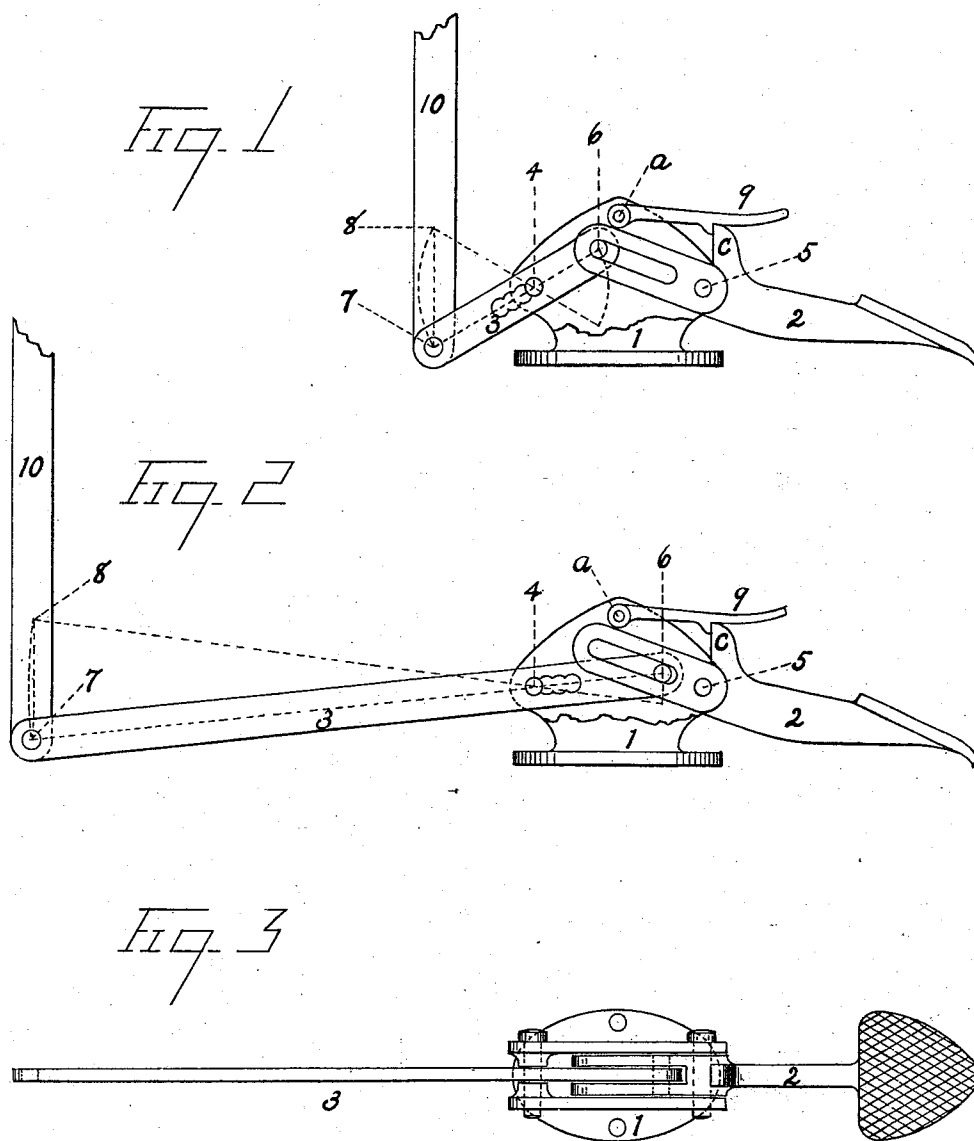


(No Model.)

A. C. CAMPBELL.
CLUTCH TREADLE.

No. 478,398.

Patented July 5, 1892.



Witnesses-
E. C. Lewis
J. M. Gallond

Inventor.
Andrew C. Campbell.
By Atty.
Edw. F. Lewis.

UNITED STATES PATENT OFFICE.

ANDREW C. CAMPBELL, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
WATERBURY FARREL FOUNDRY AND MACHINE COMPANY, OF SAME
PLACE.

CLUTCH-TREADLE.

SPECIFICATION forming part of Letters Patent No. 478,398, dated July 5, 1892.

Application filed March 30, 1892. Serial No. 427,127. (No model.)

To all whom it may concern:

Be it known that I, ANDREW C. CAMPBELL, of Waterbury, in the county of New Haven and State of Connecticut, have invented a
5 new Improvement in Clutch-Treadles, of which the following is a specification.

My invention relates to improvements in clutch-treadles, in which the treadle is connected by a link to the clutch and is pressed
10 upon to start the machine to which the clutch is attached and released to stop the machine; and the objects of my improvements are, first, to construct a clutch-treadle which is complete in itself and only requires bolting to
15 the floor to be in readiness to operate; second, to construct a clutch-treadle that is capable of any reach within the usual limits without altering its length of stroke; third, to construct a clutch-treadle that is entirely and
20 conveniently under the control of the operator whether the clutch is used once for each cycle or once for several cycles. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

25 Figures 1 and 2 are side views of the clutch-treadle adjusted for different reaches, the front side of the holder being broken away to show interior. Fig. 3 is a view looking on top of Fig. 2 with the pawl 9 removed.

30 Similar letters and figures refer to similar parts.

The holder 1, cast in one piece, constitutes the frame of the machine and is provided with a flange or base with holes for bolting to
35 floor. A treadle-lever 2, shaped at one end to receive the operator's foot and slotted at the other end, is fulcrumed about midway upon a pin 5 in the frame 1. A pawl 9 swings upon a pin *a* in the frame 1 and engages with a projecting tooth *c* on the treadle-lever 2 when
40 said lever is pushed way down. A horn extending from the tip of the pawl 9 is provided for lifting said pawl when it is required to disengage the pawl from the treadle-lever. A
45 lever 3, having a pin 6 at one end which enters the slot in the end of the treadle-lever 2,

is provided with a number of pin-holes, any one of which may receive the pin 4 in the frame 1 and turn upon it as a fulcrum, the two levers thus connected forming a compound
50 lever. The other end of the lever 3 is connected by a pin 7 to the link 10, which is in connection with the clutch.

The lever 3 may be made of any length to suit circumstances, the pin 4 being placed so
55 as to make the ratio of the arm 4 6 to the arm 4 7 the same in every case. Figs. 1 and 2 show the lever 3 of different lengths; but the chord 7 8, which subtends the arc generated by the pin 7, is the same length in both figures.
60

What I claim as my invention is—

1. In a clutch-treadle, the combination of a frame or holder 1, a lever 3, supported by the holder, a pin 4, said lever 3 being provided with a series of holes adapted to receive the
65 pin 4, whereby the fulcrum may be located so as to preserve a constant ratio between the two arms of the lever 3, and a pin 6, extending through one end of the lever 3, a lever 2, fulcrumed upon a pin 5, supported by the frame
70 1, shaped at one end to receive a person's foot and slotted at the other end to receive the pin 6 in the end of the lever 3, whereby motion is imparted from one lever to the other, substantially as described, for the purpose
75 specified.

2. In a clutch-treadle, the combination of a frame or holder 1, a compound lever 2 and 3, fulcrumed upon pins supported by the frame
80 1, said lever 2, provided with a projecting tooth *c*, and a pawl 9, swinging upon a pin *a*, supported by the holder 1 and adapted to catch under said tooth *c*, whereby the lever 2 is held down, said pawl 9 being provided with a
85 horn extending from one end, whereby said pawl may be raised to release the lever 2, all substantially as described.

ANDREW C. CAMPBELL.

Witnesses:

EDWARD S. BEACH,
GEO. ROWBOTTOM.