(No Model.)

E. P. SARTELL.

DOOR CHECK.

No. 490,504. Patented Jan. 24, 1893.

Fig. 1.

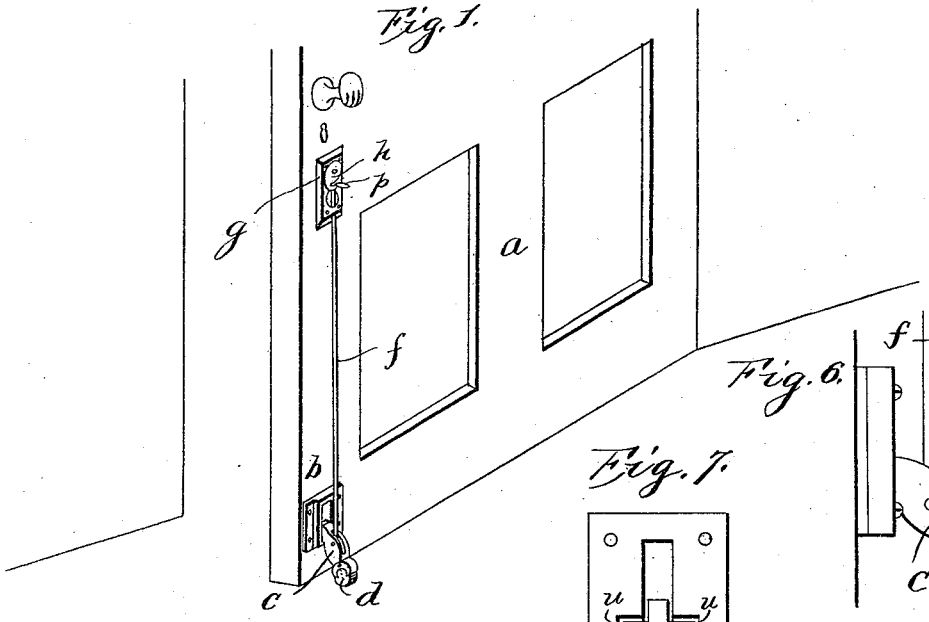


Fig. 6.

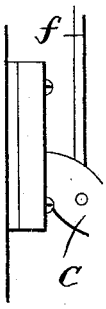


Fig. 7.

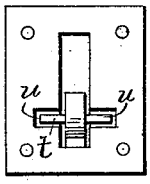


Fig. 2.

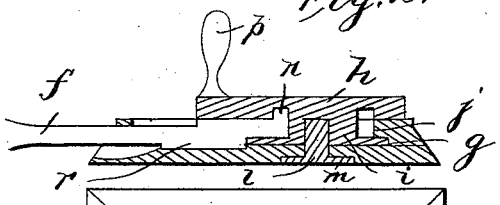


Fig. 3.

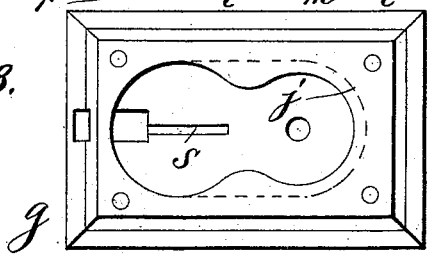


Fig. 4.

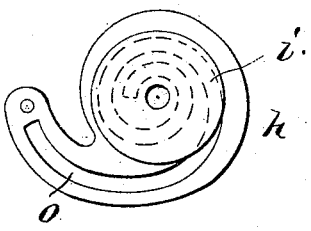
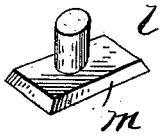


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EGBERT PERRY SARTELL, OF ST. CLOUD, MINNESOTA.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 490,504, dated January 24, 1893.

Application filed August 10, 1892. Serial No. 442,708. (No model.)

To all whom it may concern:

Be it known that I, EGBERT PERRY SARTELL, of St. Cloud, in the county of Stearns and State of Minnesota, have invented certain new and useful Improvements in Door Checks or Stops; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in door checks or stops.

The object of the invention is to provide an improved article exceedingly cheap simple, and durable in construction and sure and effective in operation and which will effectually hold a door at any desired position and prevent slamming thereof and consequent injury and annoyance, and which will further act as a door bumper and prevent the door or parts thereof injuring the plaster or walls.

The invention consists in certain novel features of construction and in combinations of parts more fully described hereinafter and particularly pointed out in the claims.

Referring to the accompanying drawings. Figure 1 is a perspective view showing the invention applied to a door and adjusted to lock or hold the door. Fig. 2 is a sectional view of the operating portion of the article and its base. Fig. 3 is a detail view of the base block. Fig. 4 is a detail view of the operating cam or wheel. Fig. 5 is a detail view of the removable pivot for said cam or wheel. Fig. 6, is an edge view of the plate carrying the shoe. Fig. 7, is an inner view thereof with the inner plate removed.

In the drawings the reference letter *a*, indicates a door.

b, indicates a fulcrum plate secured to the inner side of the door near the lower edge thereof. A lever *c*, is pivoted at its inner end in this plate to swing vertically and the outer end of this lever is provided with a recess or socket in which a projecting rubber (or other suitable material) shoe *d*, is fitted so as to project forwardly and tightly engage the floor or carpet when the lever is forced down and thereby firmly hold the door against slamming, and so as to engage the wall when the lever is raised in its normal position and the door forced in. The rubber shoe can be transversely corrugated if desirable to obtain a better grip, or hold on the floor or carpet. The rubber shoe will firmly hold the door without in any way injuring or marring the floor, carpet, or wall. When worn or injured the shoes can be removed and replaced. Suitable mechanism is provided to operate said lever and hold the same in the desired position. This mechanism preferably consists of the rod *f*, pivoted at its lower end in the swinging lever between the free end and fulcrum thereof, and at its upper end connected with means for reciprocating the rod. This reciprocating means preferably consists of a base block *g*, usually secured to the inner side of the door below the knob and lock. This block is recessed at its outer side to receive the cam wheel *h*, which has a headed stud or projection *i* on its under side fitting and turning in said recess. The upper portion of the recess is undercut as shown at *j*, so that the head or flanged end of the stud *i* fits beneath the overhanging edges of the undercut recess *j* and thereby holds the wheel in position and prevents the same pulling out from the base. The lower or opposite portion of the recess is enlarged so that the cam wheel can be removed from the base when pushed from beneath the undercut end of the recess to the enlarged end thereof. The cam wheel is normally held in the undercut end of the recess by pivot pin *l*, extending through the base from the inner side into an opening or bearing in the cam wheel. This pivot pin is provided with a head or plate *m*, countersunk in the inner face of the base. The pivot pin is removable so that the cam wheel can be removed when desired.

The rod *f*, extends through an opening in the lower end of the base and has a lug *n*, entering a cam groove *o*, in the under face of the cam wheel. This groove is so shaped that when said wheel is turned in one direction by the handle *p*, the rod *f* will be drawn up and the lever and shoe thereby raised, and when the wheel is turned in the opposite direction the rod and lever will be forced

down with the shoe tightly engaging the floor. The groove will hold the parts in the positions desired without slipping so that when the lever is raised to its normal position it will not drop down by jars when it is not wanted in the lowered position; also when the lever is forced down to hold the door, the groove and lug will held the parts in this position without slipping.

The groove *o*, in the cam wheel *h*, is preferably extended, as shown by dotted lines in Fig. 4, several times around the axis of the wheel. By this arrangement the wheel can be easily and effectually turned to operate the rod *f*. The rod *f* can be provided with a longitudinal rib or feather *r*, reciprocating in a groove *s* in the bottom of the socket of the base *g*. This arrangement serves to guide the rod *f*, and prevents lateral play or wedging.

The base *g* is preferably formed of two plates as shown in Fig. 3. The outer plate being recessed to form the cam wheel recess. This manner of forming the base renders it easily and cheaply manufactured.

The plate *b*, carrying the lever *c*, is preferably formed in two sections. The outer section is slotted as shown in Fig. 7 to receive the end of lever *c*. A pin *t*, is inserted through the end lever *c*, at the inner side of said outer section so as to project beyond the sides of the lever and rest in the lateral grooves *u u*, to form the fulcrum of the lever. The inner section fitting the inner face of said outer section holds said pin and the lever in the proper position, and the fastening means pass through both sections to the door. The pivot of the lever is thus concealed and the device can be quickly and easily made and is strong and durable.

The article is very simple and cheap in construction and yet is exceedingly strong and durable and easily and quickly operated.

The article can be advantageously applied for fastening or holding the window sashes and other purposes.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is;—

1. In a door check, the combination of a foot the connecting rod operating the same, a base block having an elongated socket open at one end and having over hanging edges at the other end, the wheel having a cam groove controlling the connecting rod as described, said wheel having the headed stud on its under side turning in said socket beneath its edges and so that the wheel can be moved to the open end of the socket and removed, and means for removably retaining the wheel under said edges, substantially as described.

2. In a door check, the combination of the base block having the elongated socket undercut at one end, the wheel having a cam groove and the headed stud on its under side fitted in said socket uder the edges thereof, the removable headed pin passing through said block into said stud, substantially as described, and the reciprocating rod controlled by said groove and operating a foot, as set forth.

3. In a door check, the combination of the operating wheel, the connecting rod operated thereby, the swinging foot lever to which the lower end of said rod is pivoted, the base plate therefor formed in sections, the outer section slotted to receive the inner end of said lever and having the lateral groove in its inner face to receive and conceal the pivot of said lever, as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

EGBERT PERRY SARTELL.

Witnesses:

BARNEY VOSSBERG,

H. MUELLER.