

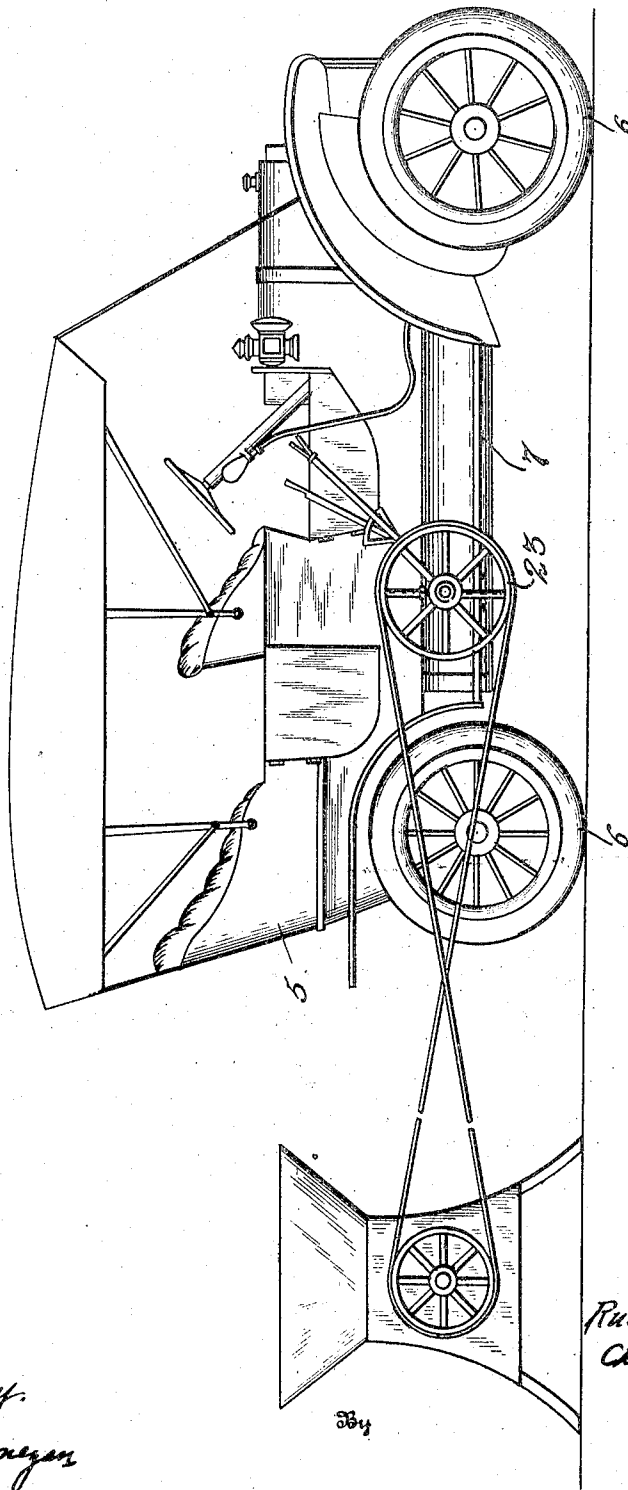
R. HATTEN.
 COMBINED CRANKING AND POWER SHAFT.
 APPLICATION FILED MAR. 29, 1909.

1,006,656.

Patented Oct. 24, 1911.

2 SHEETS—SHEET 1.

Fig. 1.



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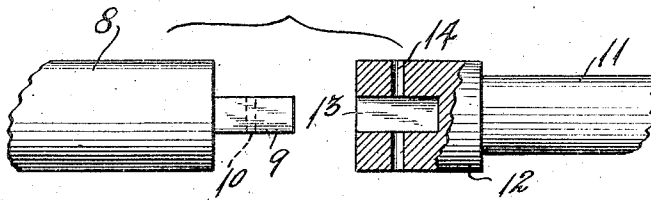
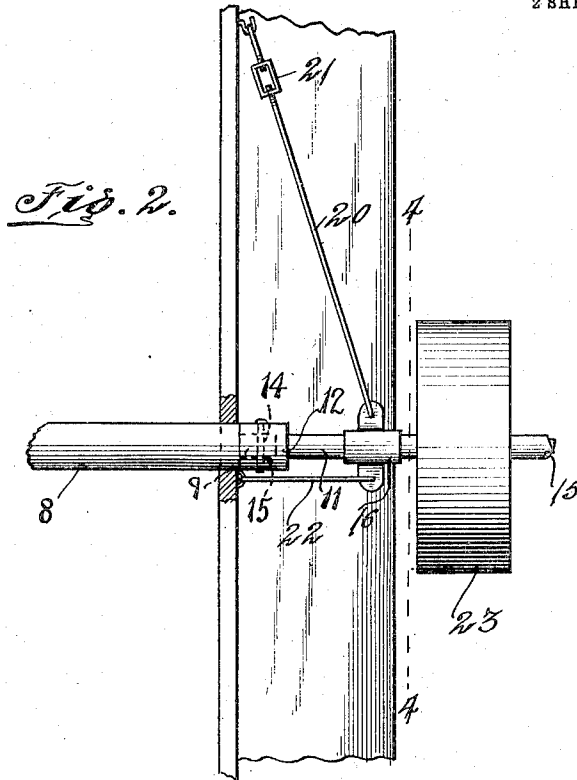


Fig. 3.

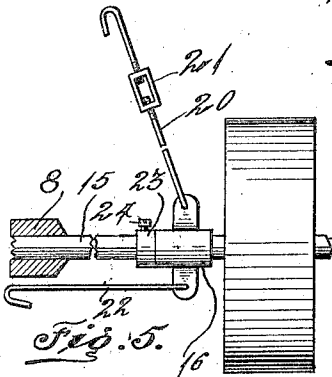


Fig. 5.

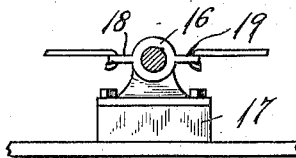


Fig. 4.

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UNITED STATES PATENT OFFICE.

RUSSELL HATTEN, OF STATE CENTER, IOWA.

COMBINED CRANKING AND POWER SHAFT.

1,006,656.

Specification of Letters Patent. Patented Oct. 24, 1911.

Application filed March 29, 1909. Serial No. 486,567.

To all whom it may concern:

Be it known that I, RUSSELL HATTEN, a citizen of the United States, residing at State Center, in the county of Marshall, State of Iowa, have invented certain new and useful Improvements in Combined Cranking and Power Shafts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to attachments for automobiles and more particularly to devices to be used in connection with the cranking shaft.

It has for its object the provision of an auxiliary shaft which is designed to be secured to the outer section of the cranking shaft, and to which is keyed a pulley which is designed to operate a saw, grinding mill or other apparatus requiring high power.

With these and other objects in view as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form, proportion, size and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification:—Figure 1 is a side elevation of an automobile equipped with my invention and showing the application of the same to an ordinary grinding mill or the like. Fig. 2 is a plan view of the running board showing the device applied thereto. Fig. 3 is a detail side elevation of the cranking shaft and showing the auxiliary shaft in section. Fig. 4 is an end elevation approximately on the line 4—4, Fig. 2. Fig. 5 is a modified form of connecting the auxiliary shaft with the cranking shaft.

Similar numerals of reference are employed to designate corresponding parts throughout.

The body of the automobile is designated in general by the numeral 5 and is shown provided with the usual wheels 6 and running board 7. The cranking shaft 8 is disposed in the usual manner on the side of the vehicle. In the present instance the outer

end of the cranking shaft is reduced so as to form a stud 9 having a centrally disposed transverse opening 10.

The auxiliary shaft is designated in general by the numeral 11 and at its inner end is provided with a boss or head corresponding in diameter to the greatest diameter of the cranking shaft. The boss or head is provided with a longitudinal bore or opening 13 which receives the stud 9 of the cranking shaft, and is further provided with a transverse opening 14 adapted to be brought into registration with the opening 10 of the stud 9. These openings receive a suitable pin by means of which the shafts are secured together. The outer end of the auxiliary shaft 11 extends considerably beyond the vertical plane of the running board 7 and terminates in a starting ratchet 15 for engagement with the usual cranking handle.

By referring now to Figs. 2 and 4 it will be seen that the running board 7 is provided adjacent its outer edge with a pedestal having a journal box 16, the pedestal being supported by a base 17. A portion of the auxiliary shaft 11 extending in advance of the boss 12 is journaled in the journal box 16 as shown in Figs. 2 and 4. In order to prevent vibration of the pedestal the latter is provided with a pair of horizontally disposed lateral ears 18 and 19. A brace bar 20 has one end fitted into an opening in the ear 19 and its opposite end secured in a suitable manner to the side of the vehicle body, the bar 20 being provided with a turnbuckle 21 by means of which its length may be increased or diminished and furthermore this bar is inclined obliquely to the shaft. A second brace bar 22 is disposed parallel with the cranking shaft and one end of this bar is secured in the opening of the ear 18, and its opposite end connected with the vehicle body. Keyed to the outer end of the auxiliary shaft is a pulley 23 which is designed to receive a belt by means of which the machinery is driven, as shown in Fig. 1.

In the modified form illustrated in Fig. 5 the auxiliary shaft 15 is shown provided on its inner end with a ratchet surface which bears on the ratchet surface of the cranking shaft 8 and in order to hold the parts in this position a collar 23' is employed which surrounds the auxiliary shaft and is adapted to bear against the inner end

of the journal box 16 the collar being secured in place by means of a set screw 24.

What is claimed, is:—

5 An attachment for motor vehicles comprising in combination with the cranking shaft of a vehicle, an auxiliary shaft having one end joined to the free extremity of said cranking shaft and the other provided with a starting ratchet, a pedestal supported
10 upon the vehicle step and having at its upper end a journal box engaging said auxiliary shaft, said journal box having a pair of ears projecting horizontally from its sides, a brace having one end engaged in
15 one of said ears and its opposite end engag-

ing the side frame of said vehicle, said brace extending approximately parallel to said auxiliary shaft, and a brace engaging with one of its ends the other ear and having its opposite end engaged with said vehicle side frame, said brace being arranged on the opposite side of said shaft from the first named brace and being inclined obliquely to said shaft.

In testimony whereof, I affix my signature, in presence of two witnesses.

RUSSELL HATTEN.

Witnesses:

W. A. COWAN,
FRED WILKENING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."