No. 751,876. PATENTED FEB. 9, 1904.

G. D. SMITH.

ATTACHMENT FOR VEHICLE STEERING GEARS.

APPLICATION FILED JULY 24, 1903.

NO MODEL.

Fig. 1.

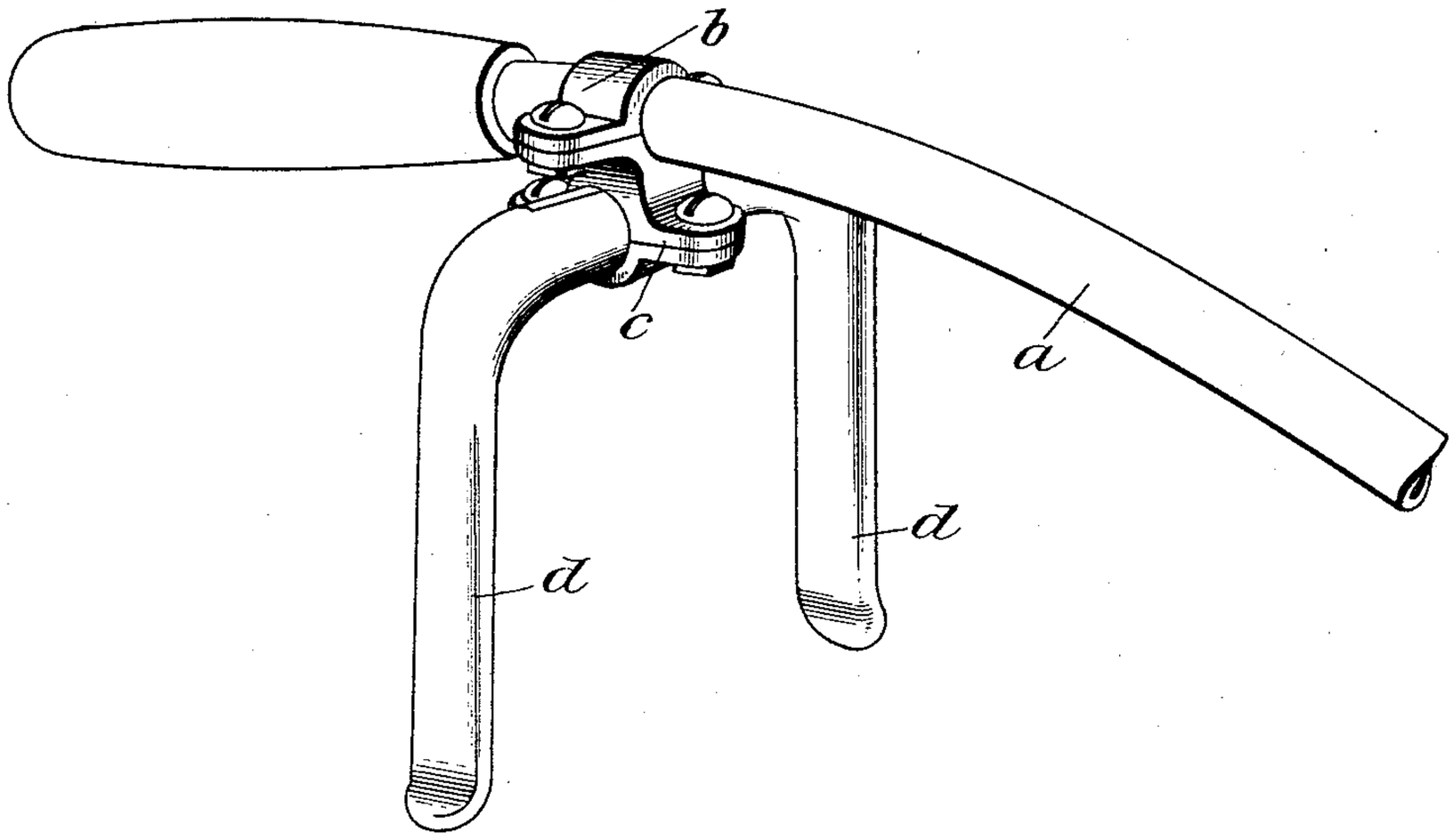
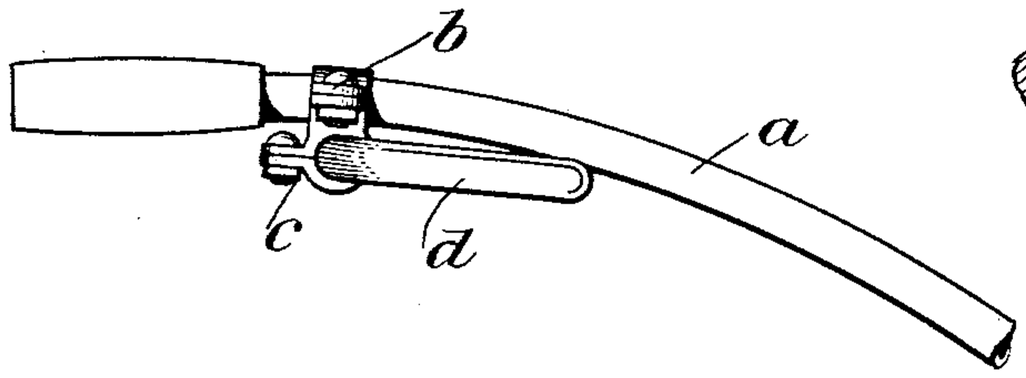


Fig. 2.



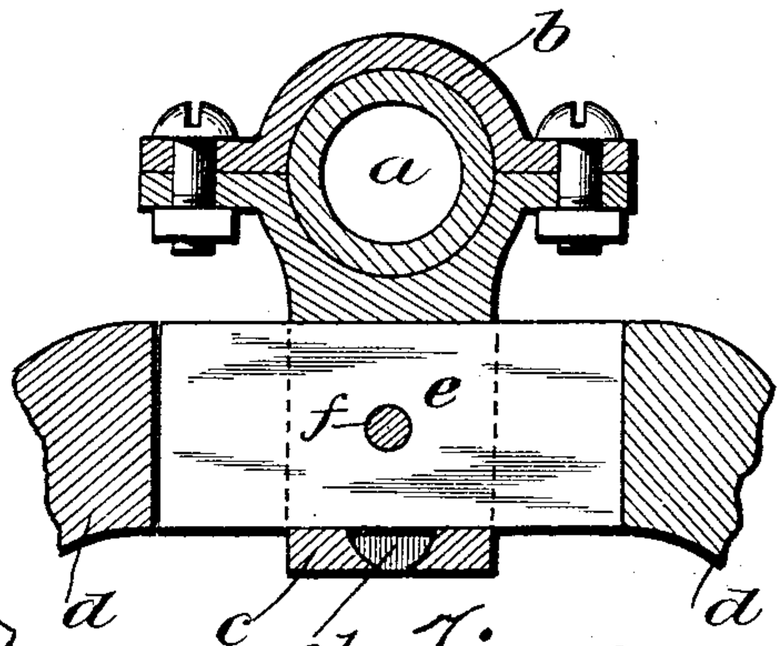
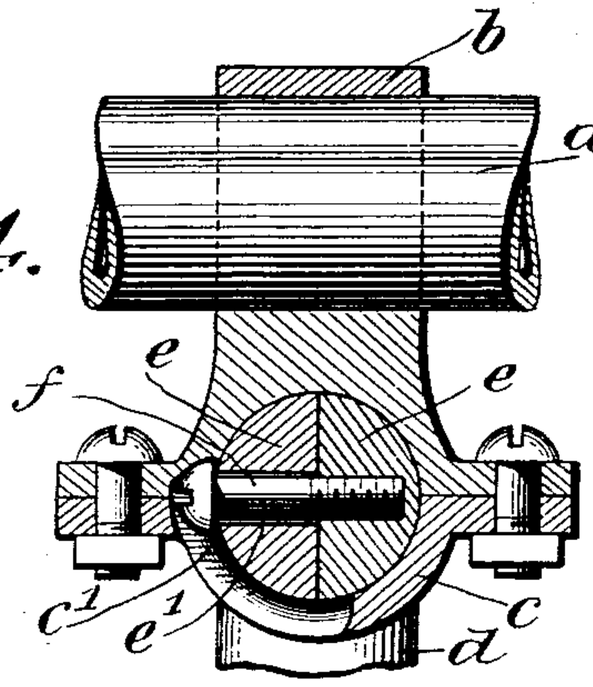


Fig. 3.

Fig. 4.



WITNESSES:

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No. 751,876. Patented February 9, 1904.

UNITED STATES PATENT OFFICE.

GROVER D. SMITH, OF MONTCLAIR, NEW JERSEY.

ATTACHMENT FOR VEHICLE STEERING-GEAR.

SPECIFICATION forming part of Letters Patent No. 751,876, dated February 9, 1904.

Application filed July 24, 1903. Serial No. 166,835. (No model.)

To all whom it may concern:

Be it known that I, GROVER D. SMITH, a citizen of the United States, and a resident of Montclair, in the county of Essex and State of New Jersey, have invented a new and Improved Attachment for Vehicle Steering-Gears, of which the following is a full, clear, and exact description.

This invention relates to an attachment for the steering-handles of automobiles and analogous vehicles by means of which the steering-handle may be operated from the driver's knee as distinguished from being operated manually.

According to the form of the invention here illustrated I provide a clip which fastens to the free end of the steering-handle and which carries a fork, this fork being arranged to embrace the knee of the driver and being mounted in the clip, so that it may be swung into vertical or horizontal position, as desired, the horizontal position being the inactive position and the vertical position the active position. The fork is also made adjustable as respects the distance between its limbs, so as to fit it to a person of any size within the range of the adjustment of the fork.

This specification is a specific description of one form of my invention, while the claims are definitions of the actual scope of the invention.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view showing the invention in operative adjustment. Fig. 2 is a side elevation of the steering-handle and my improved attachment, this view showing the attachment moved in the horizontal or inactive position. Fig. 3 is an enlarged section of the attachment, the section being taken transversely to the steering-handle; and Fig. 4 is a section on the same scale, taken longitudinally of the steering-handle.

a indicates the steering-handle, which is illustrated of the usual type—namely, of an arm connected with the steering-gear at the front end and extending rearward to a point in proximity with the seat of the carriage. The rear or free portion of the arm *a* has attached thereto by clamping its sections around the arm a clip *b*, the bottom section of which is suitably connected to or formed integral with the top section of a clip *c*, the clip *c* lying below the handle or arm *a* and disposed transversely thereto, so as to receive the transversely-extending body of the fork. The limbs *d* of the fork are preferably flattened and rounded on their inner faces, so as to preferably engage the knee of the driver, and said limbs extend up to the body portion, which is formed of two semicircular parts *e*, said parts lying with their flattened faces adjacent to and forming jointly a round body, which is fitted friction-tight within the clip *c*. One of the body parts *e* is formed with a slot *e'*, and the other of the body parts carries a headed pin or screw *f*, which is fastened to the second part of the fork-body and is fitted loosely in the slot *e'*, this screw or headed pin serving to permit longitudinal movements of the body part *e* and at the same time holding said parts friction-tight, so that the parts will stay in the position into which they may be put. The bottom section of the clip *c* is formed with a slot *c'*, extending one-quarter of the distance around the clip and receiving the head of the screw or pin *f*, thus allowing the fork to be swung from the position shown in Fig. 1 to that shown in Fig. 2, but limiting the movements of the fork within this range.

In using the device the fork is thrown down to the operative position shown in Fig. 1, and the knee of the operator may then be placed between the limbs of the fork and the steering-handle moved from side to side without involving the use of the driver's arms, which will thus be left free for other purposes. When it is desired to steer the vehicle by hand or when the vehiele is at rest, the fork may be thrown up into the position shown in Fig. 2, and it will then lie closely in the steering handle or arm out of the way of the persons getting in and out of the machine and does not interfere with the knees of the driver during the manual steering of the machine.

The device is preferably constructed of cast metal, although the mode of its construction is not material to my invention.

Various changes in the form, proportions, and minor details of the invention may be resorted to at will without departing from the spirit and scope of the invention as defined in my claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A vehicle steering means, comprising the combination with the steering means proper, of an attachment thereto positioned to engage the knee of the driver whereby to permit steering the vehicle from the knee of the driver.

2. The combination of a vehicle steering-arm and a fork attached to the free portion of the arm and capable of embracing the knee of the driver for the purpose specified.

3. The combination of a vehicle steering-arm, a fork capable of embracing the knee of the driver, and means for mounting the fork of the arm to move in and out of active position.

4. The combination of a vehicle steering-arm, a fork adapted to engage the knee of the driver, and means for mounting the fork of the arm to move in and out of active position, said means comprising a clip in which the fork is mounted friction-tight.

5. The combination with the steering devices of a vehicle, of a member adapted to engage the driver's knee for the purpose specified, and means for mounting said member on the steering devices to permit said member to move in and out of active position.

6. The combination with the steering devices of a vehicle, of a fork comprising two sections adjustable toward and from each other, and means for mounting said fork on the steering devices.

7. The combination with vehicle steering devices, of a fork, comprising two limbs and a body part connected to each limb, means for slidably connecting the body parts for the purpose specified, and means for mounting the fork on the steering devices.

8. The combination with vehicle steering devices, of a fork, comprising two limbs and a body part connected to each limb, means for slidably connecting the body parts for the purpose specified, and means for mounting the fork on the steering devices, said means for mounting the fork comprising two connected clips engaged respectively with the fork and steering devices, the fork-engaging clip holding the clip friction-tight to permit the movement of the fork in and out of active position.

9. The combination with vehicle steering devices, of a fork, comprising two limbs and a body part connected to each limb, means for slidably connecting the body parts for the purpose specified, and means for mounting the fork on the steering devices, said means for mounting the fork comprising two connected clips engaged respectively with the fork and steering devices, the fork-engaging clip holding the clip friction-tight to permit the movement of the fork in and out of active position, and the fork-engaging clip having a slot therein receiving a part of the fork to limit the movements of the fork in the clip.

10. A vehicle steering means, comprising the combination with the steering means proper, of a fork attached thereto and positioned to engage the knee of the driver, whereby to permit steering the vehicle from the knee of the driver.

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

GROVER D. SMITH.

Witnesses:
ISAAC B. OWENS,
JNO. M. RITTER.