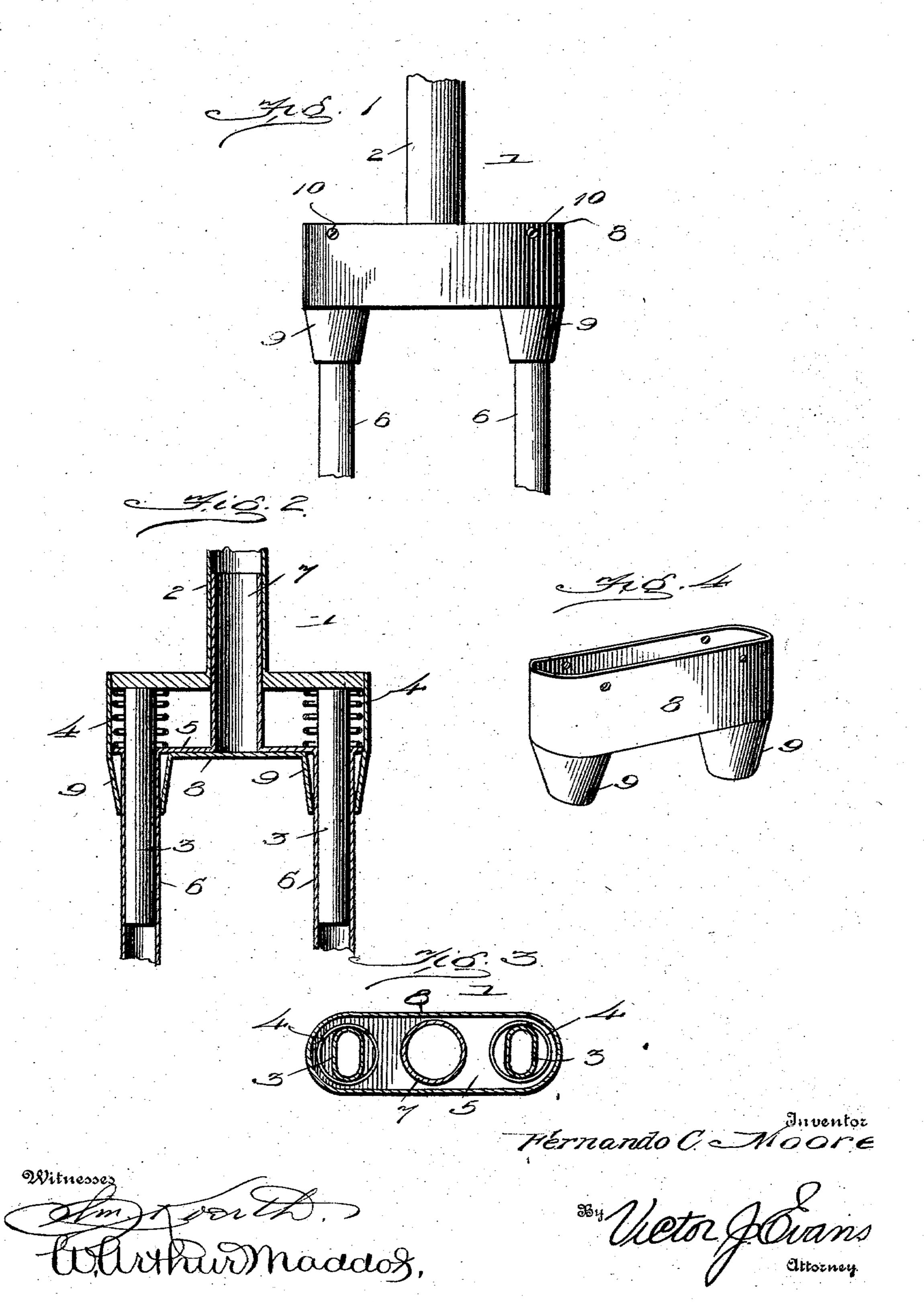
## F. C. MOORE. BICYCLE.

(Application filed Sept. 13, 1901.)

(Ne Model.)



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

FERNANDO C. MOORE, OF SAN BERNARDINO, CALIFORNIA.

## BICYCLE.

SPECIFICATION forming part of Letters Patent No. 704,901, dated July 15, 1902.

Application filed September 13, 1901. Serial No. 75,286. (No model.)

To all whom it may concern:

Be it known that I, FERNANDO C. MOORE, I a citizen of the United States, residing at San Bernardino, in the county of San Bernardino 5 and State of California, have invented new and useful Improvements in Bicycles, of which the following is a specification.

This invention relates to bicycles, and particularly to the front or steering forks there-10 of, the object in view being to provide a novel construction of front fork, whereby while retaining all the strength necessary at the same time the fork is adapted to cushion and absorb the jars and concussions ordinarily ap-15 plied through the medium of the fork to the frame of the machine, thereby increasing the comfort of the rider and also materially increasing the life of the machine.

With the above and other objects in view, 20 the nature of which will hereinafter more fully appear, the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described,

illustrated, and claimed.

25 In the accompanying drawings, Figure 1 is a front elevation of a fork constructed in accordance with the present invention. Fig. 2 is a vertical section through the same. Fig. 3 is a plan section of the fork-crown. Fig. 4 30 is a detail perspective view of the outer casing or jacket.

Similar numerals of reference denote like parts in all the figures of the drawings.

Referring to the drawings, 1 designates a 35 fork-crown, which may be of any usual or preferred shape, the same having extending upward therefrom the usual fork-stem 2 of tubular construction.

In carrying out the present invention the 40 fork-crown 1 is provided at suitable points with a pair of pendent stubs 3, around which are disposed springs 4, which are preferably coiled and illustrated as such, although it will be apparent that the shape of the springs 45 may be altered, and, in fact, rubber sleeves or cushions may be employed in place of the coil-springs.

Arranged beneath the fork-crown 1 is an auxiliary crown or crown-plate 5, which has 50 associated therewith the tubular fork-blades 6, the same opening up through the plate 5 to receive the stubs 3, which are slidingly | ingly receiving said studs, a crown plate

mounted therein and adapted to work up and down under the control of the springs 4. Extending upward from the crown-plate 5 is a 55 tubular stub 7, which is slidingly fitted in the lower end of the fork-stem 2. It will now be seen that by reason of the springs 4 being interposed between the crown and crownplate and by further reason of the stubs 3 60 fitting into the tubular fork-blades 6 and the stub 7 into the stem 2 a limited and yielding sliding movement is established between the fork-blades 6 and the fork-stem 2, with the result that all concussions or jars imparted 65 to the wheel and fork-blades will be absorbed before reaching the fork crown and stem, and will consequently be prevented from being communicated to the machine-frame to the discomfort of the rider.

In order to conceal the parts by which the above desirable result is accomplished, and to limit the upward movement of the studs 3 within the fork-blades 6, to obviate all liability of their accidental displacement, and 75 also to prevent the deterioration of springs by the elements, I provide an outer jacket or casing 8, conforming in shape to the shape of the crown and provided with a body portion 8 and a bottom 8ª adapted to engage the un- 80 der side of the auxiliary crown or crown-plate 5 to limit the upward movement of the studs 3 within the fork-blades 6 and projecting from the bottom are pendent cuffs 9 which slidingly embrace the upper portions of the 85 fork-blades. This jacket or casing is secured to the fork-crown by means of screws or other suitable fasteners 10, inserted through the jacket or casing into the crown.

It will be understood that the invention is 90 susceptible of various changes in the form, proportion, and the minor details of construction which may accordingly be resorted to without departing from the principle or sacrificing any of the advantages of this in- 95 vention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

A steering-fork, comprising a fork-crown, 100 a tubular stem extending upward from the center thereof, studs pendent from the lower side of the crown, tubular fork-blades slidserving as a yoke for the fork-blades, a tubular stub extending upward from the center of the crown-plate and slidingly fitting in the fork-stem, springs surrounding the pendent studs and interposed between the fork and fork-plate, and a jacket or casing connected with the fork-crown, and having a body portion, a bottom engaging the under side of the crown-plate whereby the upward

movement of the studs within the fork-blades 10 is limited, and pendent cuffs embracing the fork-blades.

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

FERNANDO C. MOORE.

Witnesses:

W. L. VESTAL, F. J. ESLER.