

No. 722,008.

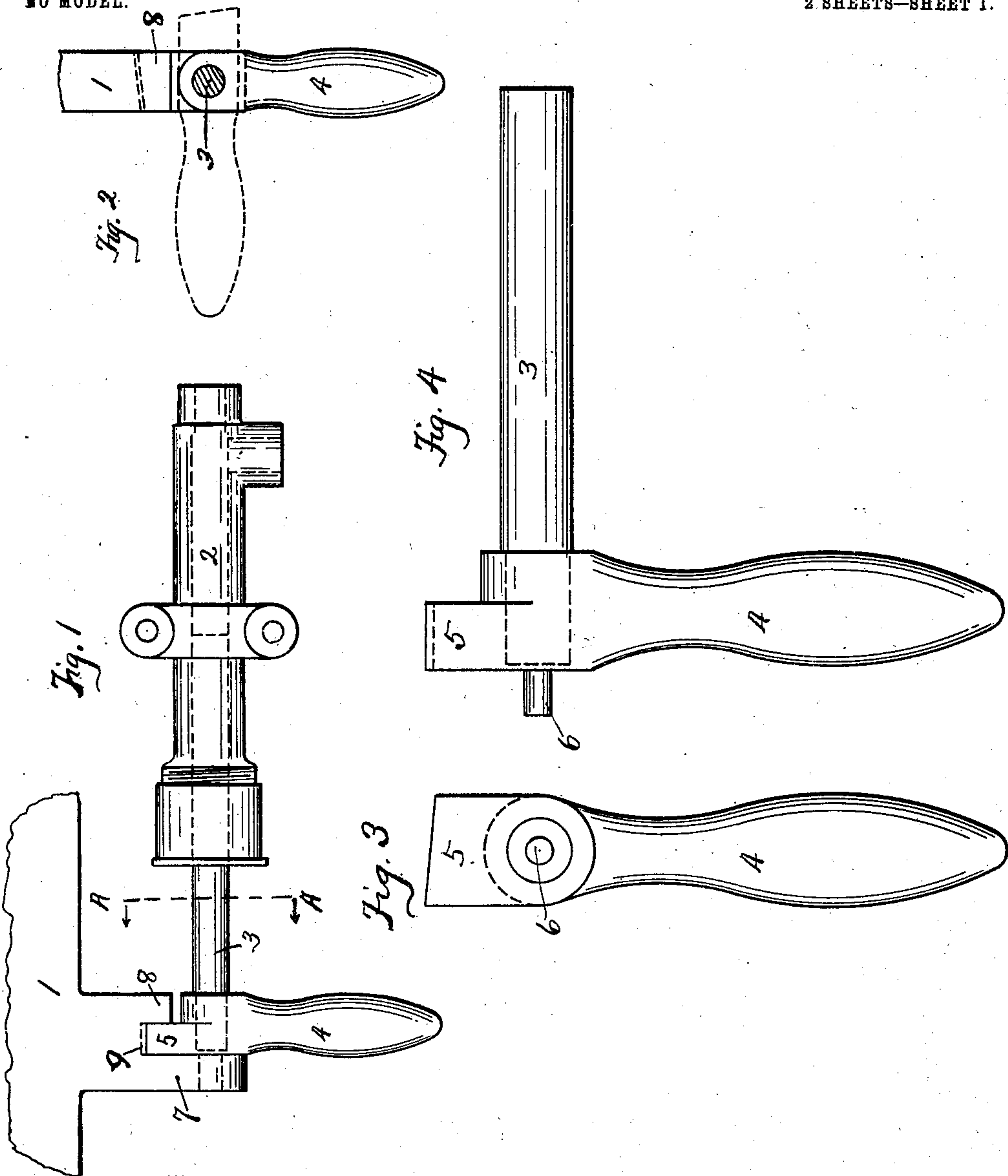
PATENTED MAR. 3, 1903.

G. A. GEMMER.
PUMP FOR COMBUSTION ENGINES.

APPLICATION FILED NOV. 21, 1901.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

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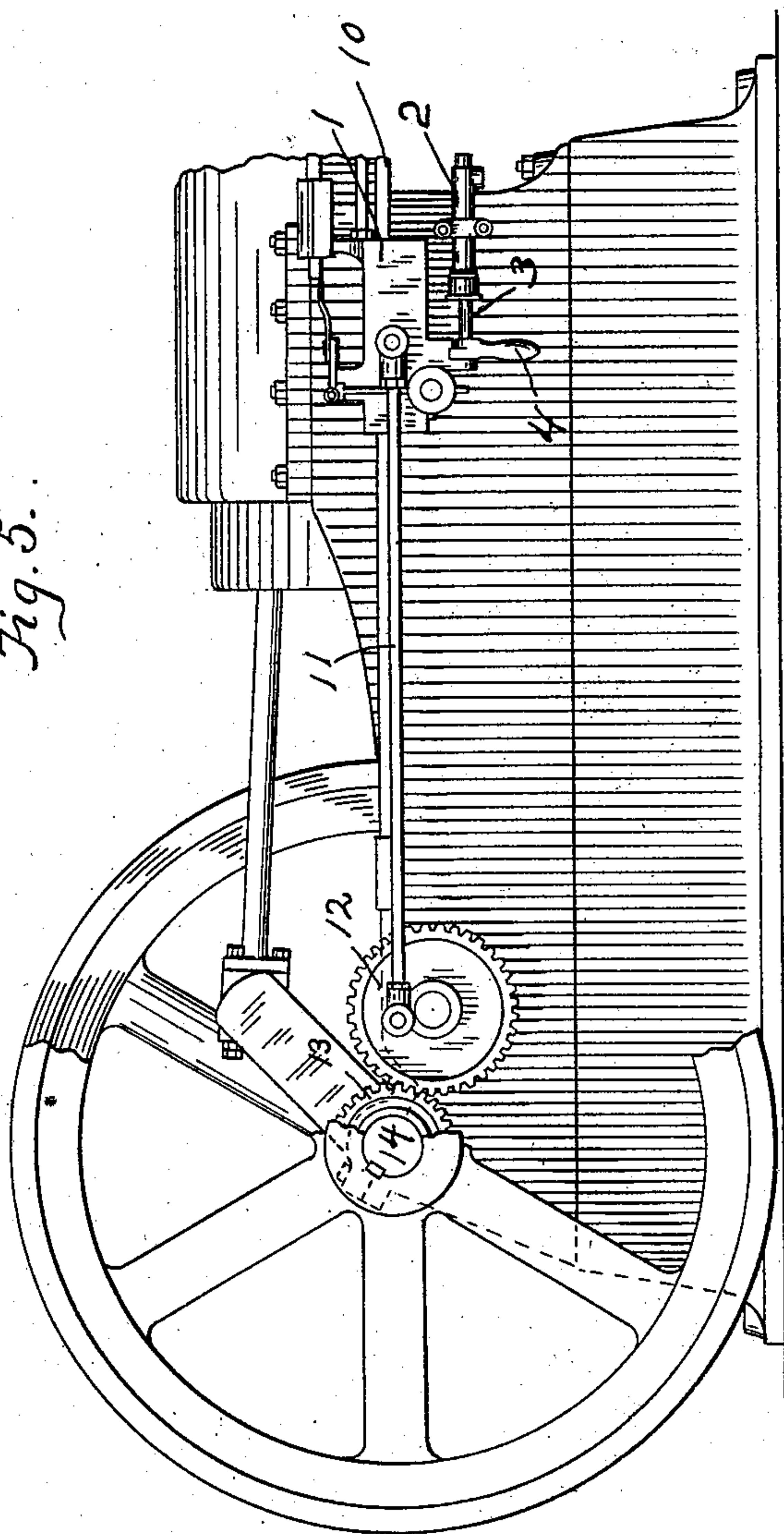
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WITNESSES:

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GEORGE A. GEMMER, OF MARION, INDIANA.

PUMP FOR COMBUSTION-ENGINES.

SPECIFICATION forming part of Letters Patent No. 722,008, dated March 3, 1903.

Application filed November 21, 1901. Serial No. 83,132. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. GEMMER, of Marion, county of Grant, and State of Indiana, have invented a certain new and useful Pump for Combustion-Engines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

10 The object of this invention is to improve the connection between the carriage or other movable part of a combustion-engine and the plunger of the fuel-pump used with such engine, so that said plunger can be readily dis-
15 engaged from the moving carriage and be operated by hand, if desired, and then readily connected with the carriage.

In the drawings, Figure 1 is a side elevation of a pump and a portion of the carriage
20 or movable part of a combustion-engine. Fig. 2 is a section on the line A A of Fig. 1 with the plunger shown in dotted lines disengaged from the carriage. Fig. 3 is an end elevation of the handle connected with the plun-
25 ger of the pump. Fig. 4 is a side elevation of the handle and plunger. Fig. 5 is a side elevation of an engine with my invention thereon, parts of the engine being broken away.

30 The combustion-engine with which this apparatus is adapted to be connected is not here shown, as the construction of such engine is immaterial, provided there be a horizontally-reciprocable means or carriage 1, that is ac-
35 tuated by the engine, either from the shaft or otherwise, whereby the pump may be mechanically driven.

2 is a cylinder of a gasoline-pump whereby gasoline is drawn from a tank or other
40 source of supply (not here shown) and forced to the vaporizer. (Not here shown.)

The specific construction of the gasoline-pump is immaterial to this invention, and the connections between it and the tank and the
45 vaporizer are likewise immaterial.

The pump has a plunger 3, that has secured to its outer end a handle 4, with a projection 5, extending at a right angle from the
50 plunger. A pin 6 extends centrally from the outer end of the plunger and in line therewith. An arm extends downward from the moving carriage 1 of the engine that has two

lugs 7 and 8, the lug 7 extending down in the path of the plunger 3 and having in its lower end a hole (shown in dotted lines of Fig. 1) 55 to receive the pin 6 of the plunger and hold it in alinement. A recess 9 is made between the lugs 7 and 8 to receive the projection 5 from the plunger, whereby said projection 5 fits between the two lugs 7 and 8 from the
60 carriage and remains in said position while the handle 4 is in a vertical position, as shown in Figs. 1 and 2. Then the plunger is drawn back and forth with the movement of the carriage 1. When the handle is turned to a
65 horizontal position, as shown in dotted lines in Fig. 2, the projection 5 from the plunger disengages the lugs 7 and 8 on the carriage, and then the plunger may be operated by hand independently of the carriage. 70

It is often necessary to actuate the fuel-pump by hand, and this is a very simple and convenient mechanism to enable the plunger to be disconnected and actuated by hand. After it has been actuated by hand it is con-
75 nected with the carriage by inserting the pin 6 into the hole in the lug 7 while the handle is in a horizontal position and then turning the handle to the vertical position. The weight of the handle will maintain the con-
80 nection during the operation of the machine.

The moving means or carriage 1 referred to is shown in Fig. 5 as reciprocable on the guide-rod 10 and is actuated by the connecting-rod 11, crank-gear 12, pinion 13, and
85 main driving-shaft 14.

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

1. In a combustion-engine, a movable part of the engine, a fuel-pump having a plunger
90 beside and extending parallel with the direction of movement of said movable part of the engine, and means on the plunger to engage or disengage it with said moving part of the engine by turning the plunger on its axis. 95

2. In a combustion-engine, a horizontally-reciprocating member, a fuel-pump having a plunger mounted horizontally parallel with the line of movement of said reciprocating member, and means for engaging and disen-
100 gaging the plunger with said reciprocating member by turning the plunger on its axis.

3. In a combustion-engine, a reciprocating member having one or more projecting lugs,

a fuel-pump with a plunger adapted to be engaged by said projecting lugs when said plunger is turned in a proper position, and a recess in the projecting lugs adapted to receive
5 the outer end of the plunger and keep it in alinement when in operating position.

4. In a combustion-engine, a reciprocating member having a pair of downwardly - extending lugs with a recess between them and
10 one of said lugs being longer than the other and provided with a hole in it, a fuel-pump with a suitable plunger, a handle secured to the plunger, a projection from the plunger

adapted to fit between said lugs when the handle is in one position and to disengage them
15 when the handle is turned in another position, and a pin at the outer end of the plunger adapted to enter the hole in said lug.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses
20 herein named.

GEORGE A. GEMMER.

Witnesses:

JOHN R. BROWNE,
J. F. CHARLES.