

(No Model.)

A. A. REASER & R. D. HUBBARD.
STOVEPIPE ANCHOR AND BRACE.

No. 581,399.

Patented Apr. 27, 1897.

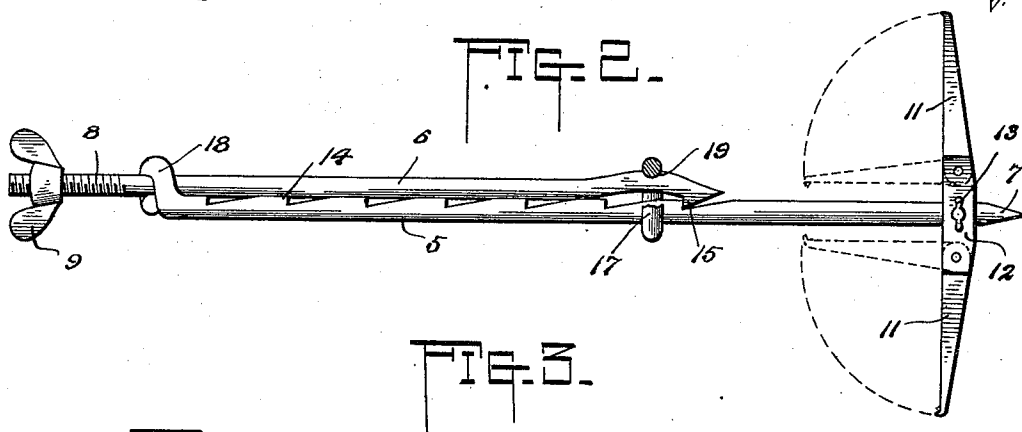
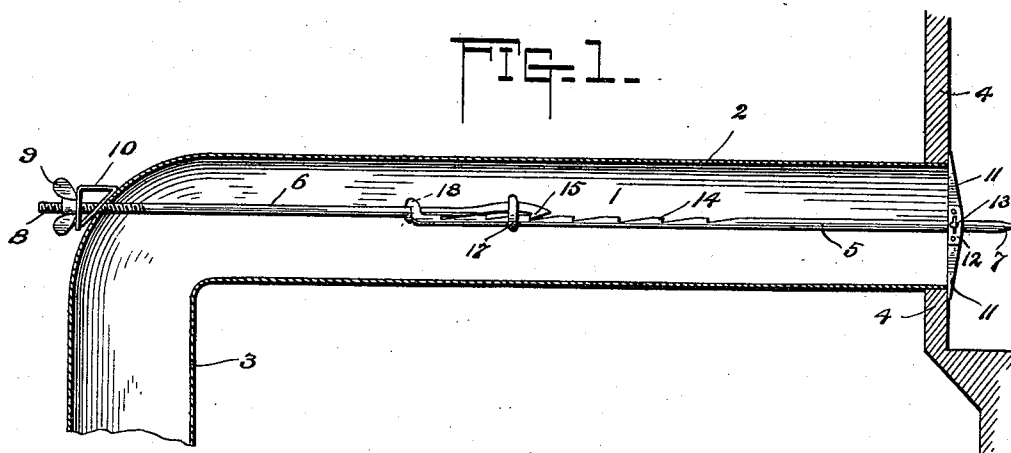
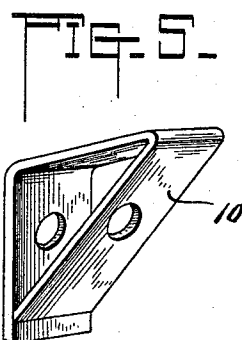
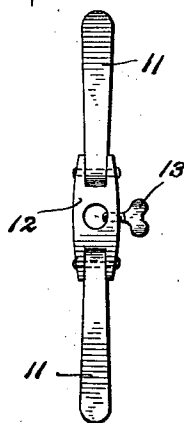
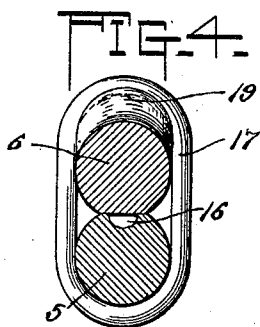


FIG. 3.



Witnesses

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By *their* Attorneys,

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Arthur A. Reaser and
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UNITED STATES PATENT OFFICE.

ARTHUR A. REASER AND RAY D. HUBBARD, OF LINCOLN, NEBRASKA.

STOVEPIPE ANCHOR AND BRACE.

SPECIFICATION forming part of Letters Patent No. 581,399, dated April 27, 1897.

Application filed June 17, 1896. Serial No. 595,899. (No model.)

To all whom it may concern:

Be it known that we, ARTHUR A. REASER and RAY D. HUBBARD, citizens of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and useful Stovepipe Anchor and Brace, of which the following is a specification.

The invention relates to improvements in stovepipe anchors and braces.

The object of the present invention is to provide a simple inexpensive device for securing a stovepipe to a chimney and for supporting the same.

A further object of the invention is to provide a combined anchor and brace which will be capable of adjustment to accommodate itself to a stovepipe and to the size of a chimney.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a vertical sectional view of a portion of a stovepipe and chimney provided with a brace and anchor constructed in accordance with this invention. Fig. 2 is an elevation of the brace and anchor detached. Fig. 3 is a detail view of the adjustable block and the pivoted anchor-arms. Fig. 4 is a transverse sectional view of the adjustable rods or sections. Fig. 5 is a detail perspective view of the triangular washer or bracket for engaging the elbow of the stovepipe.

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

1 designates a horizontal brace extending through the horizontal arm 2 of a stovepipe 3 and projecting through the thimble-opening of a chimney or flue 4 and engaging the rear wall of the same, and the brace is composed of inner or outer rods or sections 5 and 6, adjustably connected and adapted to vary the length of the brace to accommodate the same to the length of the horizontal arm of a stovepipe and the width of a chimney. The inner end 7 of the brace is pointed to enable it to penetrate readily the mortar between a layer of bricks of the chimney or flue, and the outer portion 8 of the brace, which is threaded,

passes through a perforation of the elbow of the stovepipe and receives a thumb-nut 9, which bears against a triangular washer 10. The triangular washer 10, which is provided with perforations for the reception of a brace and which is interposed between the thumb-screw and the elbow of the stovepipe, consists of an outer vertical portion which receives the thumb-screw, an inner inclined portion which bears against the elbow of the stovepipe, and a horizontal top portion which connects the vertical and the inclined portions.

The brace is secured to the chimney and locked in its outward movement by a pair of folding anchor-arms 11, pivoted at their inner ends in bifurcations of an adjustable block 12, which is provided with a central perforation for the reception of the inner section of the brace, and which carries a clamping-screw 13 for engaging the brace to the screw at any desired adjustment. The arms 11 are introduced into the chimney when they are folded and are afterward expanded to engage the inner face of the front wall of the chimney or flue, and they are secured firmly against the same by the clamping-screw 13.

The adjacent edges of the inner and outer sections of the adjustable brace are flattened, as illustrated in Fig. 4 of the accompanying drawings. The inner section 5 is provided at its upper edge with a series of teeth 14, beveled at their outer sides and shouldered at their inner sides and adapted to be engaged by a tooth 15 of the inner end of the outer section, and the said inner section is provided at its upper edge with a longitudinal groove 16, adapted to receive the point of the tooth 15 to form a guide for the same. The groove 16, which guides the engaging tooth 15, also prevents the rod from turning and throwing the tooth out of engagement with the shoulders 14 in adjusting the parts. The sections 5 and 6 are connected by a link 17, located adjacent to the inner end of the outer section by an eye or ring 18, arranged at the outer end of the inner section and formed by coiling the terminal of the section 5, as shown. The section 6 is provided at its upper edge with a notch 19 to receive the upper end of the link and to retain the latter in proper position.

The sections of the brace are adapted to be

moved on each other to vary its length, and the thumb-nut, at the outer end of the brace, enables the precise adjustment to be obtained and firmly clamps the parts together. The adjustable brace may be interlocked with a chimney or flue by other suitable anchoring devices than that shown and described in the present application, as will be readily understood, and it is capable of holding the joints or sections of a stovepipe firmly together.

It will be seen that the combined brace and anchor is simple and inexpensive in construction, that it is strong and durable, and that it is adapted to secure a stovepipe firmly to a chimney or flue and to support it in proper position. It will also be apparent that the combined anchor and brace is adapted to be adjusted to suit the length of the horizontal arm of the stovepipe and the width of the chimney.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What we claim is—

1. In a device of the class described, the combination of a brace designed to be arranged in a stovepipe and to be connected with the same, an adjustable block secured to the rod and folding anchor-arms mounted on the block and adapted after they have been introduced into the chimney or flue to be expanded to engage the same, substantially as and for the purpose described.

2. In a device of the class described, the combination of a horizontal brace designed to be arranged in a stovepipe and to project into a chimney or flue, an adjustable block mounted on the inner end of the brace, pivoted anchor-arms connected with the block

and adapted when swung outward to engage the interior of a chimney or flue, a nut arranged on the outer end of the brace, and a triangular washer mounted on the brace and adapted to be interposed between the nut and the elbow of the stovepipe, substantially as described.

3. In a device of the class described, the combination of a brace comprising inner and outer sections, one of the sections being provided with a series of shoulders having a longitudinal groove and the other section having a tooth guided in and held against lateral movement by the said groove and adapted to engage the shoulders, whereby the brace is adapted to be adjusted, means for slidingly connecting the sections, an anchoring device for securing the brace to a chimney or flue, and a fastening device for securing a stovepipe to the brace, substantially as described.

4. In a device of the class described, the combination of a brace comprising an inner section, provided with a series of shoulders having a longitudinal groove and provided at its outer end with an eye, the outer section passing through the eye and provided with a tooth arranged to slide in the groove and adapted to engage the shoulders of the inner section, a ring connecting the sections adjacent to the inner end of the outer one and interlocked with the same, an anchoring device, and means for securing the stovepipe to the brace, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ARTHUR A. REASER.
RAY D. HUBBARD.

Witnesses:

O. A. ROBINSON,
BERTHA FLETCHER.