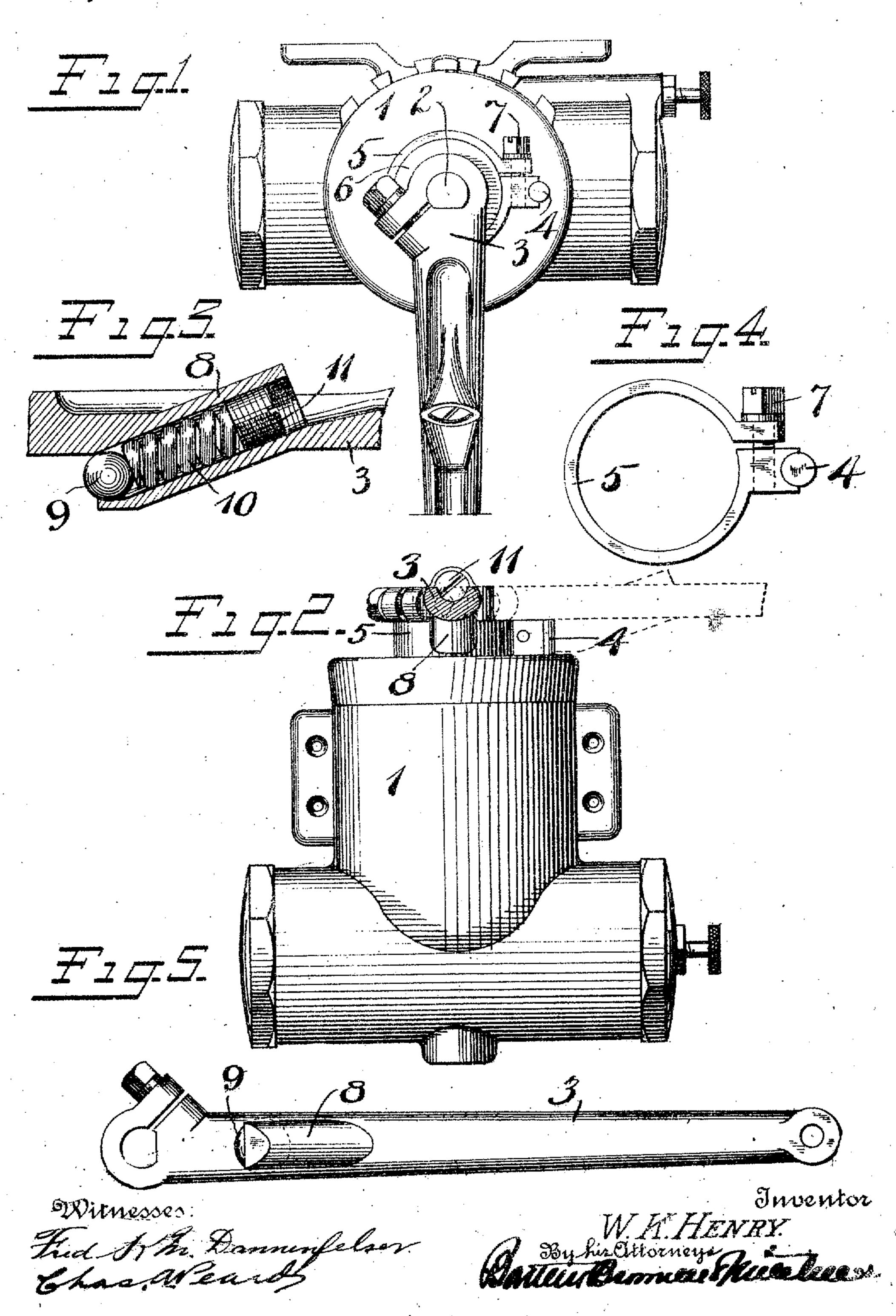
W. K. HENRY.

DOOR STOP FOR DOOR CHECKS AND CLOSERS.
APPLICATION FILED FEB. 18, 1910.

986,710.

Patented Mar. 14, 1911.



UNITED STATES PATENT OFFICE.

WILLIAM K. HENRY, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

DOOR-STOP FOR DOOR CHECKS AND CLOSERS.

986,710.

Patented Mar. 14, 1911. Specification of Letters Patent.

Application filed February 18, 1910. Serial No. 544,586.

To all whom it may concern:

a citizen of the United States, residing at | spring-pressed member 9 moves in a path 5 Connecticut, have invented certain new and useful Improvements in Door-Stops for Door Checks and Closers, of which the following is a full, clear, and exact description.

My inventios relates to an improved door 10 stop for use in connection with a door closer apparatus, said stop being readily adjustable both as to operative tension and as to position, the construction also being such that the stop action may be readily re-

15 leased whenever desired.

In the accompanying drawings Figure 1 is a plan view of a door closer of conventional form provided with my improved stop; Fig. 2 is a front elevation thereof; Fig. 20 3 is a longitudinal section of certain parts; Fig. 4 is a plan view of another part detached; Fig. 5 is a view of the under side of the lever arm carrying part of the stop mechanism.

25 1 represents the case of a suitable door for mechanically turning a spindle 2.

3 is a lever arm carried by the spindle 2 and by which the closing mechanism is con-30 nected to the door casing, the closer mechanism itself being ordinarily connected to the door proper. The upper end of the case carries an adjustable stop shoulder 4, the same having rounded outer bearing 35 face and in the particular form shown being mounted upon a split collar 5, which may be adjustably clamped upon a central hub 6 on top of the cap of the case 1, said split collar being secured in any suitable 40 way as by a screw bolt 7. By releasing the serew bolt 7 the stop shoulder 4 may be adjusted angularly relatively to the axis of shaft 2.

In the lever arm 3 is a guide 8 preferably 45 arranged obliquely- as shown in Fig. 3. This guide is open at both ends but is contracted at its forward end so as to permit a spring-pressed member, preferably a hardened steel ball, 9 to project partly 50 through. Behind the member 9 is a spring 10 and behind the spring is an adjustable member 11, screwthreaded in the rear end of the guide 8, whereby by advancing or retracting the member 11 the pressure of the

spring 10 against the member 9 may be 55 Be it known that I, WILLIAM K. HENRY, | varied at will. The projecting end of the New Britain, county of Hartford, State of | which will cause it to encounter the stop 4 laterally and the tension of the spring 10 should be sufficient (when the stop is in 60 action) to hold the arm 3 in the position in which said arm would stand when the member 9 is back of the stop shoulder 4; that is to say, sufficient to prevent the closer spring (not shown) from restoring the arm 3 to 65 its normal position in which the door is closed. When it is desired to close the door, the tension of the spring is supplemented, viz., by a pressure against the door, thus causing the spring member 9 to be 70 pressed back until it clears the stop 4, whereupon the closer mechanism restores the arm 3 to its normal door closing position. Obviously, by this arrangement the stop 4 may be adapted to either a right or 75 left hand door, and may be so set as to hold the door ajar at any desired position.

It is obvious that this stop mechanism may be readily applied at minimum cost to closer apparatus in which means is provided | almost any form of door closer and may be 80 put into action or out of action at a moment's notice either by releasing the tension against the member 9 or by shifting the stop shoulder 4 to such a position that it will not be encountered by the member 9 at any 85

angle to which the door is opened.

What I claim is: 1. In a combined door closer and stop, a closer case, a rotatable s'iaft, an arm mounted thereon, a stop carried by said case, and 90 a spring-pressed member carried by said arm arranged to encounter the side of said

stop. 2. In a combined door closer and stop, a closer case, a rotatable shaft, an arm carried 95 thereby, said arm having an obliquely inclined guide passage opening above and below said arm and a spring-pressed stop engaging member projecting partially through the lower open end of said guide passage, 100 and a spring within said guide passage operating on said member and a stop shoulder on the case arranged to co-act with said member:

. 3. In a combined door closer and stop. . 105 closer case, a rotatable shaft, an arm mounted thereon, a stop carried by said case, and a spring-pressed member carried by said

en de 1. De marco de 1900 de la composición de la combinación de la combinación de la combinación de 1900 de 1 La combinación de 1900 de la combinación de la combinación de la combinación de la combinación de 1900 de 1900

and Little Barrier and the second of the

"我们就是我们就是我们的,我们就是一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就会不会不会不会不会不会 "我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的一个人,我们就是我们的一个人,我们就会不是我们的

A PARTIE DE LA COMPANIO DE LA COMPANIO DE MARTINA DE LA COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANION DEL COMPANION DE LA COMPANION DE LA COMPANION DE LA COMPANION DEL COMPANI

A Commence of the state of the

And the second of the second o

and the second of the second of

"我们"。"我们们,我们就把我们看到了我们,我们就是我们的,我们就想到了我们,我们就想到我们的,我就拿到我们的一个人,我们就想到了我们的。""我们,我们也没有 "我们"

The hold for the first the first of the second of the first of the first of the second of the first of the second of

a mining stephiloment is appropriate and a more than a more propriate and a stephilogical section by the contraction of the con

and the second of the second o

The first of the first of the second of the second of the first of the first of the second of the second of the

There of the gradual of the control of the control of the state of the state of the control of the state of the

The same of the first of the same of the s

"我们是一个概要的我们的"我们的",我们就是一个"我们的",我们们就是一个"我们"的"我们"的"我们"的"我们"的"我们",我们就是一个"我们"的"我们"。"我们 "我们,我们就是我们的"我们",我们就是我们的"我们",我们就是我们的"我们",我们就是我们的"我们",我们就是我们的"我们",我们就是我们的"我们",我们就是

The state of the s

The second second and the second seco

Comment of the state of the sta

There is a first the transfer of the property of the property of the first of the second of the second of the second

· 1000年,1866年,1968年,1968年,1967年,1968年,1968年,1968年,1968年,1868年,1868年,1968年,1968年,1968年,1968年,1968年,1968年,1968年,

The first of the second of

Andrew Control of Control of the Con

arm arranged to encounter the side of said stop, and means for adjusting the tension

on said spring-pressed member.

4. In a combined door closer and stop, a closer case, a rotatable shaft, an arm mounted thereon, a stop carried by said case, and a spring-pressed member carried by said arm arranged to encounter the side of said stop, and means for adjusting the tension on said spring-pressed member including a spring arranged to the rear of said member and an adjusting device to the rear of said spring.

5. In a combined door closer and stop, a 15 closer case, a rotatable shaft, an arm mount-

ed thereon, a stop carried by said case, a spring-pressed member carried by said arm arranged to encounter the side of said stop, means for adjusting the tension on said spring-pressed member including a spring 20 arranged to the rear of said member and an adjusting device to the rear of said spring, a screw threaded connection between said adjusting device and said arm whereby said adjusting device may be advanced or 25. retracted.

WILLIAM K. HENRY.

Witnesses: R. C. MITCHELL, CHAS. W. PEARD.