

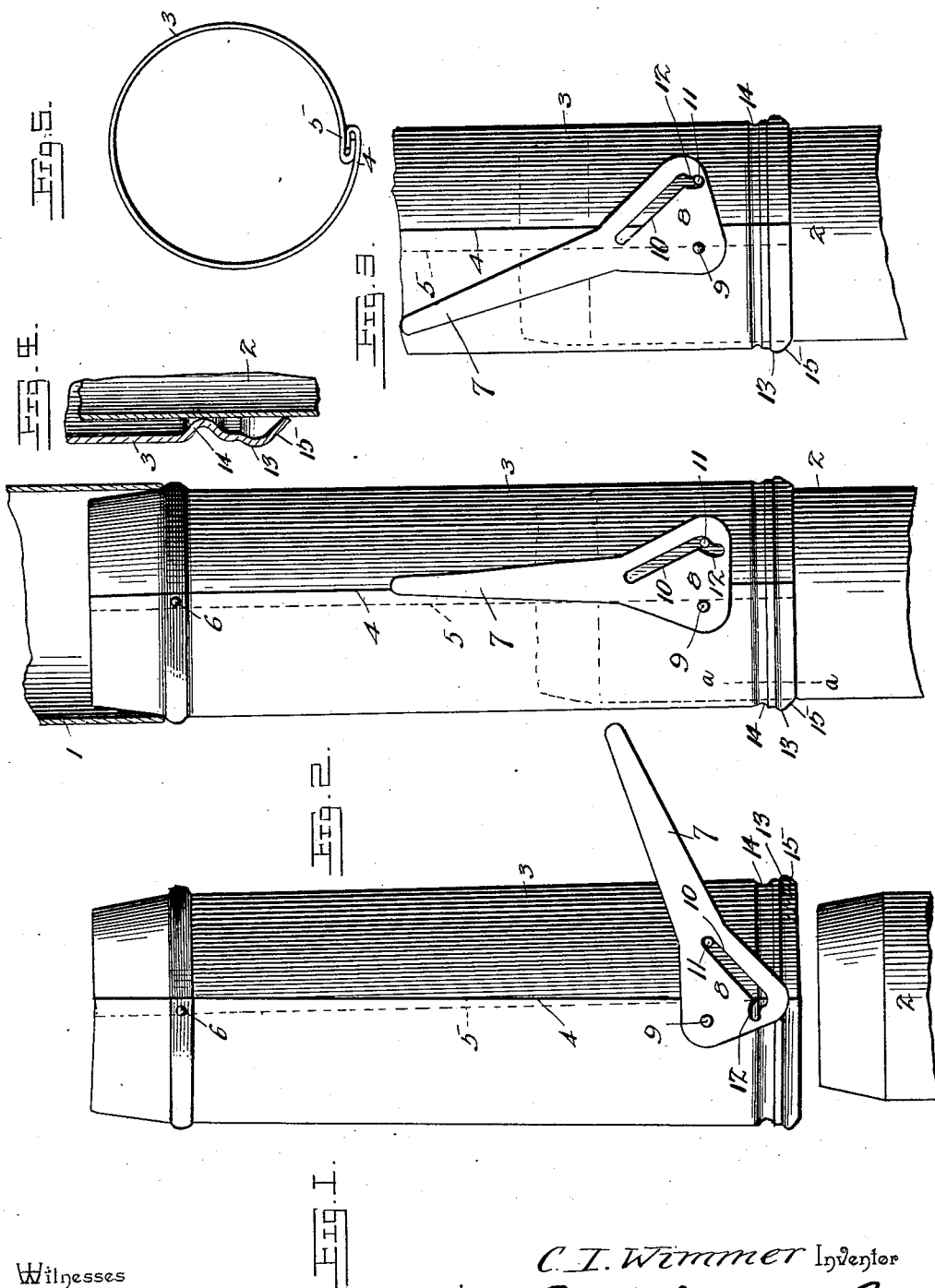
No. 683,584.

Patented Oct. 1, 1901.

C. I. WIMMER.
ADJUSTABLE STOVEPIPE SECTION.

(Application filed May 22, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES ISAAH WIMMER, OF COLUMBUS, OHIO.

ADJUSTABLE STOVEPIPE-SECTION.

SPECIFICATION forming part of Letters Patent No. 683,584, dated October 1, 1901.

Application filed May 22, 1901. Serial No. 61,430. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ISAAH WIMMER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Adjustable Stovepipe-Section, of which the following is a specification.

This invention relates to stovepipes; and it consists in a section of stovepipe so constructed as to be capable of enlargement and contraction to adapt it to be clamped firmly upon the adjacent pipe-sections at any required point, whereby the pipe may be lengthened or shortened without cutting, as hereinafter shown and described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a side elevation of the adjustable section distended, and Fig. 2 is a similar view with the adjustable section partially contracted. Fig. 3 is a view similar to Fig. 2, showing the adjustable section fully contracted and locked. Fig. 4 is a transverse section on the line *a a* of Fig. 2. Fig. 5 is an enlarged sectional detail.

This device is intended to provide for bridging the gaps between the ends of smoke-flues or stovepipes which are less than the lengths of the ordinary sections of pipe and consists of a section of pipe preferably of the conventional length of an ordinary length of stovepipe and with the edges of its longitudinal seam overlapping, the overlapping edges secured at one end by a pivotal connection and with a lever pivotally connected at one side of the overlapping seam at the other end of the pipe-section and provided with a cam-slot engaging a stud or pin on the pipe-section at the other side of the overlapping seam, whereby the free end of the section may be expanded or contracted, as required.

The invention further consists in crimping and beading the lower or adjustable end of the adjustable pipe-section to increase the "grip" of the adjustable pipe-section when contracted and also to produce a soot-tight joint.

In the drawings illustrative of the invention, 1 and 2 represent the ends of the stovepipe at the opposite sides of the gap to be bridged, and 3 represents the adjustable section, which, as before stated, will preferably

be of about the conventional length of an ordinary stovepipe-section. The edges 4 5 of the longitudinal seam of the section 3 overlap, as shown in Fig. 5, and are united near one end of the section 3 by a rivet 6, so that at the opposite end the overlapping of the edges 4 and 5 may be increased or decreased to expand or contract that end of the pipe-section. The operating-lever consists of a shank 7, having a widened lower end 8, secured to the section 3 by a rivet 9 and provided with a cam-slot 10, engaging a stud or pin 11, projecting from the section 3 on the opposite side of the seam or the edges 4 and 5. The cam-slot is so formed that when the lever is in its outward position, as in Fig. 1, the pin 11 will be held at the farthest point from the pin 9, with the pipe-section distended, and when the lever is in its inward position the cam-slot will "draw" the pin 11 inward toward the pin 9 and contract the lower end of the joint. The cam-slot 10 is formed with a small inwardly-projecting portion 12, and the locking is normally effected at the point where this portion begins, as shown in Fig. 2, the handled end of the lever being then in line with the seam of the pipe. In some cases where a further contraction is necessary the lever may be moved to the position shown in Fig. 3, the pin 11 then entering the portion 12 and being confined in the seat formed at the extreme end thereof. The lever after it has been drawn so far over as to cause the pin 11 to pass the projection 12 will require the exercise of considerable force to release it, a force greater than it would be likely to be subjected to when in use, so that any tendency to work loose accidentally is thereby effectually counteracted.

The expansible end of the section 3 is formed with one or more beads, preferably two, as shown at 13 and 14, one trending inward and one trending outward, and with the edge 15 crimped inward slightly, the inner surfaces of the bead 14 and the edge 15 projecting inwardly beyond the general interior surface of the section 3, and thus separating this section from the inner section 2 for the entire length of the latter except at these two points, so that the "gripping" force is expended entirely between the comparatively-reduced surfaces 14 and 15 and the general

surface of the section 2. By this means two very important results are accomplished. First, the force of the grip is thereby concentrated and greatly increased, so that all tendency of the sections 2 and 3 to either move circumferentially or longitudinally or "creep" under the concussions or jars to which the pipe may be subjected is effectually counteracted, and, second, a very close and soot-proof joint is insured, which is a very valuable consideration. A further advantage resulting from the employment of the reduced gripping-surfaces is that the inner pipe-section may be readily removed from position even if rusted for its entire length.

The whole device is very compact and simple and will not detract from the appearance of the pipe. The lever side of the joint may be placed at a point in the rear of the pipe or where it would be least liable to be observed and will be so small and flat as to escape observation.

A joint thus constructed will be of great utility and will greatly lessen the annoyance and inconvenience of erecting stoves and furnaces and the changing of the piping when required.

The section 3 will generally be about twelve inches long and the contiguous section 2 will generally be a little over twelve inches in length, with the upper end of the section 3 and the lower end of the section 2 of standard size, so that they will readily engage the contiguous ends of the pipe to be coupled. Thus the adjustable section may be extended to the full length of a section of piping or shortened to twelve inches or any intermediate length; but I do not wish to be limited to these dimensions, as the sections can be made of any length desired.

The adjacent edges 4 5 of the section 3 will be made to overlap with turned-over edges, as in Fig. 5, with the widths of the laps sufficient to allow the necessary expansion and contraction.

The section 2 will generally be a straight piece of pipe containing no swages and the seam raised entirely on the inside, so that the outer surface will be smooth and free from irregularities, so as to insure a smoke and air tight joint between the parts 3 and 2.

What I claim as new is—

1. An expansible stovepipe-section having at its end two parallel inwardly-trending crimps forming surfaces for engagement with an inner pipe-section, the internal diameter of the crimped portions being less than the internal diameter of the body of said expansible section, and means for contracting said section.

2. In an adjustable pipe-section, a section of piping having an overlapping longitudinal joint, a pin or rivet pivotally passing through said overlapping joint at one end of the section, the opposite expansible end of said section being formed with inwardly-trending crimps 14 and 15, whereby a close-fitting soot-proof joint is formed between the adjustable section and the next section with which it is engaged, a lever pivotally connected at one side of said overlapping joint near the expansible end of the section and provided with an angular cam-slot, and a pin upon said section of the opposite side of said overlapping joint and engaging in the cam-slot, the relative positions of the parts being such that when the pin is locked at the end of the slot, the handle of the lever will be in alignment with the pipe, and said slot having an inwardly-curved portion at one end forming a recess for the engagement of the pin to form a second lock for the lever, substantially as and for the purpose described.

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

CHARLES ISAIAH WIMMER.

Witnesses:

CHAS. C. KREPPS, Jr.,
C. H. HOUSEMAN.