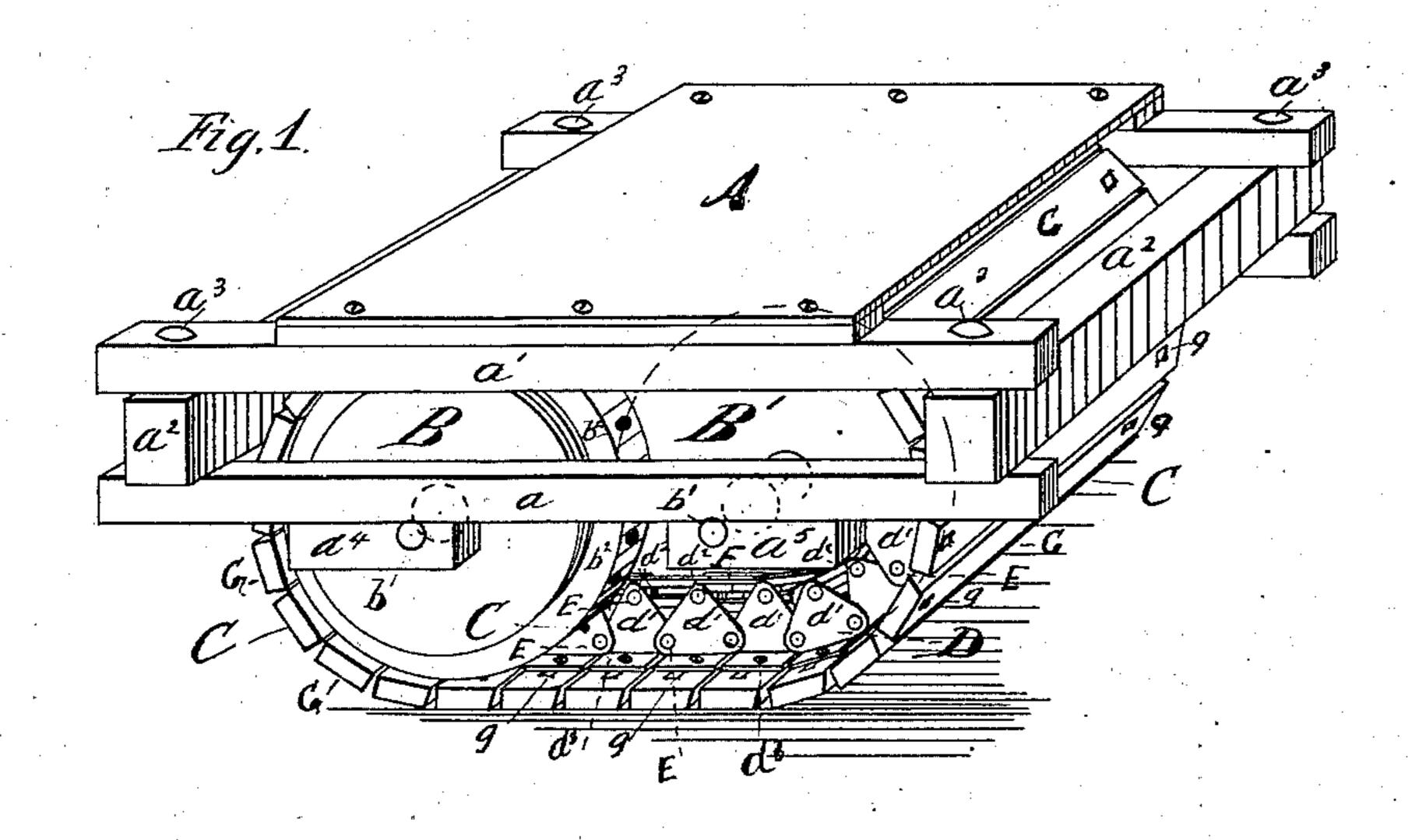
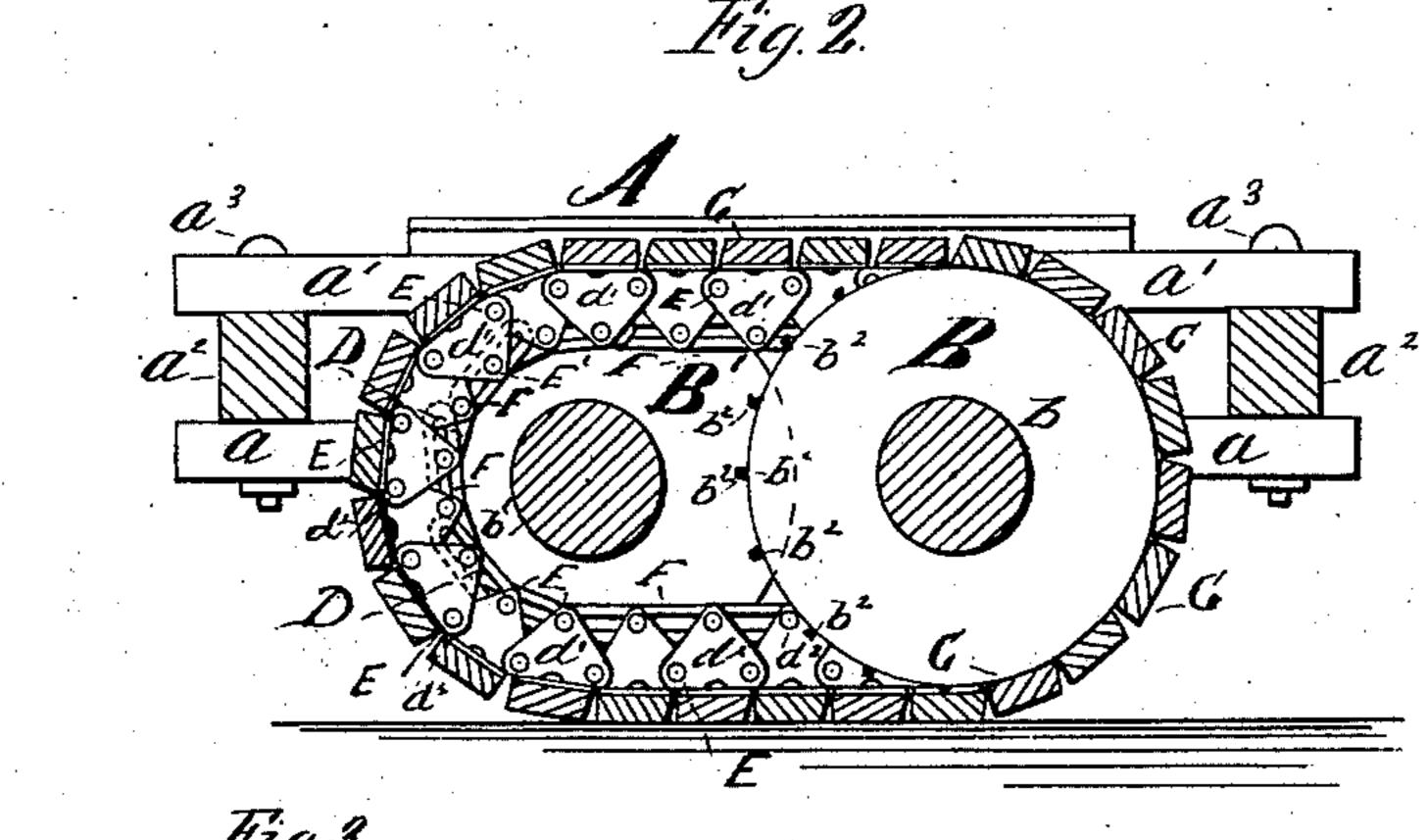
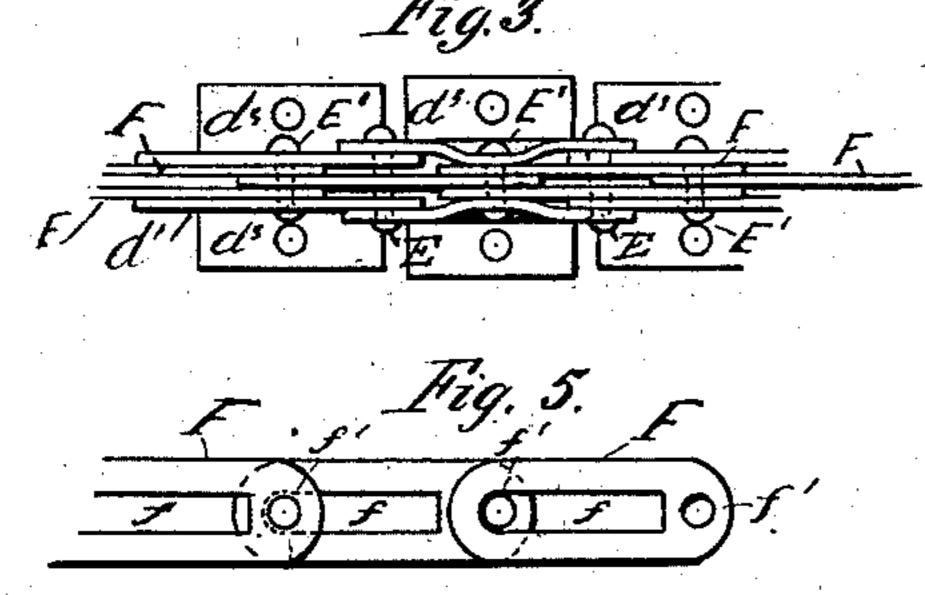
## G. H. EDWARDS. Traction Truck.

No. 232,395.

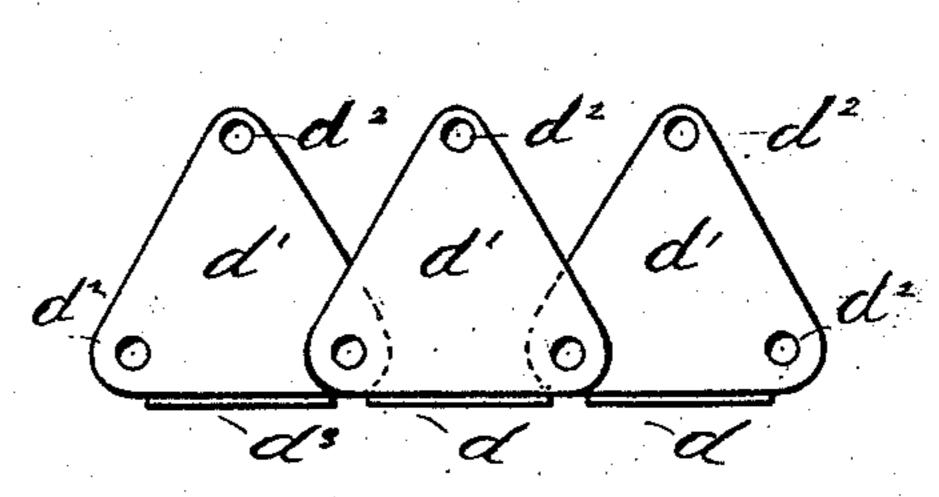
Patented Sept. 21, 1880.







Witnesses: F.B. Souneud Daniel Stoner



Jeorge D'Edwards per D. Forser

Attorney.

## United States Patent Office.

GEORGE H. EDWARDS, OF CHICAGO, ILLINOIS.

## TRACTION-TRUCK.

SPECIFICATION forming part of Letters Patent No. 232,395, dated September 21, 1880. Application filed January 23, 1880.

To all whom it may concern

Be it known that I, GEORGE H. EDWARDS, of the city of Chicago, in the county of Cook, State of Illinois, have invented a new and use-5 ful Improvement in Traction-Trucks, of which the following is a specification, reference being had to the annexed drawings, and the letters and figures marked thereon, forming a part thereof:

My invention pertains to the use of a folding, self-supporting, endless, trussed chainbelt or extended wheel, in combination with any suitably-constructed truck, the chief features of the trussed chain-belt consisting of a 15 parallel series of braces arranged perpendicular to the line of motion of the belt, and consecutively hinged together at the outer angles, and of slotted links consecutively hinged together at the inner angles of the braces, each 20 series of links being parallel to the other and to the line of motion of the belt.

The object of my invention is to provide a tractor, to be propelled by a steam-engine or other suitable mechanical motor over firm or 25 yielding surfaces, for pulling, pushing, and carrying purposes, as may be required for plowing and other uses, and that in such uses will exert a greater traction-power in proportion to its weight than other tractors heretofore pro-30 duced.

In the drawings, Figure 1 is a perspective view of the apparatus. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a top view of a section of one of the braced chains 35 of the traction-belt or extended wheel viewed from its inner edge. Fig. 4 is a side elevation of a section of the braces of one of the chains shown in Fig. 3, showing their positions in relation to each other and their points of con-40 nection with each other and with the links; and Fig. 5 is a side view of the links, showing their positions as in relation to each other and the points of their connection with each other and with the braces.

I will now describe fully the apparatus as shown in the annexed drawings, to enable others to make and use the same.

Letters and figures of like name and kind refer to like parts in each of the figures of the 50 drawings.

made of any suitable material and construction; but as herein shown it is made of side pieces, a a and a' a', and end pieces,  $a^2$   $a^2$ , of wood, secured to each other by metallic bolts 55  $a^3 a^3$ . The shafts b and b' of the wheels or drums B B and B' are journaled to the side pieces a a by journal-boxes  $a^4$   $a^4$  and  $a^5$   $a^5$ . The wheels or drums are arranged in relation to each other in such positions that B' laps be- 60 tween BB. And in said apparatus the endless belt or extended wheel C is constructed of parallel endless chains DD, respectively composed of a single, or preferably a double, series, d d, parallel to each other, of braces, d', 65 and of links F, of metal. The braces d' are cast solid or otherwise, made of a triangular or other suitable shape, and respectively provided with a perforation,  $d^2$ , at each angle, through which they are consecutively hinged 70 together in each series d, and each series  $\bar{d}$  to the other in each chain D at the outer angles by means of bolts E, and at the inner angles they are consecutively hinged to the series of links F and to each series d of the braces d' in each 75 chain D by means of bolts E, the links F being for such purpose respectively provided with a slot, f, and a perforation, f'. The braces d'are, at their peripheral edge, respectively provided with a laterally-projecting flange,  $d^3$ , 80 projecting oppositely in each chain D. To the said flanges are secured, by bolts, the transverse traction-bars G, of wood or other suitable material.

The endless belt or extended wheel C is ar- 85. ranged and travels upon the periphery of the wheels or drums B B and B'.

The braces d' in each chain D fold into each other radially at the curves of the belt C by means of the slot f of the links F, and the 90. links  $\mathbf{F}$ , in combination with the braces d' and the bolts E and E', form a firm and unyielding traction-bearing in the endless belt between the wheels or drums B B and B', free from the side rails, a a, of the truck-frame A. The 95 wheels or drums BB, to which the motor is to be applied, are provided with lugs  $b^2$ , which engage corresponding mortises g in tractionbars G, for the purpose of increasing the tractive power of the apparatus.

I do not claim as new nor as my invention In said apparatus the truck-frame A may be | the hereinbefore-described traction-frame A,

nor the wheels or drums B B and B', nor the combination of a truck and an endless traction-belt for traction purposes, knowing that the same are old devices; neither do I herein claim as my invention by itself an endless trussed belt or extended wheel having braces perpendicular and slotted links horizontal to the line of motion of the belt, as a patent showing such devices was issued to me by the United States Patent Office, bearing date February 27, 1872, and numbered 124,042; but

What I claim as new, as my invention, and desire to secure by Letters Patent, is—

In combination with the wheels or drums B and B' and the traction-bars G, the endless parallel chains D, composed of flange d, braces

d', slotted links F, and bolts E and E', the braces being arranged perpendicular and the links horizontal to the line of motion of the chains or traction-belt, and being respectively 20 constructed and arranged in relation to each other, to the wheels or drums, and to the traction-bars so that they fold with each other upon the wheels or drums and form between the latter an unyielding self-supporting traction-bearing, substantially as described, for the purposes set forth.

GEORGE H. EDWARDS.

In presence of—
ANN JOHNSON,
DANIEL STONER.