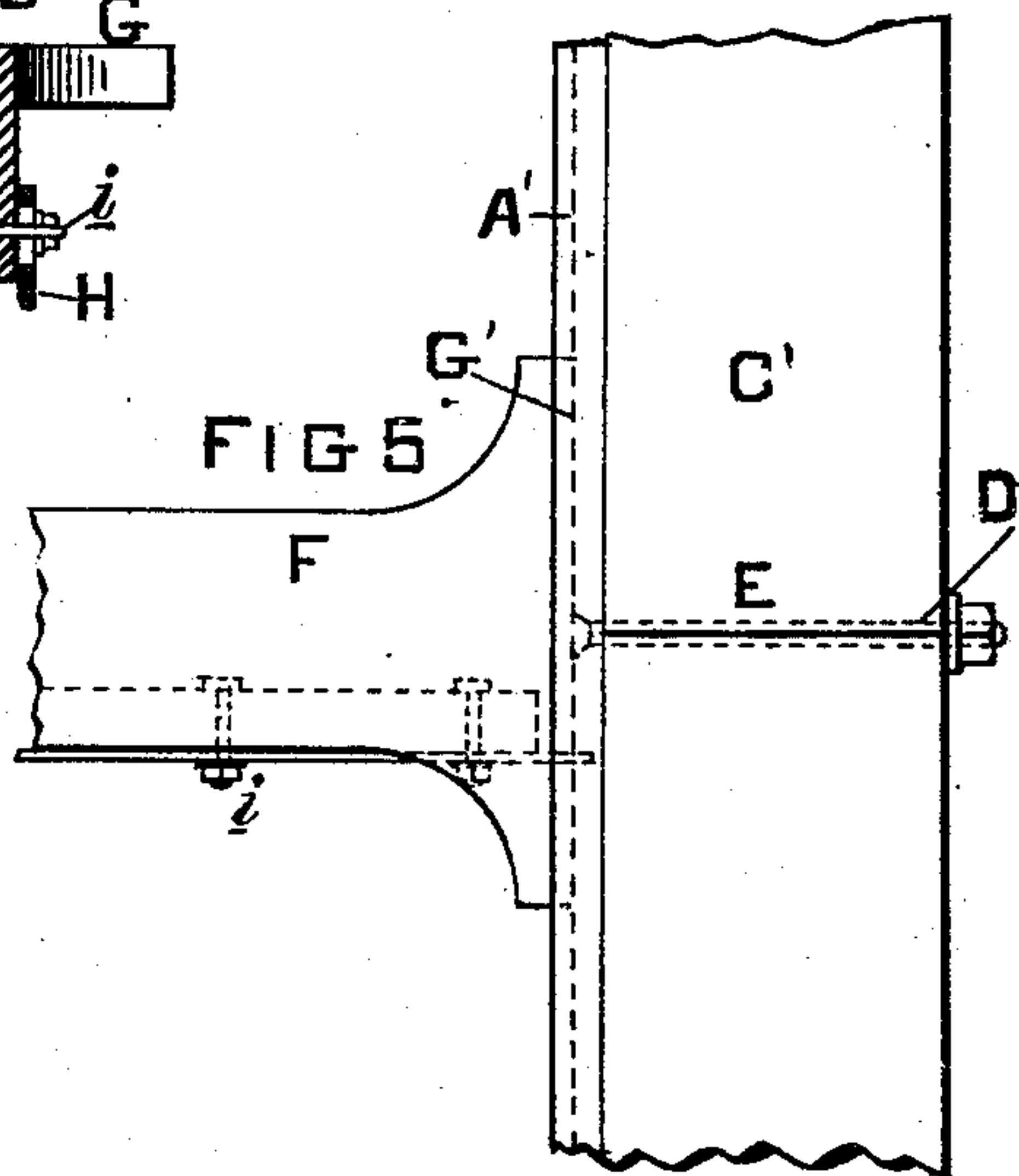
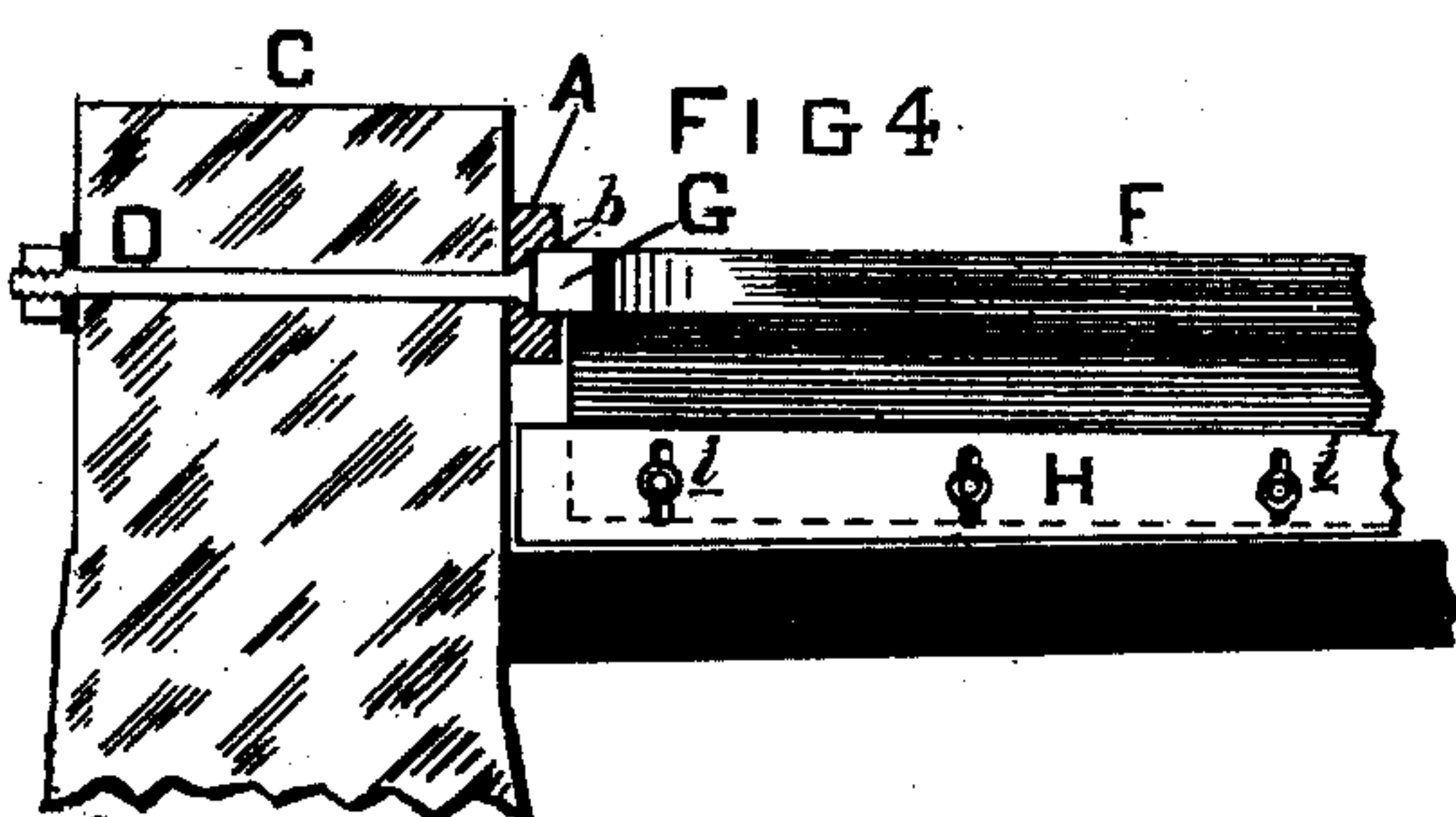
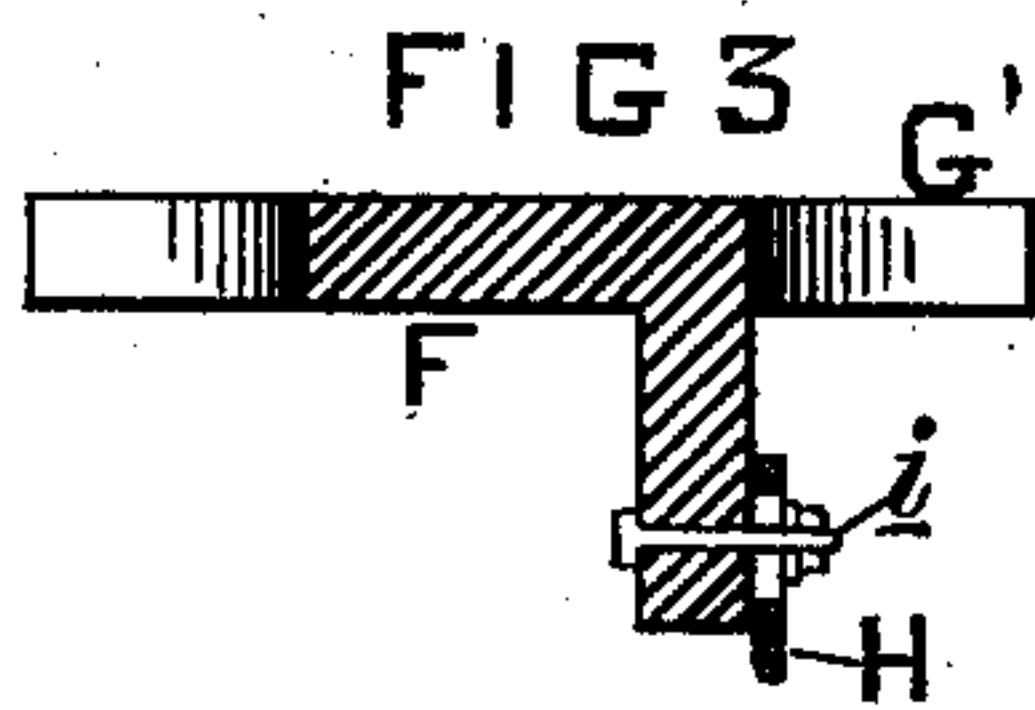
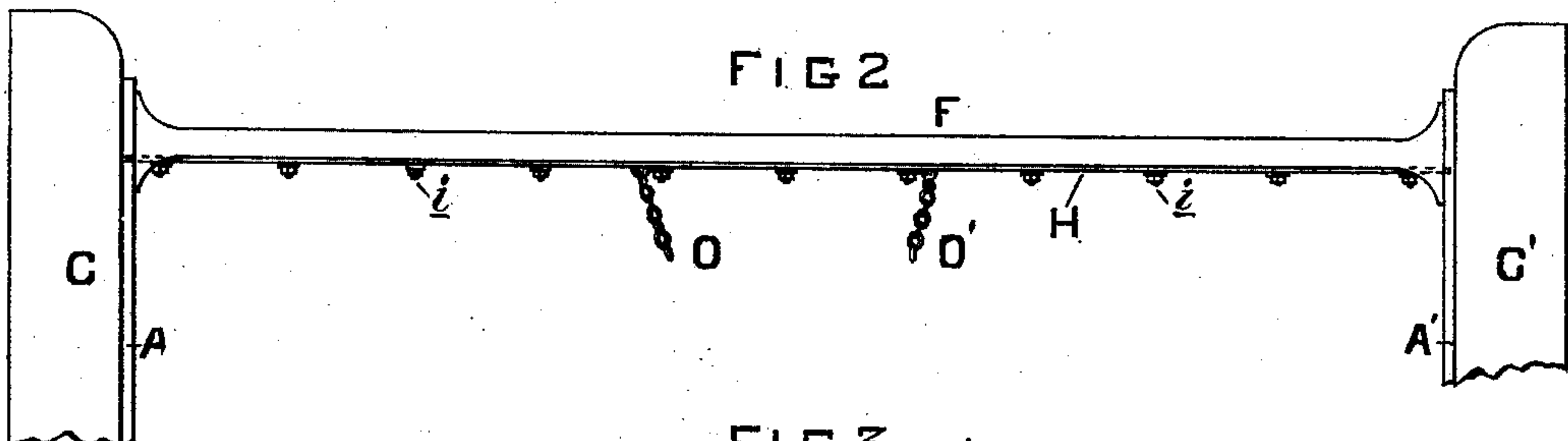
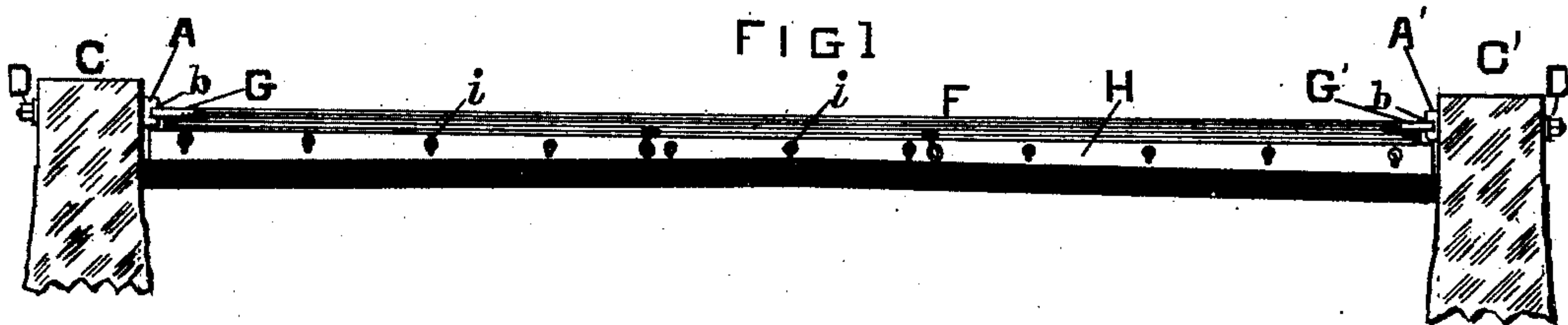


(No Model.)

J. F. STOKES.  
MACHINE FOR CLEANING STREETS.

No. 472,646.

Patented Apr. 12, 1892.



WITNESSES  
*John H. Dougherty*  
*John D. Ruff*

INVENTOR  
*Joseph F. Stokes*  
BY  
*Isaac R. Oakford.*  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

JOSEPH F. STOKES, OF PHILADELPHIA, PENNSYLVANIA.

## MACHINE FOR CLEANING STREETS.

SPECIFICATION forming part of Letters Patent No. 472,646, dated April 12, 1892.

Application filed November 27, 1891. Serial No. 413,320. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH F. STOKES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Cleaning Streets; 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.

The object of my invention is to provide a machine for effectually cleaning streets from curb to curb and the full length of a square or block in a short space of time by one continuous operation.

My invention consists of a sliding beam extending the width of the street, arranged to work within grooved rails secured to the sides of the curbstones, and carrying with it a scraper to pass over the surface of the street where the paving is of cement or asphalt. The machine thus constructed is impelled by means of animal or other power.

In the drawings, Figure 1 is a front elevation of my invention. Fig. 2 is a plan view of the same. Fig. 3 is a sectional view through the center of the beam and scraper. Fig. 4 is a front elevation, enlarged, of one end of the machine, showing the curbstone in section and the means of attaching the rails thereto. Fig. 5 is a plan view of the same on the opposite end.

The rails A and A', Figs. 1, 2, 3, 4, and 5, are each provided with a longitudinal groove or recess b and are secured parallel, the proper distance above the gutters, to the sides of the curbstones C and C' by means of bolts D, Figs. 4 and 5, which pass through countersunk holes within the grooves and through openings formed by a semicircular depression made in each stone at the abutting ends or junction, as shown at E, Fig. 5. The nuts and washers on the ends of the bolts D for holding the rails firmly in position are screwed up against the inner sides of the curbstones.

The beam F, Fig. 3, may be made of rolled angle-iron or steel or entirely of wood and of sufficient length to extend across the street from curb to curb. The ends of the horizontal flange of the said beam are extended to

form tongues G G', Figs. 4 and 5, which engage with the grooves in the rails A and A' and are spread outward to increase the length of the tongues, to impart additional stiffness to the beam, and insure its moving parallel within the grooves.

The steel scraper H, which is attached by means of bolts i for adjustment to the lower portion of the vertical flange of the beam F, has its lower edge made to conform to the curvature of the street, Figs. 1 and 4, so that when the machine is drawn forward the dirt is removed simultaneously across the entire width of the street. The scraper H, which consists of a flat bar of steel or iron, may be arranged, if desired, to clamp a strip of rubber or other suitable material against the beam in such manner that the lower edge of the rubber will extend down and rest upon the surface of the street.

In operating the machine the tongues on the beam or frame are adjusted to the grooves in the rails at the intersection or crossing of two streets.

O O', Fig. 2, are chains secured to the front part of the beam or frame, to which a horse is attached to draw the machine forward, thus scraping or sweeping the entire width of the street between the curbs at one operation, the dirt or sweepings being deposited in a pile at the end of each square or block.

The streets are to be cleaned at night or such times as least obstructed.

The main or principal feature of my invention consists in the arrangement of the grooved rails and sliding beam or frame; and

What I claim, and desire to secure by Letters Patent, is—

1. In combination with the curbstones C and C' and grooved rails A and A', secured thereto, the sliding beam F and scraper H, adapted to clean a street between the curbs at one continuous operation, substantially as shown and described.

2. The combination of the beam F, tongues G and G', scraper H, bolts i, chains O O', rails A and A', grooves b, bolts D, and curbstones C and C', substantially as and for the purpose shown and described.

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

JOSEPH F. STOKES.

Witnesses:

CHAS. H. DOUGHERTY,  
JOHN D. RUOFF.