No. 841,827. PATENTED JAN. 22, 1907.

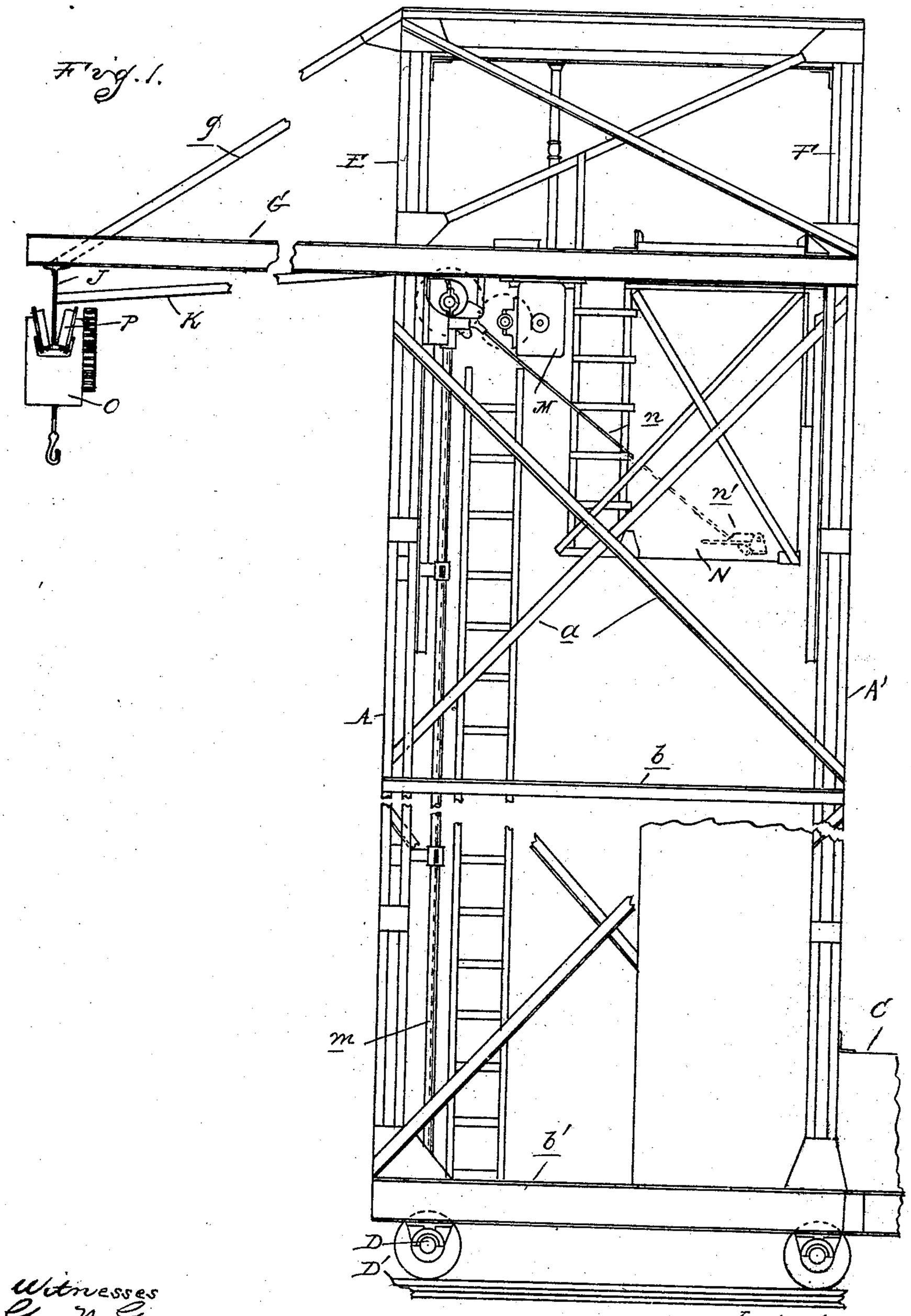
G. A. TRUE.

GAUNTREE CRANE.

APPLICATION FILED MAY 14, 1906.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses
Geo. H. Graves
James P. Barry.

Inventor
George A. True
By Whittemore Hulbert & Whittemore
Atty's.

No. 841,827. PATENTED JAN. 22, 1907.

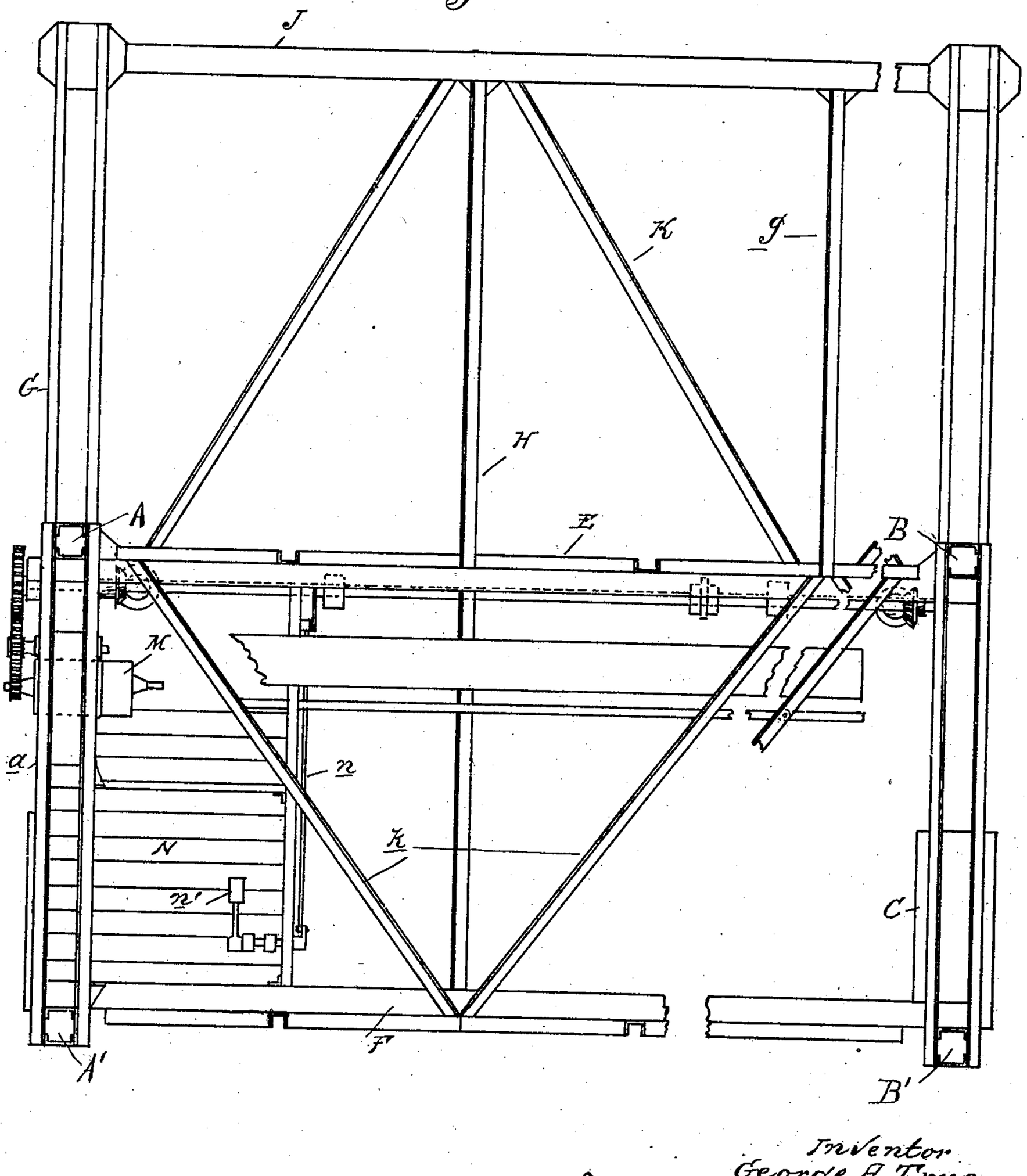
G. A. TRUE.

GAUNTREE CRANE.

APPLICATION FILED MAY 14, 1906.

3 SHEETS—SHEET 2.

Fig. 2.



Witnesses
Geo. H. Graves
James P. Barry.

Inventor
George A. True
By Whittemore Hulbert & Whittemore
atty's

No. 841,827. PATENTED JAN. 22, 1907.

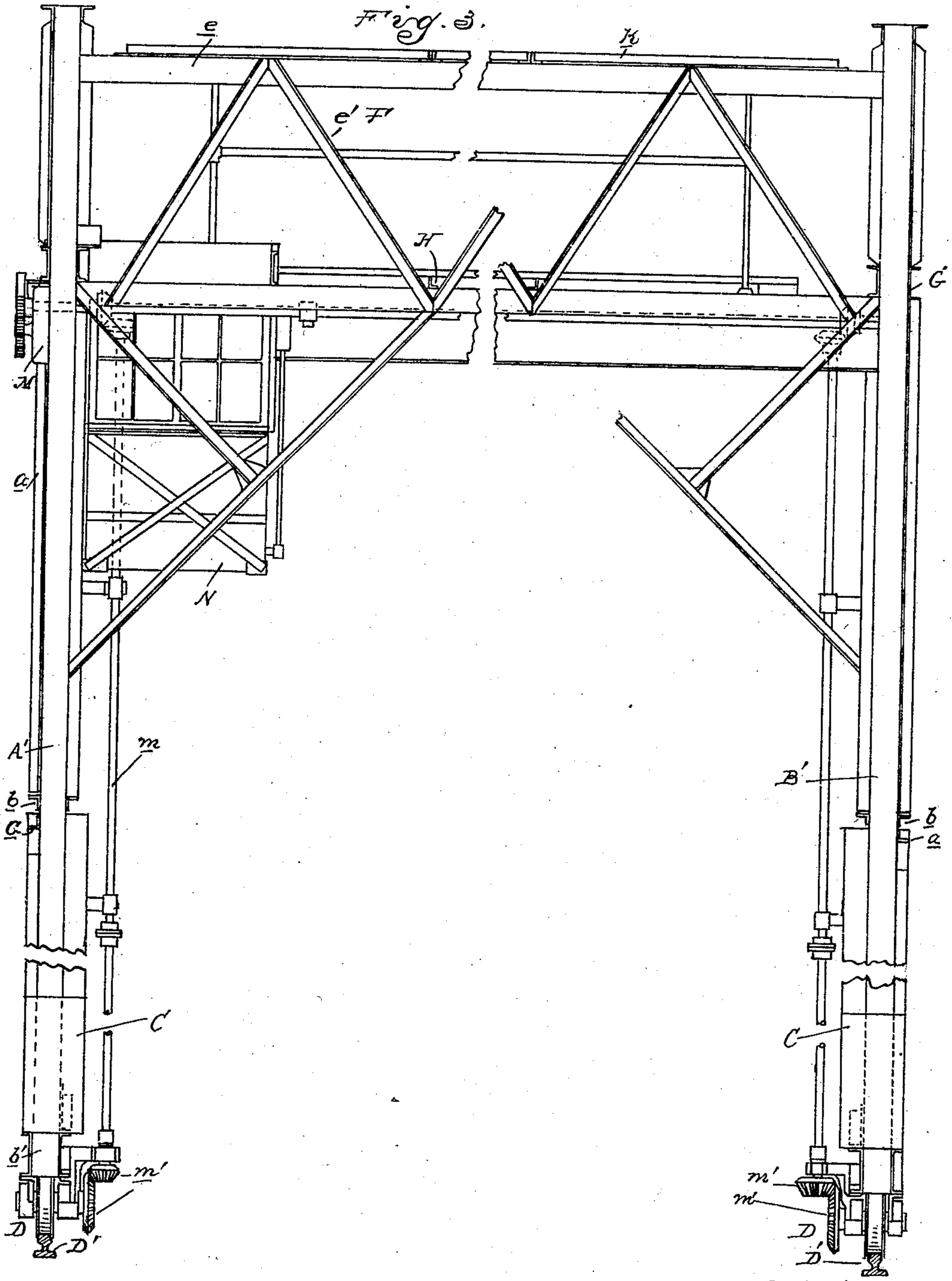
G. A. TRUE.

GAUNTREE CRANE.

APPLICATION FILED MAY 14, 1906.

3 SHEETS—SHEET 3.

Fig. 3.



Witnesses
Geo. N. Graves
James P. Barry.

Inventor
George A. True
By Whittemore, Hulbert & Whittemore
attys.

UNITED STATES PATENT OFFICE.

GEORGE A. TRUE, OF DETROIT, MICHIGAN, ASSIGNOR TO NORTHERN ENGINEERING WORKS, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

GAUNTREE-CRANE.

No. 841,827. Specification of Letters Patent. Patented Jan. 22, 1907.

Application filed May 14, 1906. Serial No. 316,873.

To all whom it may concern:

Be it known that I, GEORGE A. TRUE, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Gauntree-Cranes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to new and useful improvements in gauntree-cranes; and it consists in the novel construction and combination of parts whereby the bridge overhangs and extends parallel with the girders.

One object of this invention is to form a crane which may be used to unload cars standing outside of the property-line without extending the tracks outside thereof.

Another object is to form a crane which can unload cars of greater length than the span of the gauntree and to rotate and swing long beams from the crane-hooks without interference from the gauntree-legs.

In the drawings, Figure 1 is an end elevation of my improved gauntree-crane. Fig. 2 is a top plan view, and Fig. 3 is a rear elevation.

A and B are front legs of the gauntree, and A′ and B′ are the rear legs, A and A′ being the pair of legs at one end of the gauntree and suitably cross-connected, as by oblique struts or braces *a a* and intermediate and lower horizontal braces *b* and *b′*, respectively. B and B′ are the pair of legs at the other end and are similarly braced. The lower braces *b′* project rearwardly and on the projecting portions support counterweights C.

Each leg is provided with a wheeled truck D, arranged to run on the wide-gage track-rails D′, and the tops of the front legs A B are connected by a span-girder E, while a similar span-girder F connects the tops of the rear legs A′ B′. These span-girders may be of any suitable truss construction, such as the longitudinal beams *e* and the struts *e′*.

The lower sides of girders E and F are connected at their ends by members G, projecting in front of the crane to form bridge-arms, and at intermediate points by similarly-projecting members H. On the ends of these members is supported a bridge-beam J, preferably an I-beam. Braces *g* extend from the top of girder E to the bridge-beam, and the bridge-beam is further braced by oblique struts K, connecting with girder E. The girders are also preferably braced by oblique cross-struts *k*.

Between the tops of the legs A and A′, I preferably support an electric travel-motor M by suitably-securing means attached to the member G, and in the rear of the motor I suspend the operator's cab N from the member G. It will be understood that any electrical or other form of travel-motor may be employed and may be connected to the wheels by any suitable means, such as by the shafts *m* and the bevel-gears *m′*, without departing from the scope of my invention. Suitable motor-controlling connections, such as the rod *n* and pedal *n′*, are arranged in the cab N.

A trolley-hoist O is arranged to move on wheels P, engaging the lower flanges of the bridge I-beam. This trolley-hoist may be of any suitable construction and may be connected for control by the operator in the cab or be controlled from the ground, and hence I do not wish to limit myself to any specific form of hoist.

It is obvious that with the above-described gauntree-crane the tracks may lead up to the property-line, and when the gauntree is moved to the line the bridge will overhang and is thus able to unload cars outside of the line.

What I claim as my invention is—

1. In a gauntree-crane, the combination with pairs of legs, each of said pairs being cross-connected, wheeled trucks on the legs, girders connecting the pairs of legs and knee-braces therefor, of a plurality of transverse bridge-arms projecting from the girders, a bridge-beam carried by the projecting ends of said arms, a hoist traveling on said bridge-beam, and counterweights on said legs for the purpose described.

2. In a gauntree-crane, the combination with pairs of legs, each of said pairs being cross-connected, wheeled trucks on the legs, girders connecting said pairs of legs and knee-braces therefor, of a plurality of transverse bridge-arms carried by and projecting from said girders, a bridge-beam carried by the projecting ends of said arms, braces connecting the ends of said arms with the tops of said girders, a hoist traveling on said bridge-beam, and counterweights on said legs, for the purpose described.

3. In a gauntree-crane, the combination

with pairs of legs, each of said pairs being cross-connected, wheeled trucks on the legs, girders connecting said pairs of legs and knee-braces therefor, or a plurality of transverse bridge-arms carried by and projecting from said girders, braces connecting the ends of said arms with the tops of said girders, a bridge-beam carried by the projecting ends of said arms, a hoist traveling on said bridge-beam, a cab below said girders, and counterweights on said legs for the purpose described.

4. In a gauntree-crane, the combination with a track, of spaced legs arranged for travel on said track, span-girders connecting the legs, and a bridge outside of the vertical plane of the legs, supported by said girders, and extending transversely to said track, whereby said bridge may project beyond the end of said track, for the purpose described.

5. In a gauntree-crane, the combination with a track, of legs arranged for travel thereon, span-girders connecting the legs, a bridge outside of the vertical plane of the legs, supported on said girders, and extending transversely of said track, and a hoist mounted for travel longitudinally of said bridge whereby the course of travel may be transverse to and beyond the end of said track.

6. In a gauntree-crane, the combination with a track, of legs arranged to travel thereon, span-girders connecting the legs, a bridge supported by said girders and extending longitudinally thereof and transverse to said track outside of the vertical plane of the legs, and a traveling hoist mounted on said bridge and moving parallel with said span-girders outside of the vertical plane of the legs, whereby said hoist may project beyond the end of said track.

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

GEORGE A. TRUE.

Witnesses:
EDWARD S. REID,
HENRY W. STAUDART.