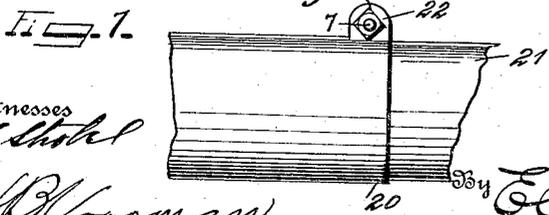
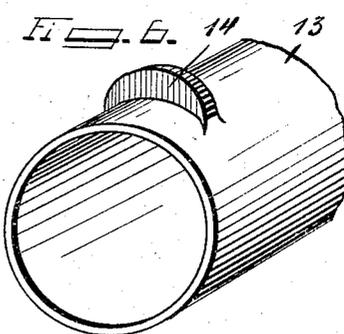
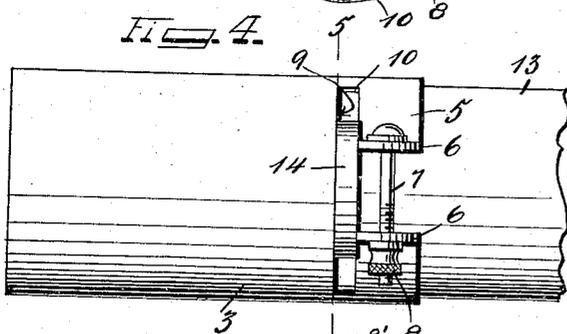
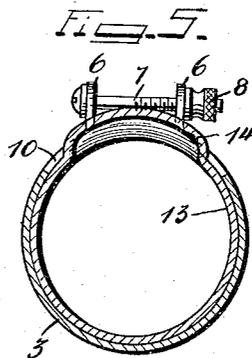
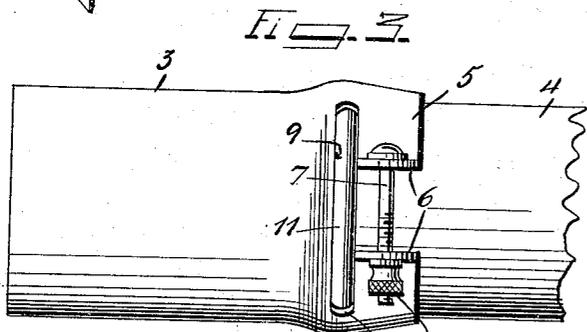
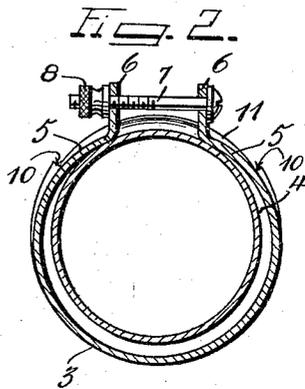
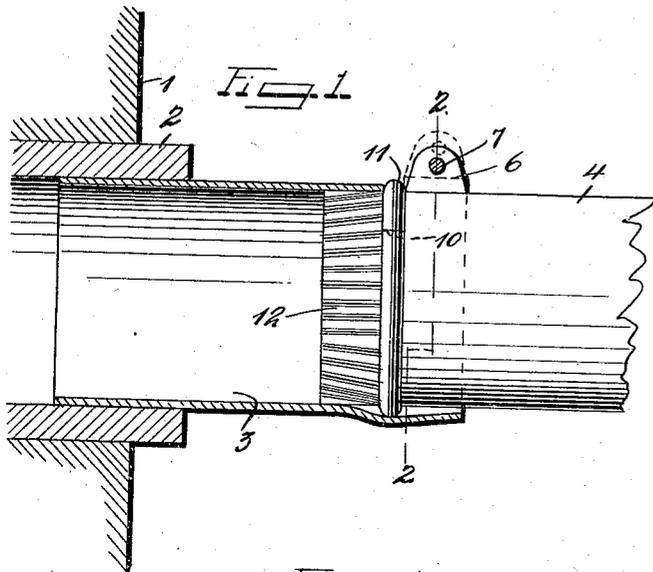


R. A. MINKLER.  
 STOVEPIPE JOINT CONNECTION.  
 APPLICATION FILED APR. 17, 1915.

1,148,041.

Patented July 27, 1915.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## STOVEPIPE-JOINT CONNECTION.

1,148,041.

Specification of Letters Patent.

Patented July 27, 1915.

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*To all whom it may concern:*

Be it known that I, RAY A. MINKLER, a citizen of the United States of America, residing at Carthage, in the county of Jasper and State of Missouri, have invented certain new and useful Improvements in Stovepipe-Joint Connections, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a stove-pipe joint connection and has for its principal object the production of a simple and efficient means for detachably retaining two lengths of stove pipe in engagement with each other.

Another object of this invention is the production of a stove-pipe joint connection having its connecting portions struck from one section of the stove pipe so as to carry a bolt whereby the section carrying the bolt may be positively clamped upon another section of a stove pipe for positively engaging the same.

A still further object of this invention is the production of a stove-pipe joint connection having the connecting portion struck from one section of a stove pipe so as to carry a clamping bolt, these portions being formed so as to provide a slot wherein may fit a rim or a projection upon the other stove pipe so as to positively retain the pipes against telescopic action after the connecting portions have been clamped.

With these and other objects in view, this invention consists of certain novel combinations, constructions and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawing:—Figure 1 is a fragmentary sectional view of a plurality of stove pipe sections, showing the joint connection in position. Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a front elevation of the connection in position. Fig. 4 is a front elevation of the connecting sections of the stove pipe showing a slightly modified form of an auxiliary section connected therewith. Fig. 5 is a section taken on the line 5—5 of Fig. 4. Fig. 6 is a fragmentary detailed perspective view of the auxiliary section of the stove pipe illustrated in Figs. 4 and 5. Fig. 7 is a fragmentary side elevation of another form of this invention illustrating the manner in which two

sections of the stove pipe may be secured together, these sections being straight throughout their entire length.

Referring to the accompanying drawing by numerals, 1 indicates a chimney having the thimble 2 into which the primary section 3 of the stove pipe is adapted to extend as clearly shown in Fig. 1. The auxiliary section 4 of the stove pipe is adapted to extend into the primary section 3 and be positively engaged by the primary section so as to prevent their accidental displacement. The primary section 3 is provided, adjacent one end, with the integral strips 5 which are struck therefrom as clearly shown in Fig. 3. These strips 5 are provided with the integral ears 6 extending at right angles thereto for the purpose of carrying the clamping bolt 7 which extends therethrough. This clamping bolt 7 is of course provided with a nut 8 so as to allow its easy adjustment when desired. These strips 5 and ears 6 are formed at a spaced distance from the adjacent side edge 9 of the primary section 3 so as to provide a semi-annular slot 10 formed in the primary section.

The auxiliary section 4 is of the ordinary construction of stove pipe sections and is provided adjacent one end with the usual annular rim 11 adjacent which is formed the corrugated portion 12. In operation the auxiliary section 4 is slipped into the outer end of the primary section 3 so as to allow the corrugated portion 12 to pass into the primary section as well as the annular rim 11. Inasmuch as the annular rim 11 is slightly larger than the inner circumference of the primary section 3 it will spring the primary section outwardly as shown in Fig. 1. When the auxiliary section 4 has been forced far enough into the primary section, the annular rim 11 will pass into and extend for the full length of the slot 10. The nut 8 may then be threaded upon the bolt 7 so as to cause the bolt and nut to draw the ears 6 toward each other and clamp the strips and the outer end of the primary section 3 upon the auxiliary section 4 of the stove pipe. At this time it will be seen that the strips 5 will rest behind the rim 11 as clearly disclosed in Fig. 3 thereby positively retaining the two sections of the stove pipe in engagement with each other. By forming

the slot 10 so as to receive the annular rim 11 it will be seen that although the nut 8 may slightly relieve the tension from the ears 6 by becoming loose upon the bolt 7 any danger of the sections coming apart is eliminated since the ears will retain the strips 5 behind the annular rim 11 of the ordinary stove pipe and thereby prevent the telescopic action of the sections whereby the device will be held against coming apart and accidental displacement.

By referring to Figs. 4, 5, and 6, it will be seen that the primary section 3 may be used in connection with a particular form of stove pipe section 13. This section 13 is provided with a struck up projection 14 formed upon one side thereof adjacent its end. This section 13 may be passed into the interior of the primary section 3 of the stove pipe so as to cause the projection 14 to be positioned within the slot 10. The usual bolt 7 and nut 8 may be passed through the ears 6 so as to clamp the strips 5 upon the section 13 and thereby retain the projection 14 within the slot 10. In operation this device is similar to the device as above described and operates in a similar manner thereto.

From the foregoing description it will be seen that a very simple and efficient stove pipe joint connection has been produced wherein the primary section is provided with clamping strips and ears which are so formed as to provide a slot in which a rim or projection of the auxiliary section may fit so that when the strips have been clamped upon the auxiliary section by a bolt carried by the ears, the two sections will be positively retained in engagement with each other.

By referring particularly to Fig. 7 it will be seen that the form of the device as illustrated in this embodiment comprises a primary section 20 and an auxiliary section 21. The primary section 20 is provided with the integral ears 22 struck therefrom so as to be formed similar to the ears as shown in Figs. 1 and 2. These ears 22 are adapted to carry a bolt 7 upon which the nut 8' is mounted. It will be seen that by the adjustment of this nut 8' upon the bolt 7, the ears may be drawn toward each other so as to bind upon the auxiliary section 21 and thereby retain the section together. This form of the device is adapted to be used where the two sections of the stove pipe extend in the same plane throughout their entire length that are not provided, as is the case with the other forms of the invention, with the annular rim or rib. Therefore, when this device is used it will be seen that the two sections may telescope so as to allow a stove pipe of any desired length to be formed without interference therewith by an enlarged portion.

What I claim is:—

1. In a stove-pipe joint connection, the combination of a primary section and an auxiliary section, said primary section provided adjacent one end with a pair of integral strips struck therefrom and terminating in angularly extending parallel ears, an adjusting bolt carried by said ears, a nut carried upon one end of said bolt, said primary section provided with a semi-annular slot formed adjacent said strips, said auxiliary section extending into said primary section, said auxiliary section provided with a means fitting within said slot and resting behind said strips, said bolt and nut being adapted to draw said ears toward each other so as to bring said strips into binding engagement with said auxiliary section whereby said sections will be positively retained in engagement with each other.

2. In a stove-pipe joint connection, the combination of a primary section and an auxiliary section, said primary section provided with a pair of strips struck therefrom and terminating in angularly extending parallel ears, a bolt passing through said ears and provided with a nut, said primary section provided with a semi-annular slot formed adjacent said strips, said auxiliary section extending into said primary section, said auxiliary section provided with an integral circumferential extending portion, said portion fitting within said slot behind said strips, and said bolt and nut being adapted to bind said strips into engagement with said auxiliary section whereby said portion fitting within said slot will positively hold said sections in engagement with each other.

3. In a stove-pipe joint connection, the combination of a primary section and an auxiliary section, said primary section provided with a pair of strips terminating in angularly extending parallel ears, a bolt passing through said ears and provided with a nut, said primary section provided with a semi-annular slot formed adjacent said strips, said auxiliary section provided with an annular rim adjacent one end, said rim fitting within said slot when said auxiliary section is forced into said primary section, and said bolt and nut being adapted to draw said ears toward each other whereby said strips will clamp upon said auxiliary section thereby holding said rim behind said strips whereby said sections will be positively retained in engagement with each other.

4. In a stove-pipe joint connection, the combination of a primary section and an auxiliary section, said primary section provided with a pair of strips terminating in angularly extending parallel ears, a bolt passing through said ears and provided with a nut, said primary section also provided

with a semi-annular slot formed adjacent  
said strips, and said auxiliary section pro-  
vided with a struck-up projection formed  
adjacent one end thereof, said portion fit-  
5 ting within said slot and behind said strips  
whereby when said bolt and nut are tight-  
ened so as to draw said ears toward each  
other said strips will clamp upon said auxil-  
iary section or one side of said crimped por-

tion thereby positively retaining said sec- 10  
tions in engagement with each other.

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

RAY A. MINKLER.

Witnesses:

GEORGE MINKLER,  
DANIEL HOOKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."