

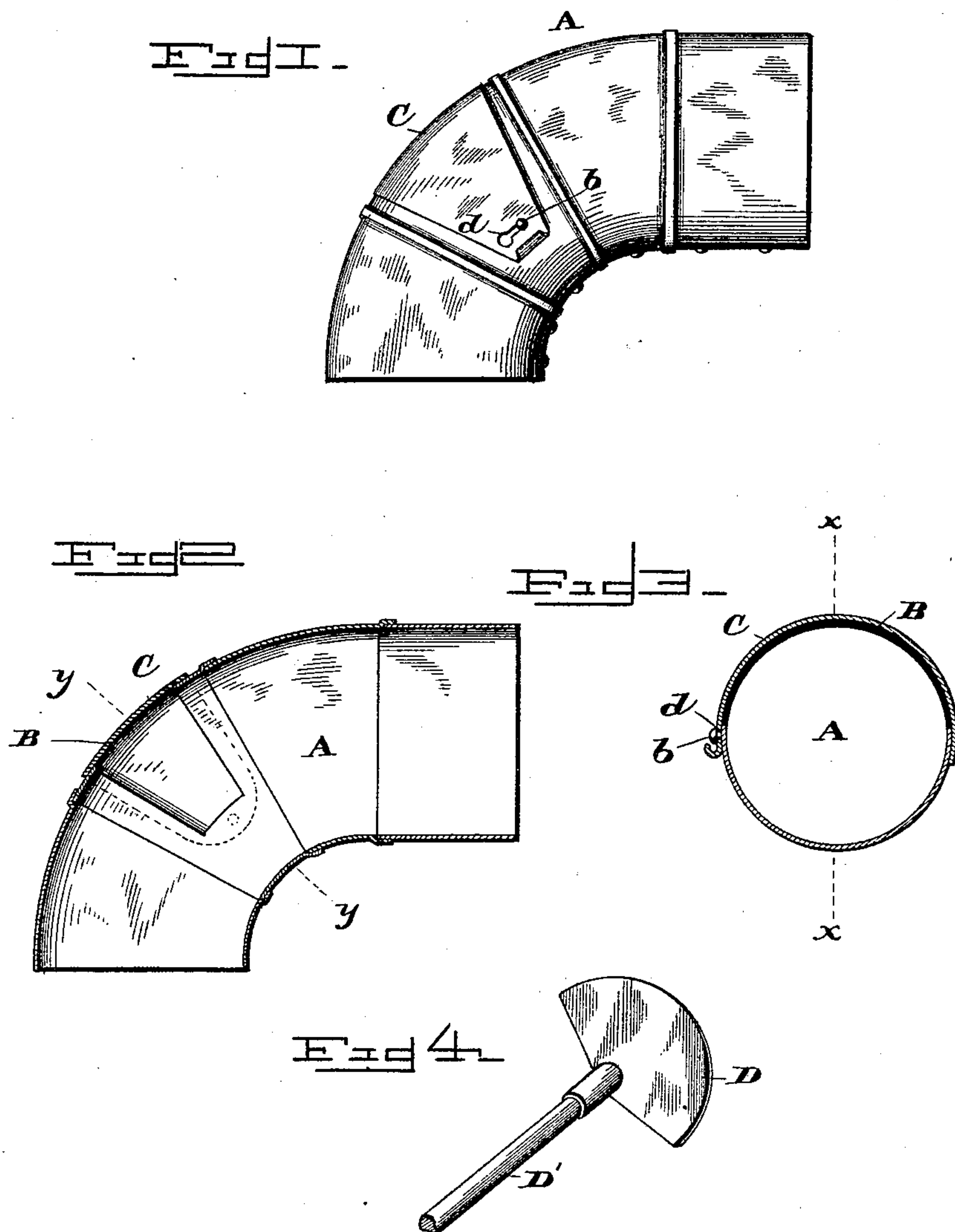
(No Model.)

O. G. CRANSTON.

ELBOW FOR FACILITATING THE CLEANING OF STOVEPIPES.

No. 480,173.

Patented Aug. 2, 1892.



Witnesses
Paul W. Stevens
Philip C. Massi.

Inventor
Otto G. Cranston
by E. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

OTTO G. CRANSTON, OF KINCAID, KANSAS, ASSIGNOR OF TWO-THIRDS TO
WALTER F. RICHARDS, OF QUINCY, ILLINOIS.

ELBOW FOR FACILITATING THE CLEANING OF STOVEPIPES.

SPECIFICATION forming part of Letters Patent No. 480,173, dated August 2, 1892.

Application filed December 24, 1891. Serial No. 416,034. (No model.)

To all whom it may concern:

Be it known that I, OTTO G. CRANSTON, a citizen of the United States, and a resident of Kincaid, in the county of Anderson and State of Kansas, have invented certain new and useful Improvements in Elbows for Facilitating the Cleaning of Stovepipes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side view of the elbow. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section. Fig. 4 is a detail view of the scraper.

This invention has relation to certain new and useful improvements in the construction of elbow-joints for stovepipes; and it consists in the novel construction and combination of parts, as hereinafter specified.

It frequently happens that after a stove-pipe has been set up and in use for any length of time it becomes choked or clogged by the soot or the products of combustion to a sufficient extent to obstruct the draft and seriously impair the operation of the stove. The angles or elbows and horizontal portions of the pipe are the portions wherein such choking or clogging is most likely to occur, owing not only to the more horizontal position of the inner wall of the pipe, but also to the fact that at such points the gases and products of combustion are turned in their course and deflected against the walls of the pipe, where they settle or adhere. With the joints ordinarily in use, when such choking or clogging occurs it is necessary to take down the pipe in order to remove the accumulated products of combustion therefrom. This operation is not only attended with considerable time and labor, but unless great care is exercised the dirt and soot are liable to be scattered upon the floor or carpet and the air filled with the fine particles or dust.

This invention consists in constructing the angles or elbow-sections in such a manner that they and the horizontal portions of the

pipe may be readily cleaned without necessitating the taking down or removal of the pipes.

In the accompanying drawings I have illustrated one of my improved elbow or joint sections. This elbow or joint is shown as having an opening or slot B, communicating with the interior thereof, said aperture being cut through the metal forming the pipe.

C is a slide or pivoted plate arranged to normally close the opening or aperture. This plate is preferably of a spring character in order that it may be drawn into close contact with the pipe around the edges of the aperture, so as to prevent the escape of any smoke therefrom. Said cover or plate is secured to the pipe loosely or pivotally at one end portion, its opposite end portion having an approximately keyhole-shaped slot *d* therein, adapted to be engaged by a headed pin or projection *b* on the pipe when in closed position, said slot and pin forming a lock therefor. The hole or aperture B may be cut in the elbow at any desired point and may be of any shape and size sufficient to allow the introduction therethrough of a scraping or cleaning device.

This cleaner may be any device suitable for the purpose. In Fig. 4 I have shown such a device, which may be employed, comprising a semicircular blade D, formed with a socket *d*, in which is secured a handle D'. The joints or seams which unite the sections of pipe forming the elbow are so constructed that the raised portions thereof are all on the outside of the pipe, leaving the interior perfectly smooth, so as to present no obstacle to the operation of the scraper. By unfastening one end of the cover or plate C and swinging it back out of the way the scraper may be introduced and the elbow and horizontal pipe portion thoroughly cleaned without taking down the pipe, the soot and dirt falling down the pipe into the stove, from which it may be removed.

Having described this invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described elbow or joint for stovepipes, having in the outer wall of its

bend an opening or slot B and a spring-metal pivoted plate designed to close said opening, substantially as specified.

2. The herein-described elbow or joint for
5 stovepipes, having in the outer wall of its bend an opening B and a spring-metal plate adapted to closely fit the surface of the pipe and close said opening, one end of said plate being connected to the pipe by a pivot-pin
10 and an approximately-keyhole-shaped slot in

its other end portion designed to engage a headed pin or projection of the pipe, substantially as specified.

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

OTTO G. CRANSTON.

Witnesses:

M. H. IGON,

J. E. SCRUGGS, Jr.