

May 14, 1929.

N. E. METHLIN

1,713,190

WHEELED SPLIT TRAIL GUN CARRIAGE

Filed July 26, 1928

2 Sheets-Sheet 1

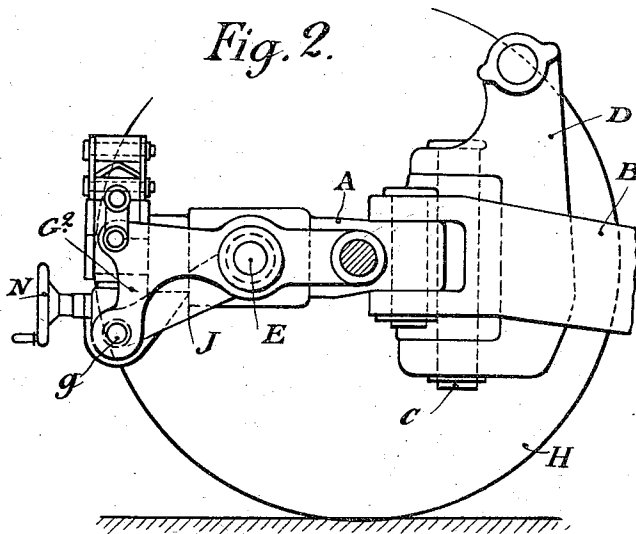
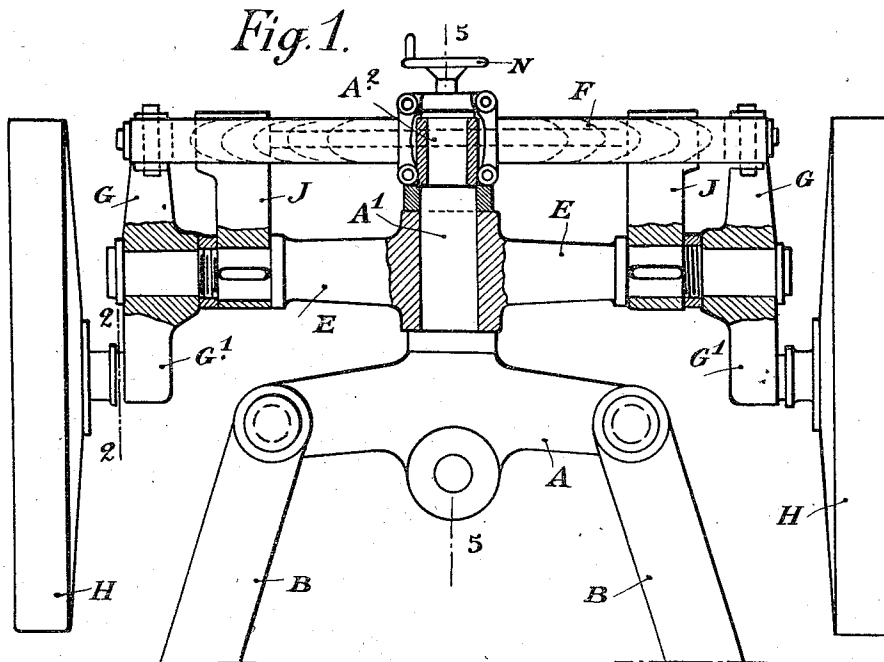
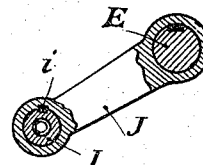


Fig. 6.



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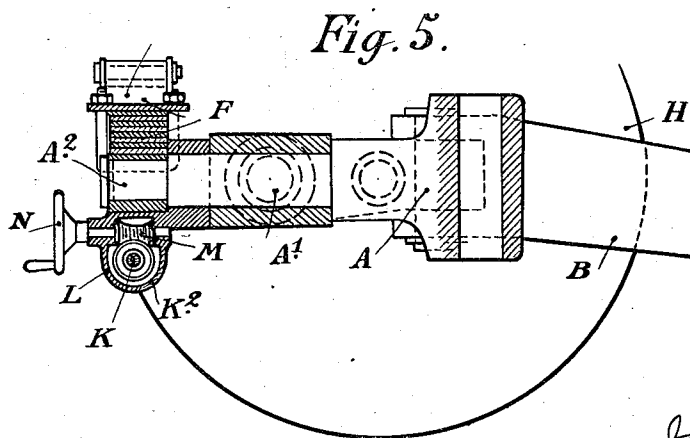
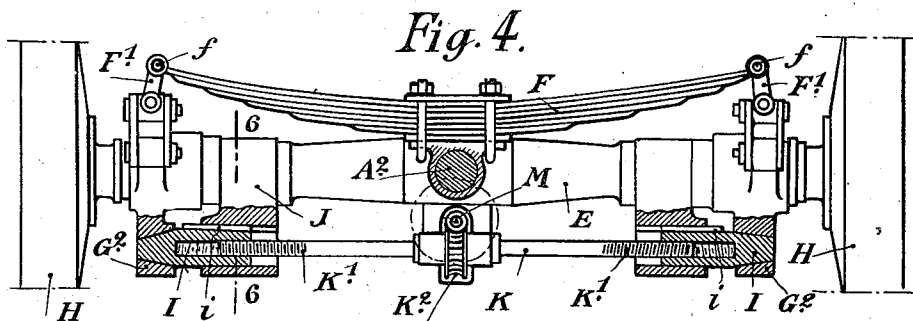
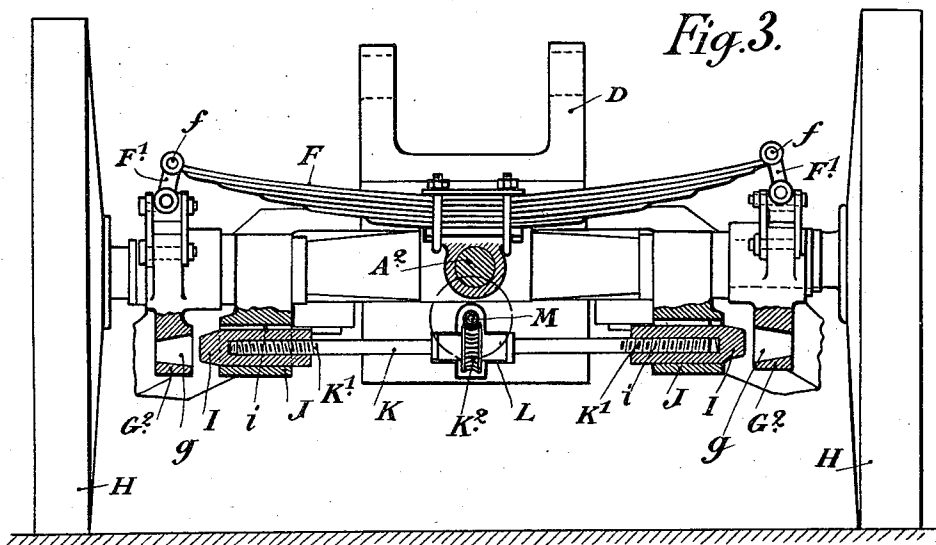
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WHEELED SPLIT TRAIL GUN CARRIAGE

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

NICOLAS EMILIE MATHLIN, OF PARIS, FRANCE, ASSIGNOR TO SCHNEIDER & CIE., OF PARIS, FRANCE, A LIMITED JOINT-STOCK COMPANY OF FRANCE.

WHEELED SPLIT-TRAIL GUN CARRIAGE.

Application filed July 26, 1928, Serial No. 295,546, and in France August 1, 1927.

The present invention relates to a piece of ordnance mounted upon a wheeled split trail carriage of known type in which the two trails are pivoted to the headplate of the gun carriage upon which the top carriage carrying the gun is pivotally mounted, the said head plate being itself pivoted to the axle by a pivot extending at right angles to the latter.

According to the invention an elastic suspension is provided for such a carriage by means of a leaf spring pivotally mounted at its center, through its clip, about the pivot provided between the head plate and axle, the ends of the said spring being each pivoted to one of the arms of a rocking lever pivoting about one end of the axis, to the other arm of which lever is pivotally connected the corresponding wheel.

A device permitting this suspension to be made inoperative during firing comprises a system of two locking bolts displaceable by means of a common transmission and adapted, as desired, to be made to engage in latch recesses formed upon one of the arms of the rocking levers to which the ends of the leaf spring are pivotally connected.

A practical embodiment of the invention is illustrated, by way of example, in the accompanying drawing.

Fig. 1 is a plan view of the carriage with a part in section.

Fig. 2 is a sectional elevation taken along the line 2—2 in Fig. 1.

Fig. 3 is an end elevation of the locking device, with a part in section, the members being shown in the traveling position.

Fig. 4 is a similar sectional elevation showing the locking bolts engaged in their latch recesses for firing.

Fig. 5 is a section taken along the line 5—5 in Fig. 1.

Fig. 6 is a section taken along the line 6—6 in Fig. 4.

In these figures, A is the head plate of the gun carriage to which the two trails B are pivotally connected, and which carries the pivot C for the top carriage D (Figs. 2 and 5), the said head plate A being itself pivoted in the axle E by means of a pivot A¹ perpendicular to the latter. The carriage comprises an elastic suspension, provided by a leaf spring F which is pivoted at its centre about a prolongation A² of the pivot A¹, the

ends f of this spring being each pivotally connected by means of a shackle F¹ to one of the arms G of a rocking lever G—G¹ pivoting about one end of the axle, to the other arm G¹ of which lever is pivoted the corresponding wheel H.

An extremely simple elastic suspension is thus obtained, by means of a leaf spring, by conveniently providing bearing points for this spring upon the carriage and trail arrangement on the one hand and the wheel arrangement on the other hand, these points of support being secured in a very practical manner by simply extending the pivot provided between the axle arrangement and the head plate and trail arrangement, on the one hand, and on the other hand, by rocking beams or levers to which the wheels are pivoted.

For firing, the suspension may be rendered inoperative by means of two locking bolts I carried by the axle and adapted to engage in latch recesses g formed in projections G² on the rocking lever G—G¹. These locking bolts I may be actuated simultaneously by means of a common transmission means and be constructed for this purpose in the form of nuts, each guided by means of a key i in a corresponding groove formed in a guiding arm J keyed upon the axis E. In each of these bolts forming nuts I is engaged the screw threaded end K¹ of a shaft K journalled in a casing L carried by the axle. At the centre of this shaft is keyed a worm wheel K² which meshes with a worm M journalled in the casing L and operated by means of a hand wheel N.

Claims—

1. A piece of ordnance mounted on a wheeled split trail carriage comprising a top carriage (D) pivotally mounted upon the head plate (A) of the carriage to which the trails (B, B) are pivotally connected, the top carriage and trail arrangement (A—B—B) being itself pivotally connected to the axle E by a pivot (A¹) perpendicular to the latter, the carriage being characterized by an elastic suspension formed by a leaf spring (F) pivoted at its centre about the pivot (A¹) provided between the trail arrangement and the axle, while its ends (f) are each pivotally connected to one of the arms (G) of a rocking lever (G—G¹) pivoted

about one end on the axle, to the other end of which arm is pivotally connected the corresponding wheel.

2. A piece of ordnance according to claim 5 1, comprising a device permitting the elastic suspension to be rendered inoperative during firing, this device being formed by a system of two locking bolts (I) carried by the

axle and adapted to be engaged, by means of a common transmission, in corresponding 10 latch recesses (g) formed in the rocking levers to which the ends of the leaf spring (F) are pivotally connected.

In testimony whereof I have signed this specification.

NICOLAS EMILIEN METHLIN.