is a diagrammatic rear elevation of the parts shown in Fig. 1; and Fig. 3 is a fragmentary plan view showing the rear portion of the machine frame or platform structure, and the rear transverse ditch-spanning beam pivotally connected thereto.

In Fig. 2, the numeral 1 indicates a ditch which is assumed to have been dug by the excavating apparatus, and in Figs. 1 and 2 the numeral 2 indicates sections of the track upon which the excavator supporting trucks are made to run, the said tracks being shown as made of a multiplicity of planks suitably secured together. Of the parts of the excavating apparatus, the numeral 3 indicates the platform structure, and the numerals 4 and 5, respectively the front and rear transverse ditch-spanning beams. The front beam 4 is rigidly secured at its intermediate portion to the platform structure 3, while the rear beam 5 is pivotally connected at 6 to the rear end of the said platform structure. The numerals 7 and 8 indicate, respectively, the frames and wheels of the four supporting trucks, two of which are applied to the ends of the front beam 4, and two of which are applied to the ends of the pivoted rear beam 5, and the wheels of which, of course, run upon the tracks 2.

As is evident, with the construction described, the two beams 4 and 5 are free to vary their positions in respect to a horizontal, so that the two pairs of trucks may independently and freely adapt themselves to all irregularities in the tracks upon which they run.

This device, while extremely simple, and while adding little or nothing to the cost of the excavating apparatus, has, nevertheless, been found to be of very great importance in this class of machines.

What I claim is:—

In an excavating apparatus, the combination with a platform structure, of a pair of transversely extended ditch-spanning beams, one of which is rigidly secured thereto, and the other of which is intermediately pivoted thereto, and wheeled trucks each comprising several wheels and a truck frame applied to the ends of the said two beams, substantially as and for the purposes set forth.

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

LOUIS MAYER.

Witnesses:

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