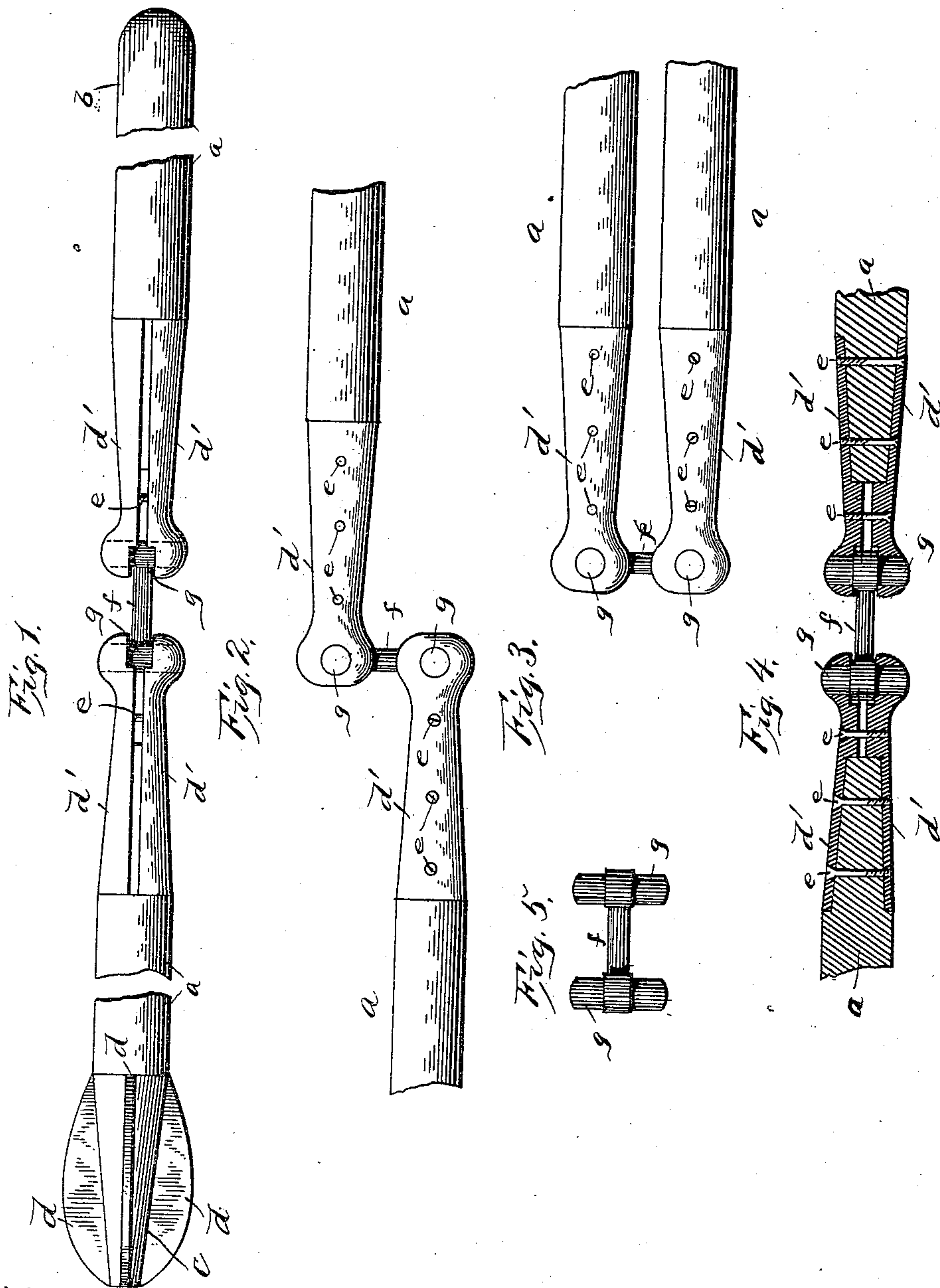


(No Model.)

T. R. BUTMAN.  
FLUE CLEANING ROD.

No. 426,912.

Patented Apr. 29, 1890.



Witnesses:

*O. B. Dwyer*  
*Chas. M. Werle*

Inventor:  
T. R. Butman  
per *O. B. Dwyer*  
Attorney

# UNITED STATES PATENT OFFICE.

THOMAS REED BUTMAN, OF CHICAGO, ILLINOIS.

## FLUE-CLEANING ROD.

SPECIFICATION forming part of Letters Patent No. 426,912, dated April 29, 1890.

Application filed March 31, 1890. Serial No. 346,092. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS REED BUTMAN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Flue-Cleaning Rods; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in flue-scraping rods.

The object of the invention is to provide an improved flue-scraping rod exceedingly cheap, simple, and durable in construction, so constructed that the rods can be used around angles and between partitions to clean the flues, and when out of use can be folded with the sections or lengths lying parallel and at right angles to the connecting-link of the joint. These objects are accomplished by and this invention consists in certain novel features of construction and in combinations of parts, more fully described hereinafter, and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is an elevation of the scraping-rod. Figs. 2 and 3 are elevations showing the joint between two rod-sections and the rods in different positions. Fig. 4 is a longitudinal section through the joint. Fig. 5 is a plan of the connecting-link and its end cross-bars or journals.

In the drawings, the reference-letter *a* indicates the rod-sections. The rod is composed of any desirable number of sections, and these sections are preferably composed of wood or other non-conducting material, the end of one section forming handle *b* and the outer end of the opposite end section being provided with a metal ferrule *c*, having a threaded socket to receive the threaded shank of the brush and with centering guide-wings *d*.

The sections at their inner ends are fitted

with longitudinally-separable ferrules *d'* extending from the ends of said section and bifurcated at their outer ends. Each ferrule is formed in two longitudinal sections or halves fitting on opposite sides of the end of the rod-section and secured thereon by bolts or screws *e* passed through the ferrule-sections and the rod end. The rod-sections are secured together by a rigid link *f*, provided on its ends with rigid cross-bars or journals *g g*, each cross-bar being transversely located in the bifurcated end of a ferrule and journaled to rotate in the outer ends of the two opposite sections of the ferrule, so that the connecting-link can move in the space between said ends.

The connecting-link should be of sufficient length to allow the rod-sections to fold parallel and at right angles to the link, the rod-sections being allowed to swing in two directions.

The broad features of this invention are claimed in an application filed by me February 6, 1890, Serial No. 339,893, this application claiming only the specific construction of rod here shown.

What I claim is—

1. A flue-scraper comprising two sections having ferrules on their adjoining ends forming sockets, and the connecting-link having cross-bars rigid with its ends and journaled in said sockets.

2. A flue-scraping rod consisting of the rod-sections, longitudinally-separable ferrules secured on the inner ends thereof having their adjoining ends bifurcated, and the rigid connecting-link having cross-bars rigid with its opposite ends and journaled in said bifurcated ends of the ferrules to allow the rod-sections to swing in two directions or fold parallel at right angles to the link, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS REED BUTMAN.

Witnesses:

EDWARD C. QUIMBY,  
SETH J. HOBBS.