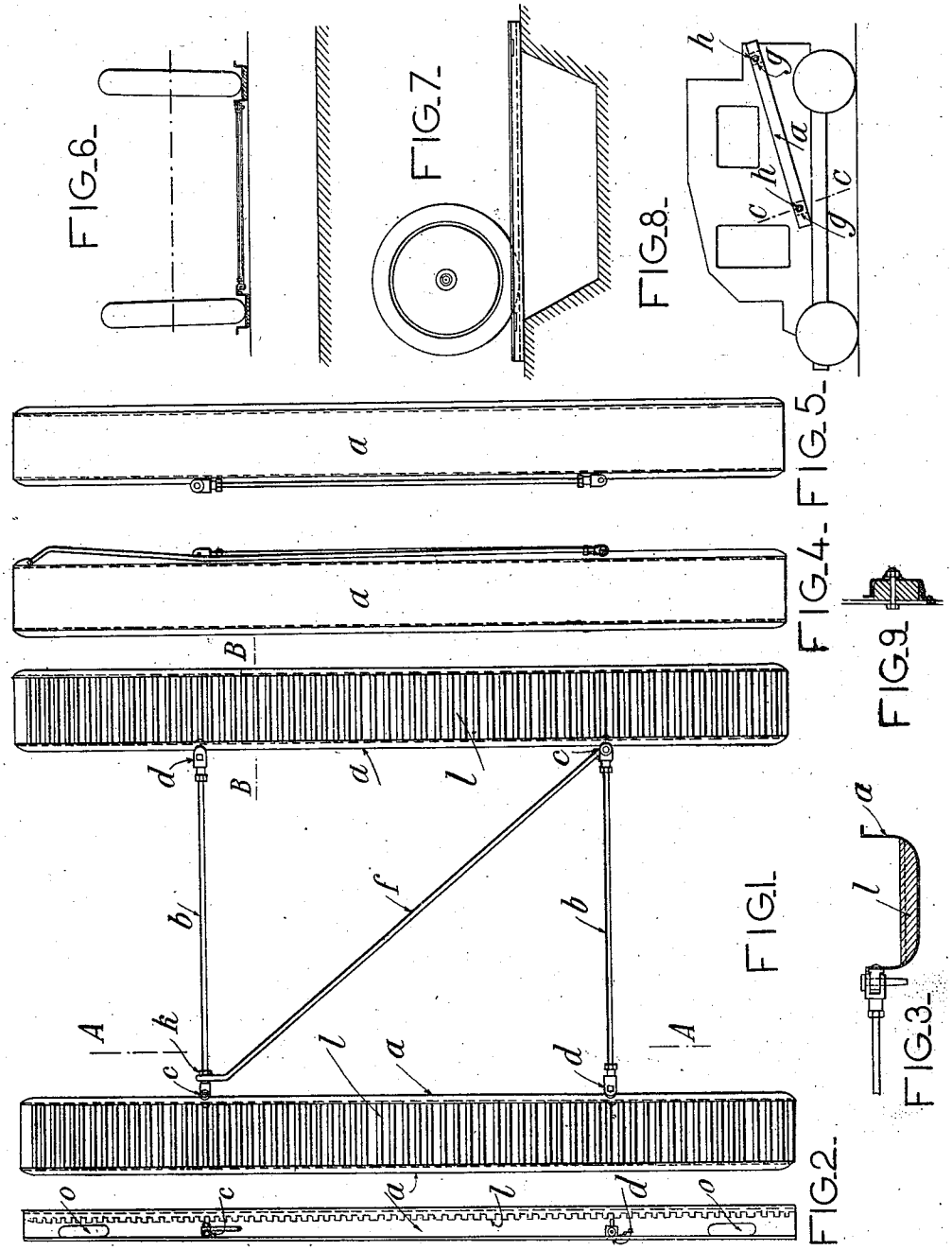
No. 854,329. PATENTED MAY 21, 1907.

F. CHARRON.

PORTABLE BRIDGE.

APPLICATION FILED FEB. 5, 1907.



WITNESSES

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PORTABLE BRIDGE.

No. 854,329. Specification of Letters Patent. Patented May 21, 1907.

Application filed February 5, 1907. Serial No. 355,938.

To all whom it may concern:

Be it known that I, FERDINAND CHARRON, a citizen of France, residing at 7 Rue Ampère, Puteaux, Seine, France, have invented new and useful Improvements in Portable Bridges, of which the following is a specification.

This invention relates to improvements in portable bridges.

The improved portable bridge can be very quickly mounted or dismounted and is intended principally to enable motor driven vehicles to cross ditches. It essentially comprises two bars of substantially U-shaped section which are held apart at a distance equal to that between the wheels of the vehicle by means of detachable and hinged connecting rods.

In the annexed drawing, Figure 1 is a plan view of the bridge with the parts assembled. Fig. 2 is a section on the line A—A of Fig. 1. Fig. 3 is a section on the line B—B of Fig. 1 on an enlarged scale. Figs. 4 and 5 are views of the two separated bars seen from below, with the connecting rods in the position for traveling. Figs. 6 and 7 are views illustrating the use of the bridge for crossing a ditch. Figs. 8 and 9 illustrate the method of fixing the bars to the sides of the vehicle when traveling, the vehicle being in this example an armor-plated motor-car for military purposes. Fig. 8 is a diagrammatic side-view of the car, and Fig. 9 is a section on the line C—C of Fig. 8 on an enlarged scale.

Referring to the drawing, it can be seen that the passage of the vehicle is effected on two portable bars *a a*. These bars are of substantially U-shaped section and are placed across the ditch to be traversed. The bars are held the proper distance apart by two transverse rods *b b* respectively hinged to the bars at *d d* by means of lugs. At *c c* these hinged rods are respectively attached to the opposite bar by means of lugs and linch-pins removable by hand. The positions of the connections having the removable linch-pins are alternated. On each bar the distance between the connections *c* and *d* is equal to the length of the connecting rod *b*; this allows of folding the rods *b* when the bridge is not in use against the sides of the bars and fixing them at *c* for facility of transport by means of the linch-pins. The interconnection of the bars is completed by a diagonal rod *f* pivoted at one of the connections *c* and fixed to one of the rods *b* by means of a hook locked by a nut *k*.

The surface of the bars *a* is furnished with cross strips of wood *l* to prevent the wheels of the car slipping. Openings *o* are formed in the sides of the bars *a* and serve either for manipulation or for attachment. For conveyance, one bar may be placed at each side of the car. For this purpose two wooden blocks *g* are fixed to each side of the car on the outer wall thereof. The bar is fitted on to these flat blocks and then fixed by a bolt *h* at each end.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

A portable bridge intended to enable vehicles to cross ditches comprising two portable bars *a* of U-shaped cross-section adapted to be placed across the ditch to be traversed,— in combination with lugs fixed on one side of each bar,—two transverse rods *b* adapted to keep the bars *a* at the proper distance apart from each other,—pivots adapted to join fixedly one end of each transverse rod *b* to a lug of one of the bars,—removable linch-pins adapted to secure the other end of each transverse rod *b* to a lug of one of the bars,—and a diagonal transverse rod *f* pivoted at one end by one of the pivots placed in one of the lugs of a bar *a* and free to be fixed at its other hook shaped end on the transverse rod *b* near a lug of the opposite bar *a*, substantially as described and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FERDINAND CHARRON.

Witnesses:

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