

May 24, 1927.

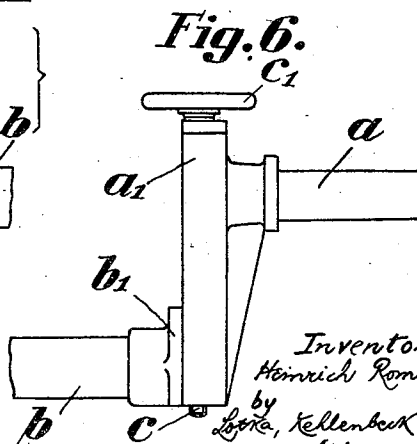
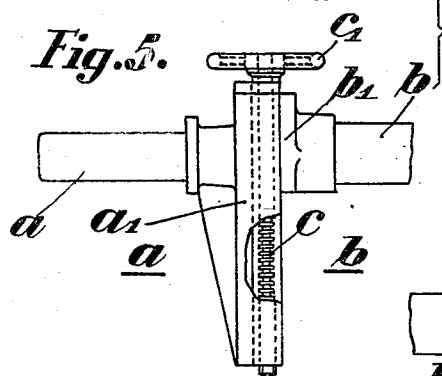
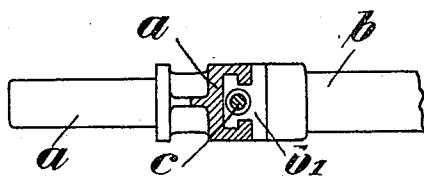
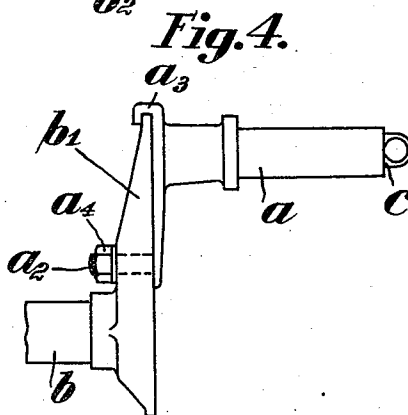
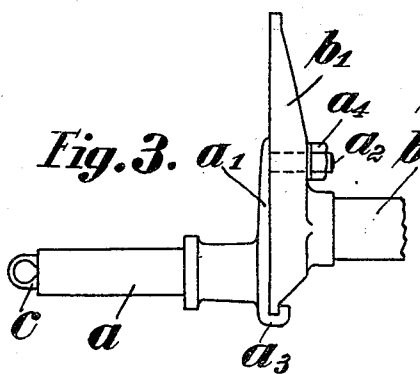
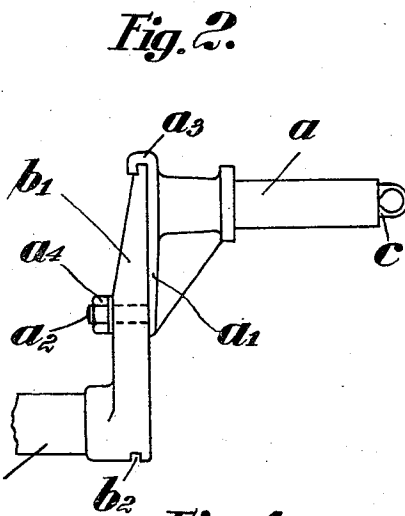
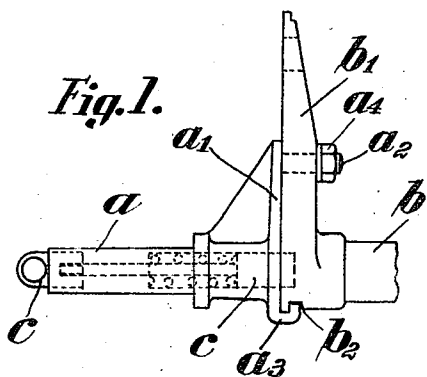
H. ROMBERG

1,629,739

GUN CARRIAGE

Filed Oct. 24, 1925

3 Sheets-Sheet 1



Inventor:
Heinrich Romberg
by
Lore, Kellenbeck & Farley
Attorneys.

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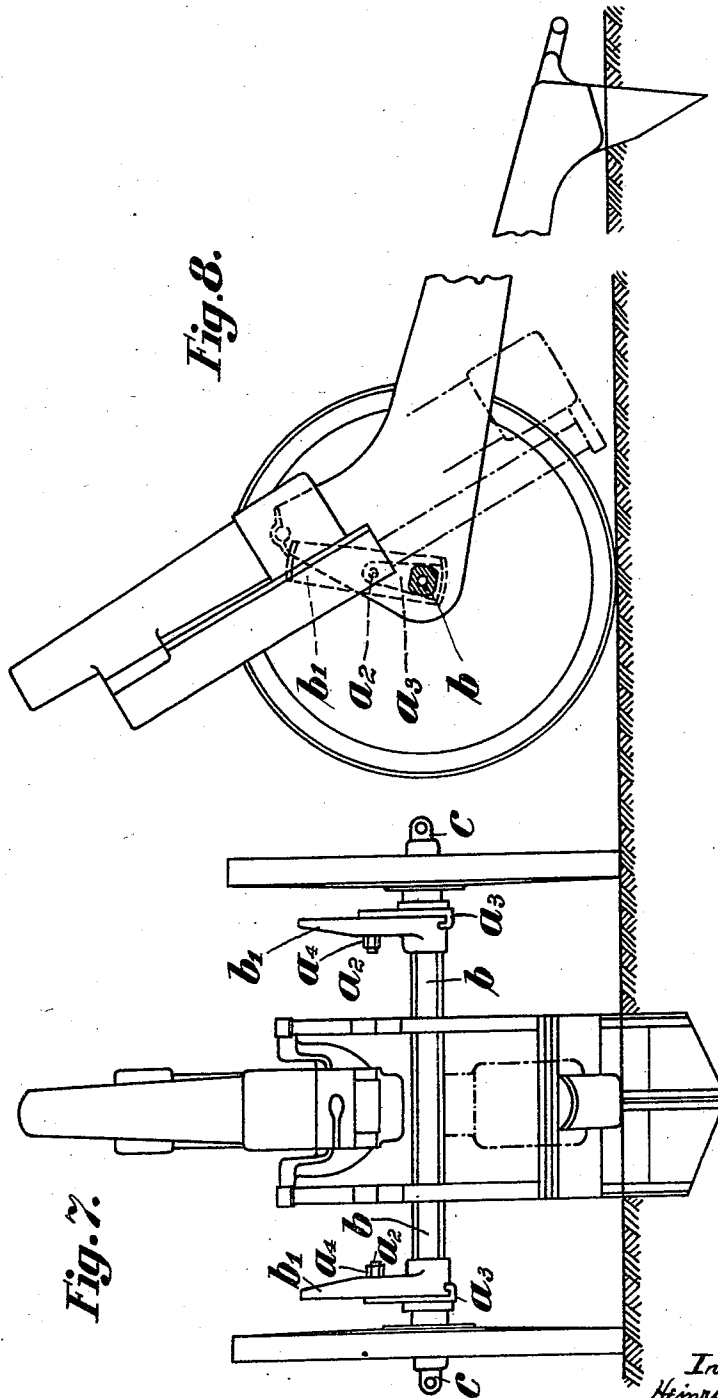
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Fig. 10.

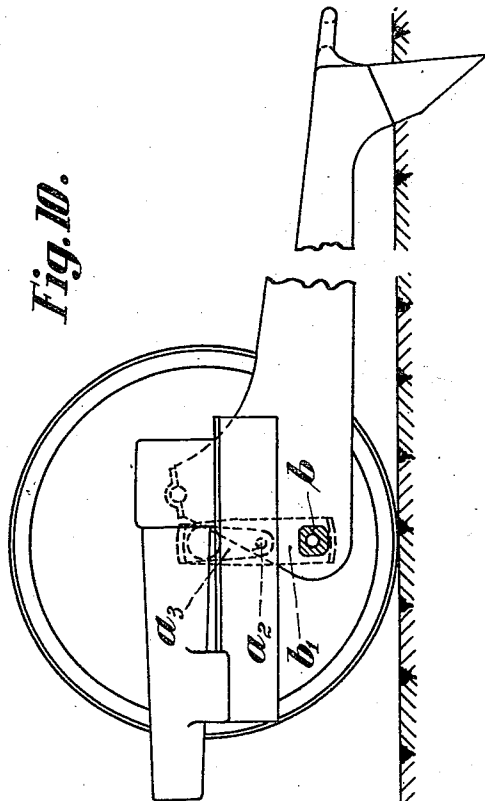
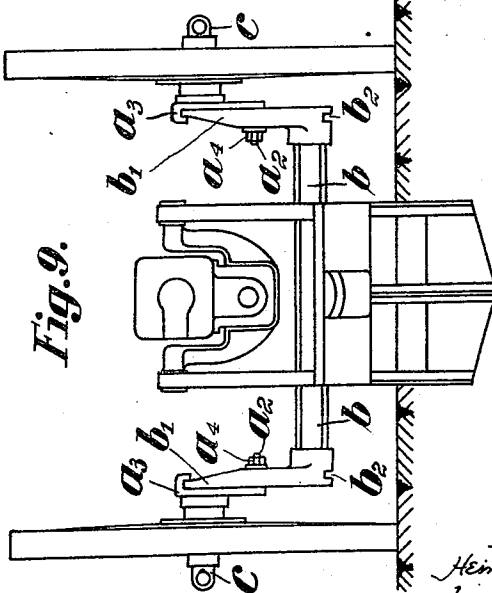


Fig. 9.



Inventor:
Heinrich Romberg,
by *Lorne Kellenbeck & Farley*
Attorneys.

UNITED STATES PATENT OFFICE.

HEINRICH ROMBERG, OF DUSSELDORF, GERMANY.

GUN CARRIAGE.

Application filed October 24, 1925, Serial No. 64,563, and in Germany October 24, 1924.

In the carriage according to the invention the central axle piece connecting the wheel axle trees forms a separate part which can be adjusted to assume different positions relative to the axis of the wheels and in one limiting position coincides with this axis to form a straight axle tree. The length of the lever arms connecting the central member is altered, as required, by relatively displacing this member with respect to the axle trees about pins disposed eccentrically to the axes of the said trees, or the carriage axle and the axle trees may be connected by vertically disposed guides so as by suitable means to be placed at different distances apart and secured therein.

The arrangement according to the invention enables an inclined position of the wheels to be compensated by the separate adjustment of the two axle trees and has also the further advantage that the firing heights of the gun can be altered, as required, within certain limits without essentially changing the position of the centre of gravity of the gun relatively to the wheel axle so that the stresses on the trail are not materially altered.

The accompanying drawings show examples of construction according to the invention in which

Figures 1, 3 and 5 represent a part of the carriage axle in the position for high firing with different means of connecting the axle trees with the middle axle piece.

Figures 2, 4 and 6 are views corresponding to Figures 1, 3 and 5 of the parts of the carriage axle in the position for low firing.

Figures 7 and 8 show respectively in rear and side elevation a gun carriage and gun adjusted according to Figure 1 for high firing.

Figure 9 is a rear elevation of the gun carriage and gun in the position for low firing according to Figure 2.

Fig. 10 is a side elevation of the gun carriage and gun in the position for low firing according to Fig. 2.

The carriage axle consists of two axle trees a and the middle axle piece b connected with the carriage.

In the construction shown in Figure 1, each axle tree a carries a pin a^2 eccentrically arranged on a vertical arm a' . This pin is

pivoted in an upwardly projecting arm b' , provided at each end of the axle piece b , and the pins are secured by nuts a^4 screwed on the threaded end of the pins. In the position for high firing represented in Figure 1 the axle tree a engages by means of the claw-shaped end a^3 of its arm a' in a notch b^2 provided in the axle piece b and thereby prevents any lateral displacement of the relatively rotatable parts a' and b' . The arm b' is prolonged upwards above the pin a^2 so that, after the axle tree a has been swung through 180° about the said pin, it engages in the claw a^3 which has been swung upwards. The downward cranking of the axle for low firing is shown in Figure 2. In both positions spring bolts c mounted in the hollow axle tree are inserted in borings of the arm b' and prevent any relative radial displacement of the parts a' and b' which are swung together about the axle trees.

The axle piece b is adapted to be moved laterally in the carriage but is prevented from rotating relatively to the said carriage.

In contrast to the construction shown in Figure 1, in which a straight axle is formed for high firing, in Figure 3 the axle tree a is displaced downwards relatively to the middle axle piece b . For high firing the said axle piece is cranked upwards, for low firing (Figure 4) it is cranked in the manner previously described.

In the constructions shown in Figures 5 and 6 any required firing between two limiting positions can be obtained.

The axle tree a carries a downwardly projecting guide bearing a' with a screw threaded spindle c rotatably arranged therein. The head b' of the axle piece b slides in the dovetailed guide of the bearing a' and co-operates with a screw-threaded spindle c rotatable by a hand-wheel c' .

In this construction the axle piece b , in order to increase the distance from the ground when travelling, is preferably rotatably mounted in the carriage; this arrangement could obviously be applied also to the axles in the previously described constructions, in order, by swinging the whole axle, to be able to set the gun for still higher firing.

It is obvious that many changes may be

made in the disposition and form of the members connecting the central axle carrying the gun carriage with the wheel axle trees without departing from the scope of the invention.

I claim:

1. A wheeled gun carriage for setting the gun at different firing heights, axle trees for said wheels, an axle piece carrying said gun carriage, pins eccentrically connected with said axle trees and arms mounted on said axle piece and adapted to be swung about said pins.
2. A wheeled gun carriage for setting the gun at different firing heights, axle trees for said wheels, an axle piece carrying said gun carriage, pins eccentrically connected with said axle trees and arms mounted on said axle piece and adapted to be swung about said pins, in one limiting position

said axle piece being in line with said axle trees.

3. A wheeled gun carriage for setting the gun at different firing heights, axle trees for said wheels, an axle piece carrying said gun carriage and rotatably mounted therein, and means for adjusting and securing said axle piece at different positions relatively to said axle trees.

4. A wheeled gun carriage for setting the gun at different firing heights, axle trees for said wheels, an axle piece carrying said gun carriage, an arm secured to each of said axle trees, a pin secured to each of said arms and arms mounted on said axle piece and adapted to be swung about said pins.

In testimony whereof I have affixed my signature.

HEINRICH ROMBERG.