

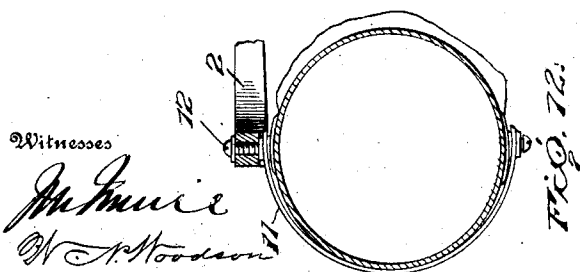
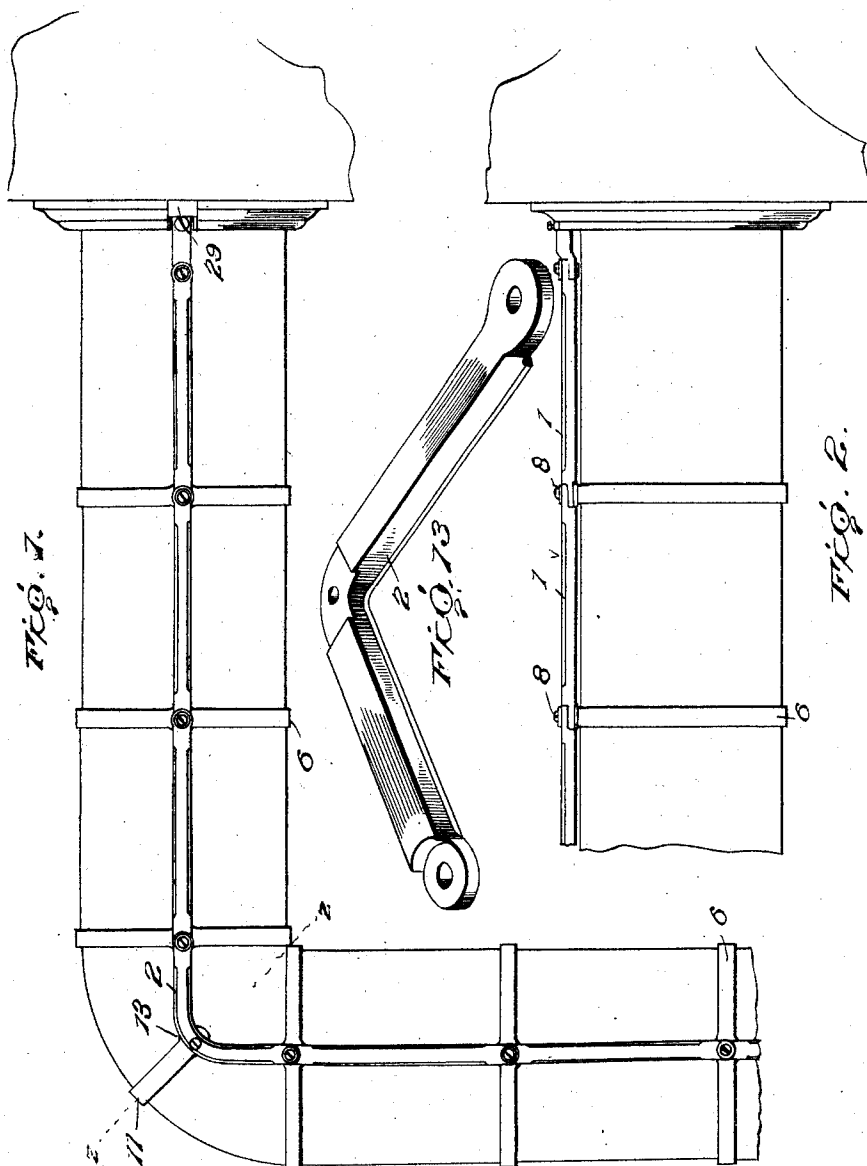
No. 879,054.

PATENTED FEB. 11, 1908.

H. KLING.
STOVEPIPE HANGER AND SUPPORT.

APPLICATION FILED MAY 7, 1907.

3 SHEETS—SHEET 1.



Witnesses

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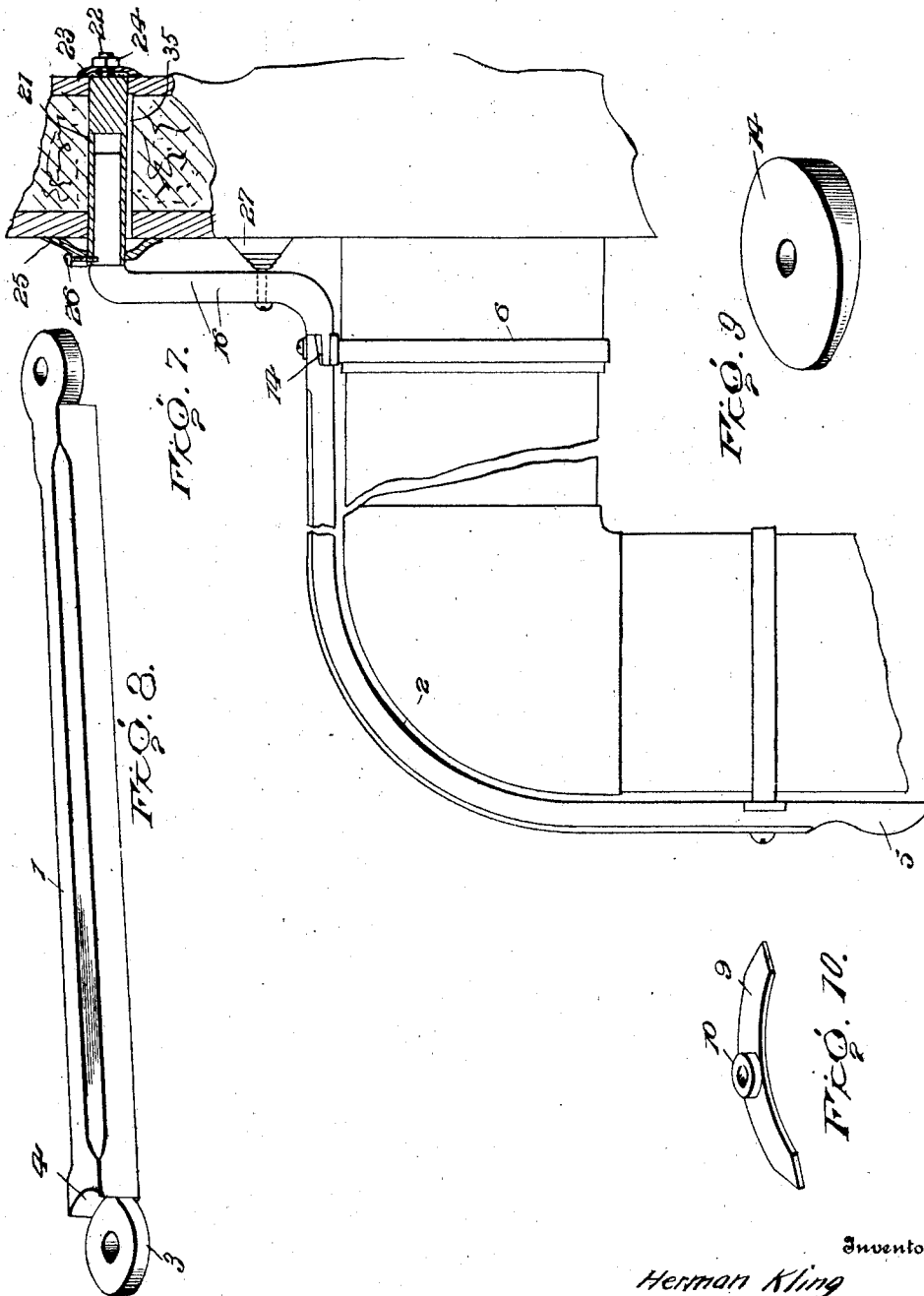
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Witnesses

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UNITED STATES PATENT OFFICE.

HERMAN KLING, OF LARNED, KANSAS.

STOVEPIPE HANGER AND SUPPORT.

No. 879,054.

Specification of Letters Patent.

Patented Feb. 11, 1908.

Application filed May 7, 1907. Serial No. 372,388.

To all whom it may concern:

Be it known that I, HERMAN KLING, a citizen of the United States, residing at Larned, in the county of Pawnee and State of Kansas, have invented certain new and useful Improvements in Stovepipe Hangers and Supports, of which the following is a specification.

This invention relates to novel means for supporting stovepipes, substantially as set forth hereinafter.

In the accompanying drawings forming part of the specifications; Figure 1 is a top plan view showing the application of the invention to a length of stovepipe. Fig. 2 is a side view thereof. Fig. 3 is a view similar to Fig. 1, showing the outer portion of the stovepipe extending in an opposite direction to the corresponding part of Fig. 1. Fig. 4 is a longitudinal section of the stovepipe thimble and a section of stovepipe showing the application of the invention, the parts being illustrated on a larger scale. Fig. 5 is a transverse section on the line $x-x$ of Fig. 4. Fig. 6 is a sectional detail of the upper portion of the stovepipe thimble on the line $y-y$ of Fig. 4. Fig. 7 is a view in elevation showing an adaptation of the invention to chimneys of already constructed buildings. Fig. 8 is a detail perspective view of a length or section of the support. Fig. 9 is a detail perspective view of the wedge-shaped washer interposed between the joint of sections of the support to incline the same when it is required to run the pipe slantwise. Fig. 10 is a detail perspective view of the shoe interposed between the stovepipe and the set screw. Fig. 11 is a detail perspective view of a portion of a supporting band or ring. Fig. 12 is a transverse section on the line $z-z$ of Fig. 1. Fig. 13 is a perspective view of a modified form of elbow or deflected length of the stovepipe support, the same being inverted.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The support for the stovepipe is of sectional construction and comprises straight lengths 1 and elbows 2, the latter being employed at the bends whether the same be horizontal or vertical. The lengths 1 approximate the lengths of the stovepipe sections whereby the joints of the support correspond to the joints in the line of stovepipe. While this construction is preferred, it is not

essential that the lengths 1 correspond to the linear dimensions of the stovepipe sections or lengths. It is necessary at times to cut the lengths of stovepipe to meet certain conditions and in order that lengths of support may correspond, it is proposed to construct a number of lengths 1 of various linear dimensions so that one may be selected to approximate the shortened length of stovepipe.

The several sections or lengths of the support are of like formation with respect to their coupling or matching ends, it being understood that the running lengths 1 are straight and the deflecting lengths 2 curved either at a right angle, or to any desired angle to conform to bends or deflections commonly employed in a line of stovepipe extending from a stove or heater to the chimney or exit. The lengths or sections of the support may be cast, pressed or formed in any manner found most advantageous and economical. The ends of the sections or lengths of support are constructed to overlap and match so that the sides of the support may be practically flush or continuous so as to present a uniform appearance. Each length or section of the support is provided at opposite ends with an approximately circular terminal 3 which is apertured and provided at one side with a curved shoulder 4 formed on the arc of a circle whose radius corresponds with the circular outline of the coupling terminal 3. As a result of this construction, the outer ends of the coupling terminals of adjacent sections abut against the shoulders 4 when assembled as when placed in position. This construction results in the formation of a substantial joint which is stiffened and braced by the shoulders 4.

It is preferred to have the coupling terminal 3 at one end of a length upon one side of said length and the coupling terminal at the other end upon the opposite side although the coupling terminals may be upon the same side of the length. The opposite arrangement of the coupling terminals is preferred as it results in the formation of stronger and stiffer joints. The elbow or deflected length of section 2 of the support may be used in either position, *i. e.*, whether the stovepipe extends to the right or to the left as shown in Figs. 1 and 3. It is further noted that the support is preferably arranged above the stovepipe, hence the joints between the several sections occupy a relative horizontal position. When

the elevated or deflected portion is designed for application to a vertically arranged elbow, as in Fig. 7, the coupling terminals occupy a position at a right angle to the plane of the elbow, thereby differing from the elbow lengths designed for use with horizontally arranged stovepipe elbows in which the coupling terminals are in the plane of the elbow 2.

When the vertical extension of the stovepipe is comparatively short, the support terminates with the elbow between the vertical and horizontal branches of the stovepipe as indicated in Fig. 7 and in order that the vertical limb or member of the elbow 2 may present a finished appearance, it terminates in an ornamental extremity 5 which may be of any design.

Bands or rings 6 connect the stovepipe with the support and are preferably arranged opposite to the joints formed between adjacent sections of stovepipe as indicated most clearly in Fig. 4. Each band or ring 6 is thickened and widened at a point in its circumference and formed with an internally threaded opening 7 to receive the set screw or fastening 8, by means of which the sections of the support are connected. The set screw 8 is made to clamp the stovepipe joint and to prevent the inner end of the set screw indenting the stovepipe, a shoe 9 is interposed between it and the stovepipe, said shoe being provided at a central point with a boss 10 having a recess forming a seat to receive the inner end of the set screw, thereby preventing displacement of the shoe. At the elbow, a curved arm 11 is provided, the same being secured at one end to the elbow 2 and having a set screw 12 fitted into a threaded opening formed in a thickened or reinforced portion near the extremity of the curved arm, a shoe being interposed between the set screw and the stovepipe elbow to prevent indenting the latter. The end side of the elbow 2 is formed with a recess 13 which receives the end of the curved arm 11, thereby admitting of the parts 2 and 11 lying close against the stovepipe elbow.

It is sometimes necessary and desirable to slant the stovepipe in order to secure sufficient draft and for this purpose a wedge-shaped washer 14 is interposed between the joint of the first length of the support and the end 15 thereof which is secured in the socket provided in the chimney. The wedge form of the washer 14 enables the coupling terminals 3 to be clamped by the set screw or fastening 8 and by turning the washer 14, the support may be given any desired inclination within the range of adjustment susceptible by properly positioning the washer 14. The end of the support secured in a socket of the chimney may be straight as indicated at 15 in Fig. 4, or may be of elbow form as indicated at 16 in Fig. 7.

The stovepipe thimble is preferably con-

structed of sheet metal bent into circular form and in order that the inner wall of the thimble may be continuous, the blank from which the thimble is formed is offset near one edge as indicated at 17 in Fig. 6, the offset providing a shoulder corresponding in depth and thickness to the blank so that the opposite end of the blank may abut against the shoulder formed by the offset. This is clearly shown in Fig. 6. The socket 18 receiving the coupling end 15 is formed by a strip which has its edge portions bent and thence outwardly deflected to provide flanges which bear against the thimble 19 and receive the rivets or other fastenings connecting the parts. One flange of the socket 18 overlaps the overlapped ends of the blank forming the thimble 19, the rivets or fastenings passing through the three thicknesses of material as indicated most clearly in Fig. 6.

The stovepipe thimble and the socket for the stovepipe support are preferably formed together, but in buildings already provided with stovepipe thimbles, the socket may be separate from the thimble and secured in the chimney a distance therefrom as indicated in Fig. 7.

The socket 21 indicated in Fig. 7 is fitted into an opening drilled in the chimney a short distance above the stovepipe thimble and its inner end is solid and formed with a reduced portion 22 which is threaded to receive a washer 23 and a nut 24. The washer 23 is of concavo convex form and arranged with its hollow side facing the inner wall of the chimney, the space being filled with mortar to secure the formation of a tight joint. A collar 25 at the outer end of the socket overlaps the chimney adjacent to the opening in which the socket is fitted and its inner side is hollow and adapted to receive mortar to insure the formation of a tight joint. The elbow end 16 of the support is secured in the socket 21 by means of a set screw 26 let into a threaded opening formed in the outer projecting end thereof. A spacer 27 is interposed between the lower vertical portion of the coupling end 16 and the chimney to form a brace and is held in place by a fastening passed through the lower portion of the coupling end 16. When the support is removed, the outer end of the socket 21 is adapted to be closed by a suitable cap, not shown.

The thimble 19 and socket 18 project a short distance from the face of the chimney and receive a collar 28 which gives a finished appearance thereto, said collar being cut away to receive the projecting end of the socket 18 and to admit of access being had to the set screw 29 by means of which the end 15 of the support is secured after being inserted in the socket.

It will be understood from the foregoing that the invention provides effective means

for supporting the stovepipe without detracting from the appearance of the room or apartment and without adding materially to the cost of running stovepipe, the support
5 being of a nature to hold lengths of stovepipe in position and to hold such stovepipe in suspension independently of the stove or other heater, thereby admitting of removing the stove for cleaning, or of taking down the
10 stovepipe as a whole and cleaning the same without necessitating the separation of the joints.

To prevent the socket 21 from turning when placed in position in the chimney space,
15 it is provided with a rib 35 which becoming fast in the mortar employed to cement the socket in the wall is held by said mortar so as to prevent possible turning of the socket.

Having thus described the invention, what
20 is claimed as new is:

1. In a hanger for stovepipe, the combination of a sectional support, set screws for connecting the sections and adapted to effect clamping of the stovepipe, and stovepipe en-

gaging means secured to the support by the 25 said set screws.

2. In a stovepipe hanger, the combination of a support composed of sections or lengths having coupling terminals which are adapted to overlap, fastenings connecting said over- 30 lapped terminals and stovepipe engaging means connected to the support by the said fastenings.

3. A stovepipe hanger comprising sections or lengths having coupling terminals adapted 35 to be overlapped, a wedge-shaped washer interposed between the overlapped terminals of adjacent lengths or sections to admit of giving a slant to the support, and means for connecting the overlapped terminals and 40 clamping the washer therebetween.

In testimony whereof I affix my signature in presence of two witnesses.

HERMAN KLING. [L. s.]

Witnesses:

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