

D. WITT.
STOVEPIPE ELBOW.
APPLICATION FILED DEC. 11, 1908.

941,836.

Patented Nov. 30, 1909.

Fig. 1.

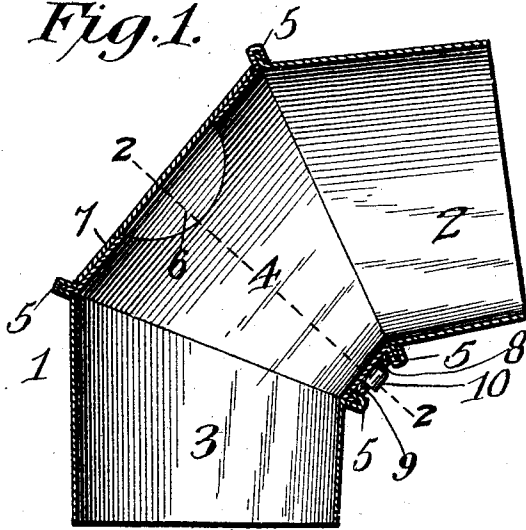


Fig. 2.

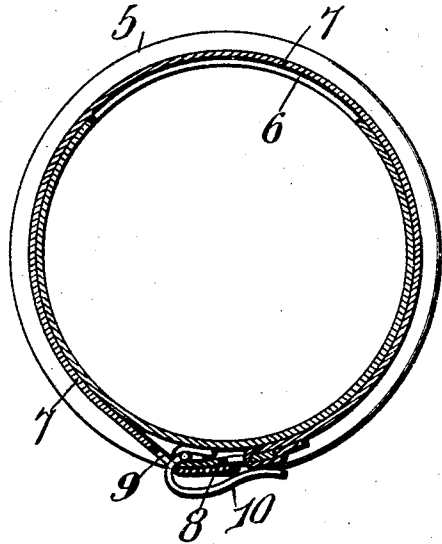


Fig. 3.

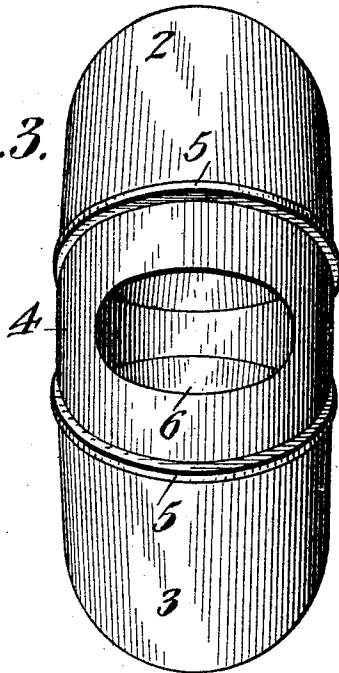
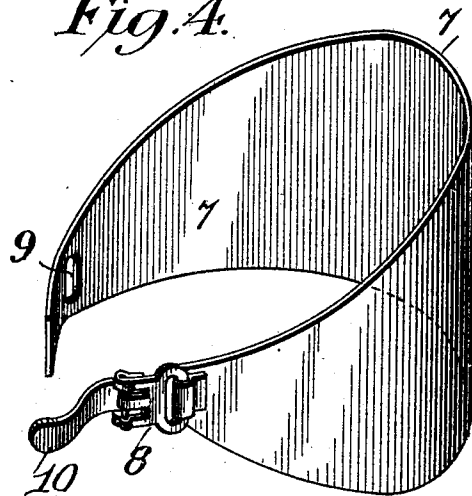


Fig. 4.



Witnesses
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DETLEF WITT, OF SHEFFIELD, IOWA.

STOVEPIPE-ELBOW.

941,836.

Specification of Letters Patent. Patented Nov. 30, 1909.

Application filed December 11, 1908. Serial No. 467,047.

To all whom it may concern:

Be it known that I, DETLEF WITT, a citizen of the United States, residing at Sheffield, in the county of Franklin and State of Iowa, have invented a new and useful Stovepipe-Elbow, of which the following is a specification.

The invention relates to improvements in stove pipe elbows.

The object of the present invention is to improve the construction of stove pipe elbows, and to provide a simple and comparatively inexpensive stove pipe elbow, equipped with a clean-out aperture adapted to afford access to both horizontal and vertical stove pipes with which the elbow is connected in order that the said pipes may be readily cleaned without separating them and taking them down.

A further object of the invention is to provide an elbow of this character in which the means for covering or closing the aperture will reinforce and strengthen the elbow at the point where it is weakened by the said aperture.

The invention also has for its object to arrange the parts so that the covering means for the clean-out aperture will be burned out instead of the elbow, thereby enabling the burned out portion to be replaced at about one third the cost of the elbow.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims here-to appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a longitudinal sectional view of an elbow, constructed in accordance with this invention. Fig. 2 is a transverse sectional view on the line 2—2 of Fig. 1. Fig. 3 is an elevation of the same, the collar or cover being removed. Fig. 4 is a detail perspective view of the cover or collar.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates an elbow comprising in its construction tubular end sections or mem-

bers 2 and 3 and an intermediate tubular member 4, tapered as shown to arrange the end sections or members in angular relation in the usual manner. The intermediate and end sections of the elbow are united in the usual manner by joints 5, forming exterior annular rims or joints, located at the ends of the intermediate section 4, which is provided at the front with a substantially elliptical clean-out aperture 6, spaced from each of the rims or joints 5 and extending partially around the elbow. The clean-out aperture 6 affords access to both of the end sections or members 2 and 3 and to the horizontal and vertical stove pipes with which the same, in practice, will be connected, and it will enable a cleaner of the usual construction to be introduced into the elbow and into the said horizontal and vertical pipes for removing the soot therefrom. The soot and other accumulation may be scraped from the horizontal and vertical stove pipes without separating and taking down the same. The soot from the horizontal pipe drops into the vertical pipe and from thence into the stove from where it may be conveniently removed.

The clean-out aperture is covered by an exteriorly arranged collar or cover 7, consisting of a single piece of sheet metal, tapered to conform to the configuration of the intermediate section or member of the elbow and completely covering the same. It is provided at one end with a clasp 8 and has an opening 9 at the other end. The opening forms a loop for engagement with the clasp, which is equipped with a locking lever 10, adapted to draw the ends of the collar tightly together. The collar clamps the exterior of the central tubular section of the elbow, and it fits tightly against the adjacent faces of the exterior annular rims or joints 5, and it thereby provides a tight joint or connection and effectually prevents the escape of smoke or other products of combustion.

The collar strengthens and reinforces the elbow at the place where it is weakened by the formation of the clean-out aperture, and by covering the clean-out aperture it is subjected to the action of the intense heat and is located at the point where elbows usually burn out and will be burned out instead of the elbow. It is adapted to be replaced at about one third the cost of the elbow, thereby increasing the durability and life of the latter and obviating the necessity of replac-

ing the elbow and the inconvenience of separating or taking down the pipes for that purpose. The cover by being constructed of a separate piece of metal may be removed
5 from the elbow and is entirely out of the way when cleaning a stove pipe.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

- 10 1. The combination of an elbow including tubular end sections, and a tapered intermediate section provided at the front with a clean-out aperture and connected at its edges with the end sections by exterior annular
15 joints or rims, a collar consisting of a separate piece completely encircling the exterior of the intermediate section of the elbow and forming a cover for the clean-out aperture and tapered to conform to the configuration
20 of the intermediate section, said collar having its side edges fitted against the projecting rims or joints, and fastening means connected with the terminals of the collar and securing the same to the elbow.

- 25 2. The combination of an elbow including

tubular end sections, and a tapered intermediate section provided at the front with a clean-out aperture and connected at its edges with the end sections by exterior annular
30 joints or rims, a collar consisting of a separate piece completely encircling the exterior of the intermediate section of the elbow and forming a cover for the clean-out aperture and tapered to conform to the configuration
35 of the intermediate section, said collar having its side edges fitted against the projecting rims or joints, the terminals of the cover being overlapped and one of the terminals having a slot, a catch secured to the other
40 terminal of the collar and provided with a locking tongue engaging with the slot and securing the terminals in their overlapped relation.

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

DETLEF WITT.

Witnesses:

L. B. CARHART,
R. S. ESSLINGER.