

No. 736,409.

PATENTED AUG. 18, 1903.

A. KÜHN.
CYCLE SAFETY APPARATUS.
APPLICATION FILED DEC. 24, 1902.

NO MODEL.

Fig. 4.

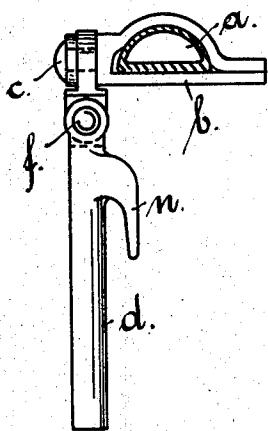


Fig. 1.

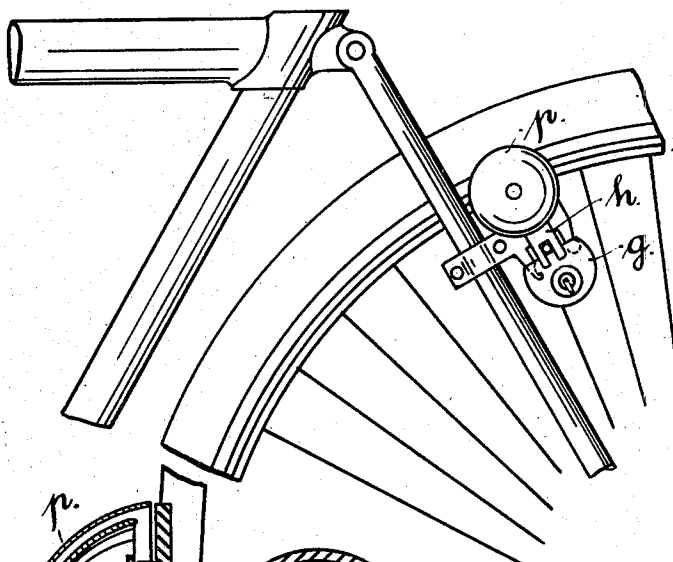


Fig. 3.

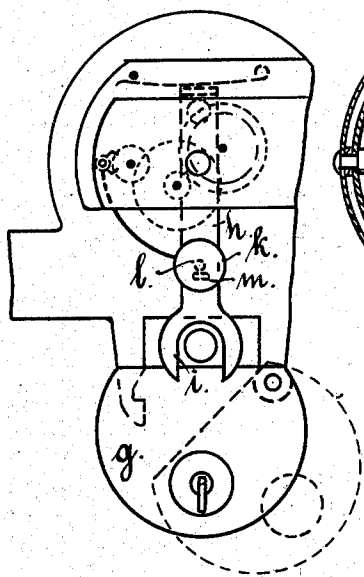
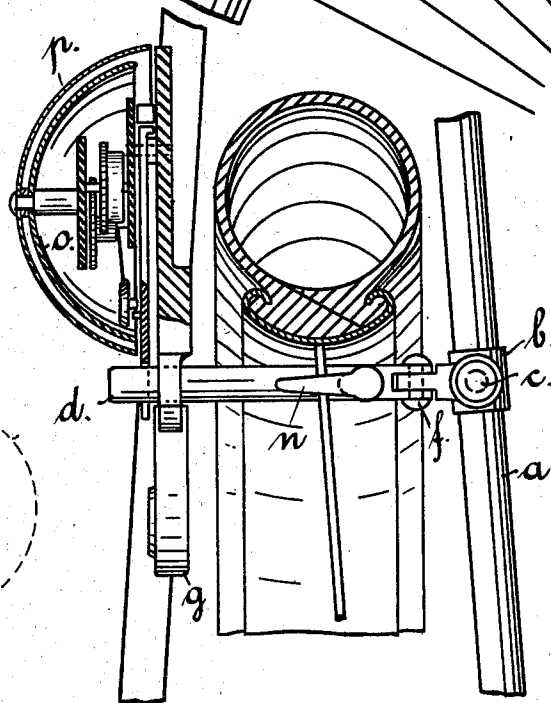


Fig. 2.



Witnesses:
Mary Peters.
Karl Schuck

Inventor:
Arthur Kühn
by Erich Peters
his atty.

UNITED STATES PATENT OFFICE.

ARTHUR KÜHN, OF MAGDEBURG, GERMANY.

CYCLE SAFETY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 736,409, dated August 18, 1903.

Application filed December 24, 1902. Serial No. 136,509. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR KÜHN, manufacturer, a subject of the King of Prussia, German Emperor, residing at 31 Diesdorferstrasse, Magdeburg, Germany, have invented a new and useful Improvement in Cycle Safety Apparatus, of which the following is a specification.

The object of the invention in question is an alarm apparatus in connection with cycle protection.

It consists of any kind of alarm apparatus which by moving a lever to the right or left is set in motion. This movement is caused by the device itself, so that the ringing takes place automatically when the cycle is moved as well as when an attempt is made to remove the stopping-bar.

Figure 1 of the drawings show a part of a cycle and the apparatus fixed on the frame; Fig. 2, the apparatus, in an enlarged size, in section; Fig. 3, in a side view, the bells removed; and Fig. 4 shows the stopping-bar and its fastening.

The bell and its clockwork are known and are only schematically drawn.

The letter *a* denotes a fork-bar of a wheel. On this is fixed in a suitable manner—for instance, by means of a clasp *b*—the pivot *c* for the fork stopping-bar *d*, which can be raised from its hanging position, and its hook-like part *n* grasps the spoke and lies with its free end in the shackle *e* of the lock. In order to be able to move it to and fro, the bar *d* is provided with a second hinge *f*. A lock *g* is fastened, with its shackle, to the other fork-bar of the wheel. The shackle extends upward to a disk bearing the alarm apparatus. On the disk a lever *h* is fixed, which swings with its fork-shaped end *i* before the opening *e* of

shackle of the lock. The same grasps the end of the stopping-bar *d*, which reaches through the opening *e*, so that a movement of the stopping-bar causes a movement of the lever *h*.

In the construction, for example, according to the annexed drawings a clockwork-bell is provided, whose clapper *k* is provided with a pin *l*. In the path of this pin a pin *m*, fastened on the lever *h*, swings, and thus arrests the clapper *k* when the lever *h* is in its middle position. When bar *d* moves the fork *i* of the lever *h* to the left or to right, which is caused, for instance, by a spoke touching the bar *d*, then the clapper *k* becomes free in its path and the bell *o* rings. By the movement of the lever *h* an electric circuit can also be closed and an electrical ringing apparatus set in action.

In order that the bell *o* may not be muffled by placing the hand on it, a second bell *p* is placed over it, which prevents the inside bell *o* being touched.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a cycle, of a rod provided with a hook and a universal joint fastened to the frame, a lock, a clockwork fastened to the shackle of said lock, a lever provided with a fork grasping the end of said rod and a pin, a clapper having a pin acted by the pin of that lever, and a bell to be struck by said clapper, all as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ARTHUR KÜHN.

Witnesses:

ERICK PETERS,
JAMES L. A. BURRELL.