No. 615,785. Patented Dec. 13, 1898.

F. E. B. BEAUMONT.

BICYCLE BRAKE.

(Application filed Sept. 18, 1897.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 2.

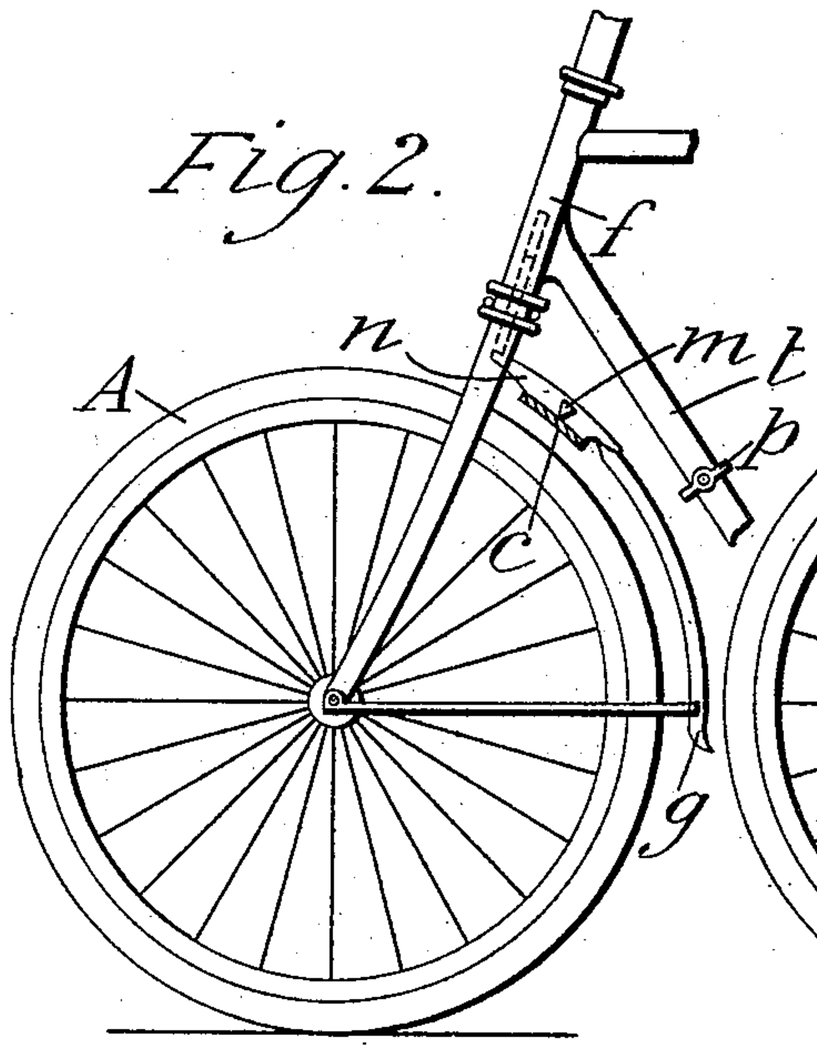


Fig. 3.

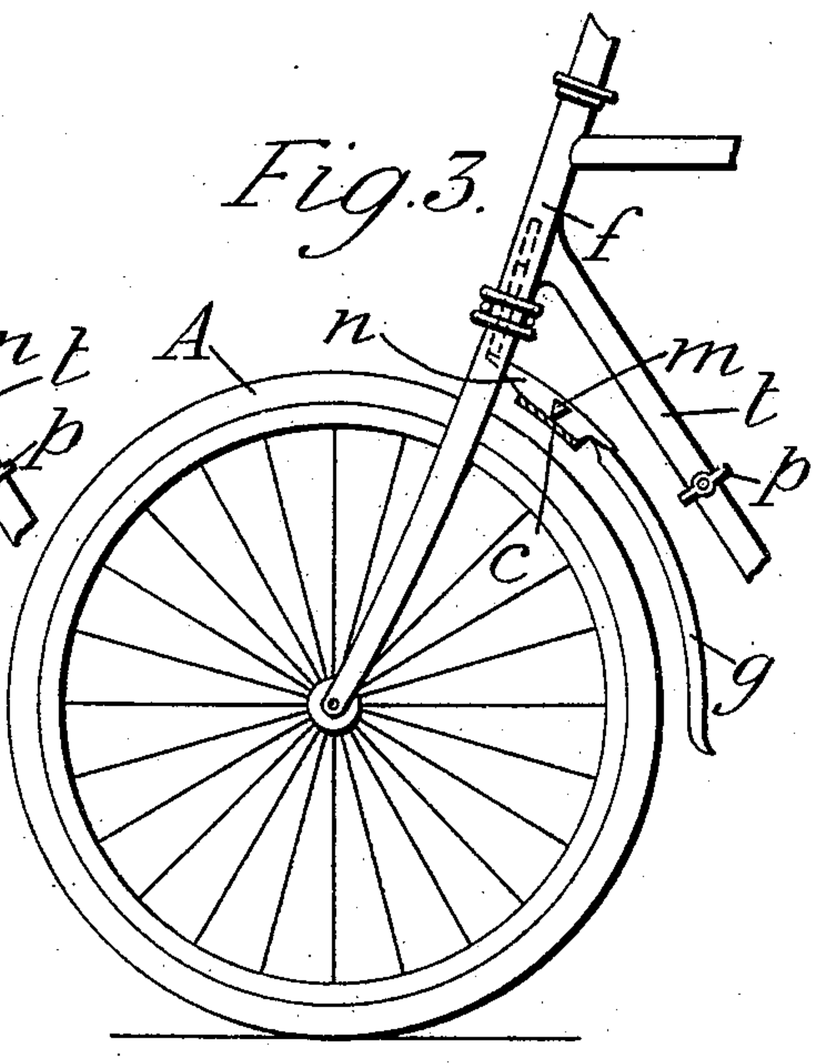
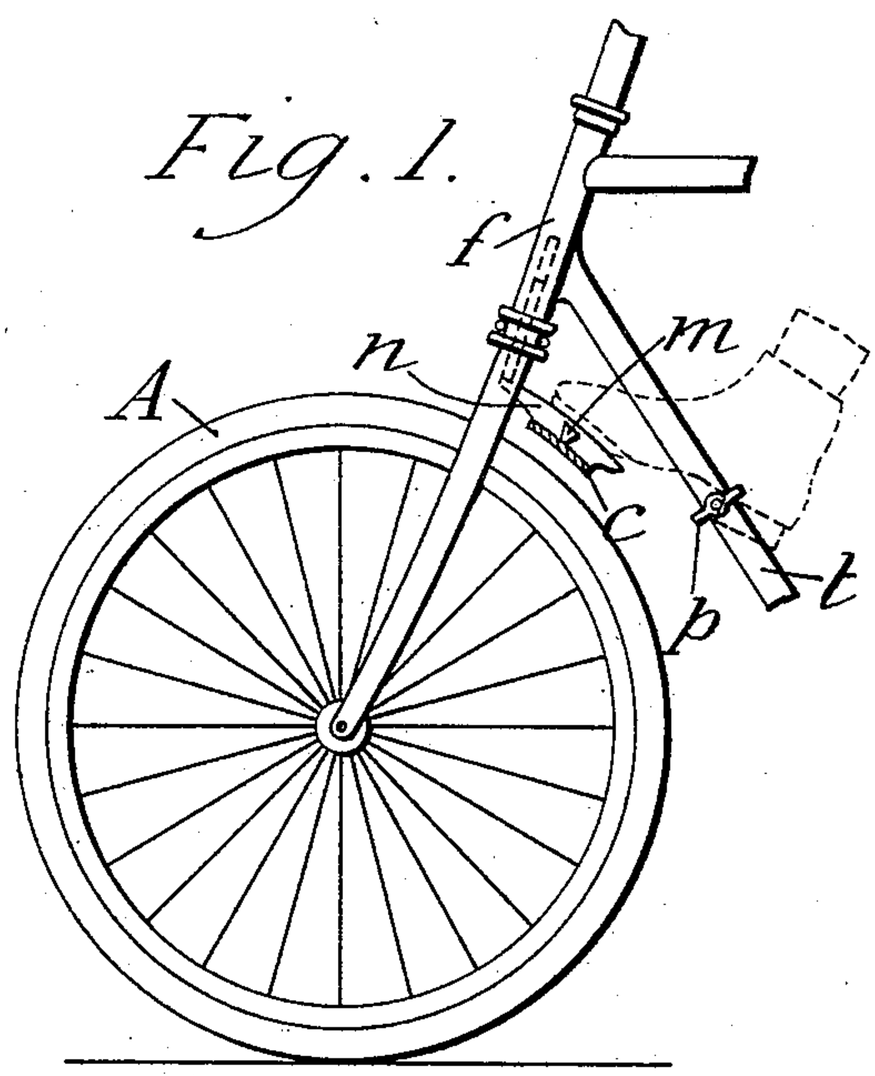


Fig. 1.



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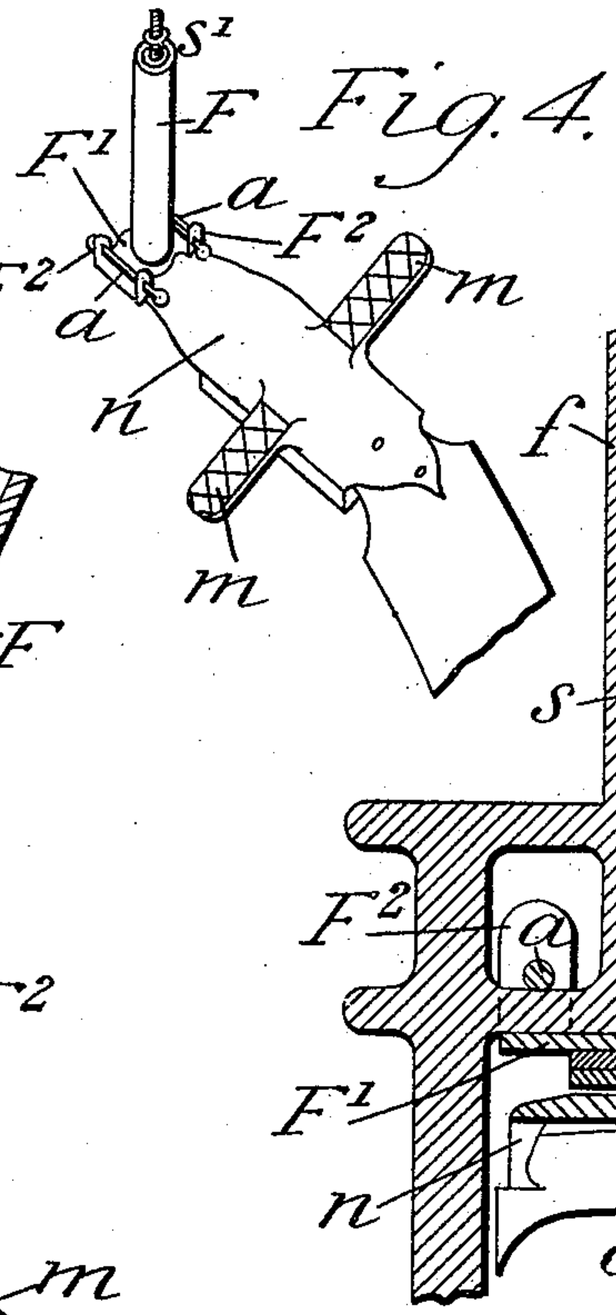

Fig. 4.

Fig. 5.

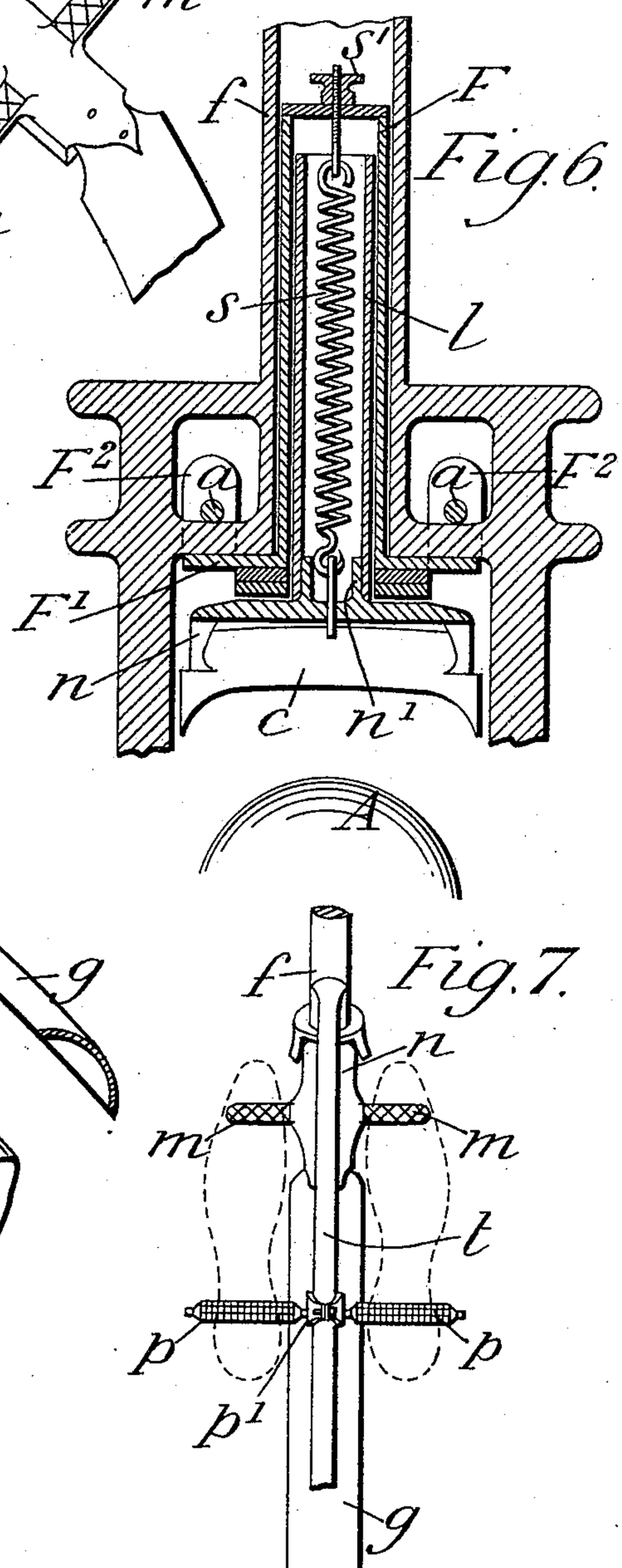

Fig. 6.

Fig. 8.

Fig. 7.

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UNITED STATES PATENT OFFICE.

FREDERICK E. B. BEAUMONT, OF LONDON, ENGLAND.

BICYCLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 615,785, dated December 13, 1898.

Application filed September 18, 1897. Serial No. 652,190. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK EDWARD BLACKETT BEAUMONT, a citizen of England, residing at St. Margaret's Mansions, Westminster, London, England, have invented a certain new and useful Improved Brake Device for Velocipedes, of which the following is a specification.

This invention relates to a brake device for velocipedes to be operated by the foot which can be readily attached to a velocipede without the necessity of altering or interfering with the usual frame or tube carrying the steering-fork.

I will describe the construction of the brake with reference to the accompanying drawings, in which—

Figure 1 shows a side view of the steering-fork and wheel of a bicycle with the brake device attached. Figs. 2 and 3 show similar views, in which the brake-plate is made to serve as support for the mud-guard. Fig. 4 shows an enlarged perspective view of the brake device detached. Fig. 5 shows a still further enlarged vertical longitudinal section of the same. Fig. 6 is a vertical cross-section thereof, showing its attachment to the steering-fork. Fig. 7 shows a plan of the brake device and of the foot-rests on the frame employed in combination therewith, and Fig. 8 shows a detached view of the foot-rests.

The brake consists of a plate *n*, preferably curved, as shown, and having, first, two lateral projections *m m*, serving as pedals for the feet, and, secondly, a cylindrical projection *n'*, which serves as means of attachment to a tube *l*. This tube can slide freely within a second tube F, which in its turn is adapted to fit within the tube *f* of the steering-fork, into which it is inserted through the open lower end and to which it is attached by any suitable means, but preferably in the manner hereinafter described. The tube F is closed at its upper end and is there connected by a screwed rod and nut to a spring *s*, the lower end of which is attached to the brake-plate *n*. Thus it will be seen that while the tube F is fixed to the steering-fork the plate *n* is free to be moved up and down with spring action, being guided in its motion by the tube *l*, sliding freely in F. These parts being secured in position on the steering-fork, the plate *n* is held in a raised position above the wheel-tire A by the spring *s*, the tension of which can be adjusted by the screw-nut *s'*. On the application of pressure by the foot or feet, as at Figs. 1 and 7, the brake-plate *n* will be forced down, so as to come in contact with the tire. The plate *n* is for this purpose preferably provided with a caoutchouc brake-block *c*, which may be conveniently attached thereto by claws on the sides of plate *n*, as shown at Fig. 6. On the withdrawal of the foot the brake is drawn upward by the spring again.

For securing the brake to the steering-fork in an easily attachable and detachable manner the tube F has a flange F' at its lower end, on which are projecting perforated ears F^2, that project up on each side of the cross-head of the fork, and through which are passed pins *a*, that pass over the lower bar of the cross-head, as shown at Fig. 6, and thus hold the tube F securely in the fork. The pins *a* are secured by screw-nuts *b*, on the removal of which the brake device can be withdrawn.

In order to enable the rider to readily apply a graduated pressure by means of his foot to the brake, I prefer to employ in combination with the above-described brake device foot-rests *p*, attached to the bar *t* of the framing in such a position that on placing his heels on these rests the front of the foot will be situated over the bars *m* of the brake-plate, as shown at Figs. 1 and 7. These foot-rests may then take the place of the ordinary foot-rests attached to the steering-fork. They are preferably constructed, as shown at Fig. 8, of a metal rod, with caoutchouc pedals and with semicircular clips *p'*, that are secured to the bar *t* by means of screws, as shown.

As shown at Figs. 2 and 3, the brake-plate *n* may conveniently serve as means of attachment of the mud-guard *g* when such is used, this being either entirely supported by the plate, as at Fig. 3, or partly from the fork by radial wires, as at Fig. 2.

Having thus described the nature of this invention and the best means I know of carrying the same into practical effect, I claim—

1. A brake for a velocipede, consisting of a tube constructed to fit within the tube of the steering-fork of the velocipede and having upwardly-projecting ears, pins passing through

said ears and engaging parts of the steering-fork for holding the tube fixed therein, a tubular guide slidable longitudinally in said fixed tube, a brake-plate connected with the tubular guide and having lateral pedals or bars, and a spring connected with the brake-plate and with the upper end of the fixed tube, substantially as described.

2. The combination in a velocipede, of the steering-fork tube *f*, a fixed tube F arranged in the steering-fork tube and provided with the ears F^2, pins passing through the said ears and engaging parts of the fork-tube, a tubular guide *l* slidable longitudinally in the fixed tube, a brake-plate *n* connected to the lower end of the tubular guide and provided with brake-block *c* and lateral pedals or bars *m*, a spring *s* connected with said brake-plate and with the upper end of the fixed tube and foot-rests *p* attached to the bar *t* of the framing by clips *p'*, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 2d day of September, A. D. 1897.

FREDERICK E. B. BEAUMONT.

Witnesses:

JNO. P. M. MILLARD,

K. SIMMONS.