(No Model.)

L. LADOMUS.

CRUTCH.

No. 332,808. Patented Dec. 22, 1885.

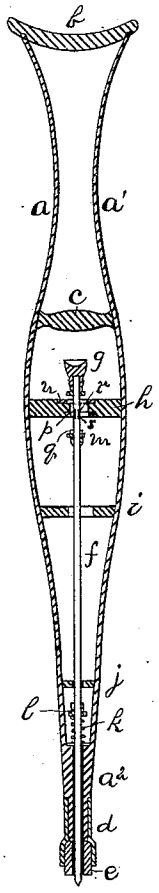


Fig. 1.

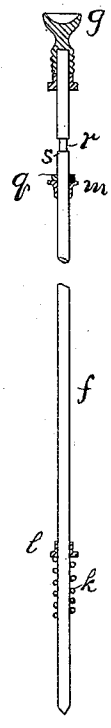


Fig. 3.

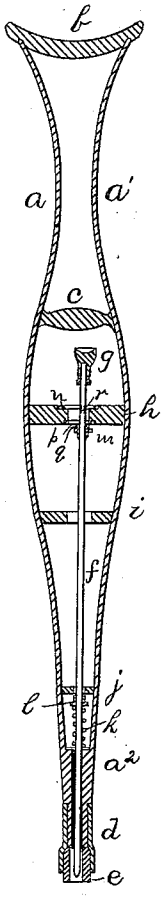


Fig. 2.

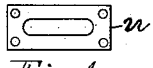


Fig. 4.

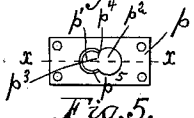


Fig. 5.

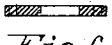


Fig. 6.

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UNITED STATES PATENT OFFICE.

LEWIS LADOMUS, OF CHESTER, PENNSYLVANIA.

CRUTCH.

SPECIFICATION forming part of Letters Patent No. 332,808, dated December 22, 1885.

Application filed July 25, 1885. Serial No. 172,628. (No model.)

To all whom it may concern:

Be it known that I, LEWIS LADOMUS, a citizen of the United States, residing at Chester, in Delaware county, Pennsylvania, have invented a new and useful Improvement in Crutches, of which invention the following is a specification.

My invention consists of an easily-operated device for pushing out and drawing in the spur and securing it in either the in or out position, as required.

In the annexed drawings, Figure 1 is a longitudinal section of the complete crutch on a middle line, showing the spur projected; Fig. 2, a similar view of the same, showing the spur withdrawn; Fig. 3, a sectional elevation of the spur-rod on an enlarged scale; Fig. 4, a plan of the plate *n;* Fig. 5, a plan of the plate *p;* Fig. 6, a section of plate *p* on the line *x x* of Fig. 5.

a and *a'* are light bars, preferably apiece with the bottom portion, a^2. *b* is the stuffed arm-rest. *c* is the hand-rest, permanently fastened between the bars *a* and *a'*. *d* is the ferrule, and *e* is an ordinary rubber tip projecting below the ferrule, all together forming the body of the crutch. *f* is a rod, preferably of steel, sharpened to form a spur at its lower end, and provided at its upper end with a knob, *g*, which is preferably concaved on top, as shown. *h*, *i*, and *j* are slotted cross-pieces fastened between the bars *a a'*, forming bearings or guides for the rod *f*. *k* is a spiral spring surrounding the rod *f*, and confined between a shoulder formed by the lower portion, a^2, of the crutch, and a collar, *l*, adjustably fastened on the rod *f*. *m* is a collar or stop adjustably fastened on rod *f*. *n* and *p* are metallic plates set in the top and bottom surfaces, respectively, of the cross-piece *h*. *q* is a washer, of rubber or leather, used to prevent noise from contact of metallic surfaces. The rod *f* is reduced in size, so as to form a neck, *r*. (See Fig. 3.) The plate *p* is provided with a slot in two parts, p' and p^2, which respectively correspond with the full diameter of the rod *f* at the neck *r* and at the shoulder *s* below the neck. The diameter of the rod *f* at the neck *r* corresponds with the opening p^3, or distance between the points p^4 and p^5. The part p' of the slot is countersunk, to permit the shoulder of the rod *f* at the bottom of neck *r* to come opposite the opening p^3, and thus lock the rod in. The spring *k* is so arranged that its normal action on the spur-rod *f* is to draw the point thereof or spur within the rubber tip *e*, as shown in Fig. 2. The rod *f* then occupies the enlarged portion p^2 of the slot in plate *p*.

When it is desired to project the spur, the thumb of the user is pressed on knob *g*, forcing the rod *f* down, thus projecting the spur below the rubber tip, as shown in Fig. 1, bringing the neck *r* of the rod *f* opposite to and causing it to occupy the smaller portion, p', of the slot in plate *p*. The spring *k* constantly presses the shoulder *s* into the countersink of slot p', and thus the rod *f* is locked, requiring pressure on knob *g* exceeding the force of spring *k* to unlock it.

The spring *k* may be covered in by plates or left open, as desired.

Instead of arranging spring *k* to draw the spur-rod in, it might be arranged to throw this rod out, the corresponding changes in the slotted plate *p* being made; but I prefer the construction first above described.

I claim—

In combination with the body of a crutch, the spur-rod *f*, constructed with a neck, *r*, the cross-piece *i*, the plate *p*, provided with a slot in two parts, p' p^2, part p' being countersunk, and the spring *k*, substantially as set forth.

LEWIS LADOMUS.

Witnesses:
J. E. SHAW,
WM. B. BUCK.