

W. Mendham,

Paper Folder.

No. 104,621.

Patented June 21, 1870

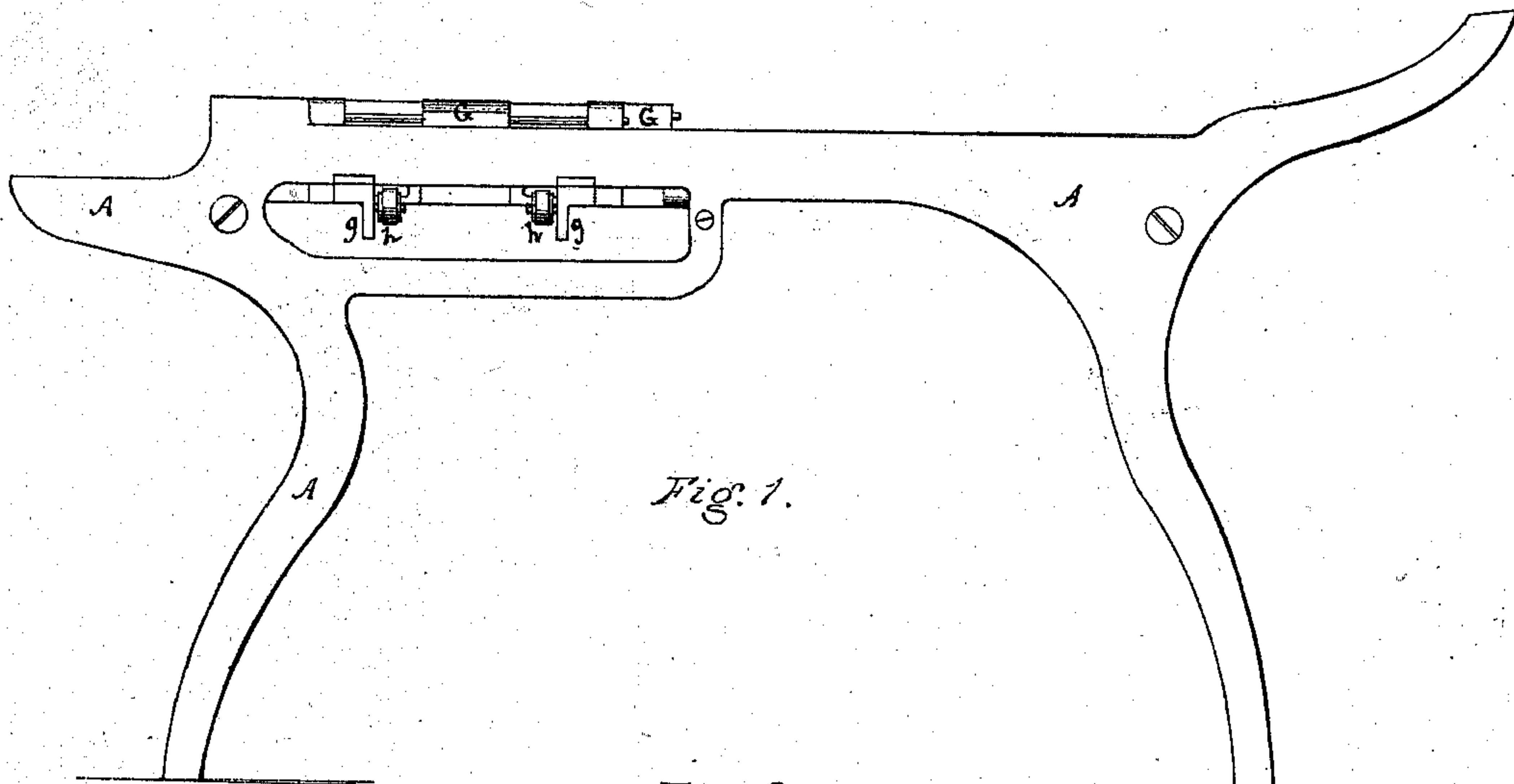
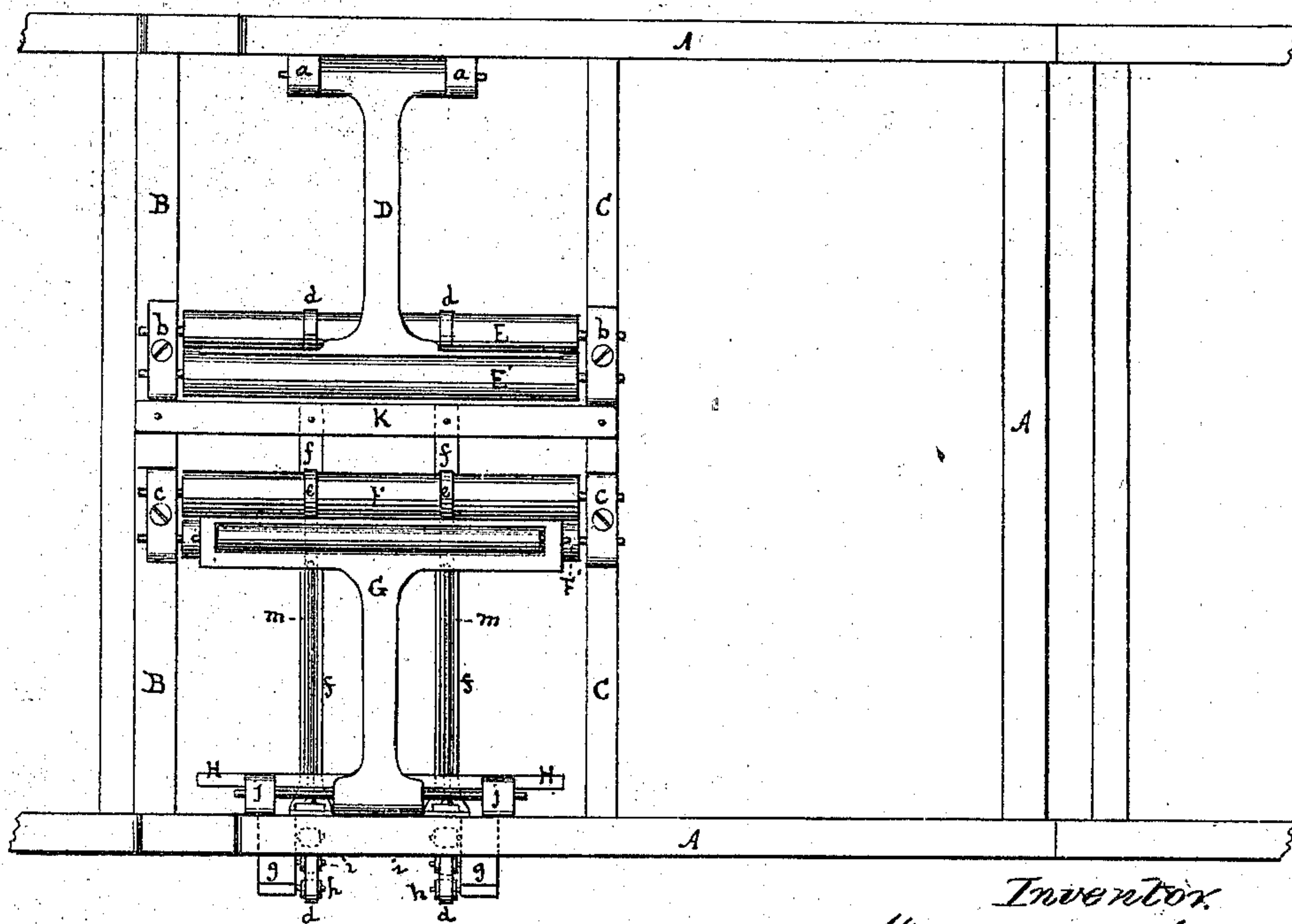


Fig. 1.

Fig. 2.



Witnesses.

J. H. Howard

a. e. Bradley

Inventor.

Wm. Mendham

By his Attorney

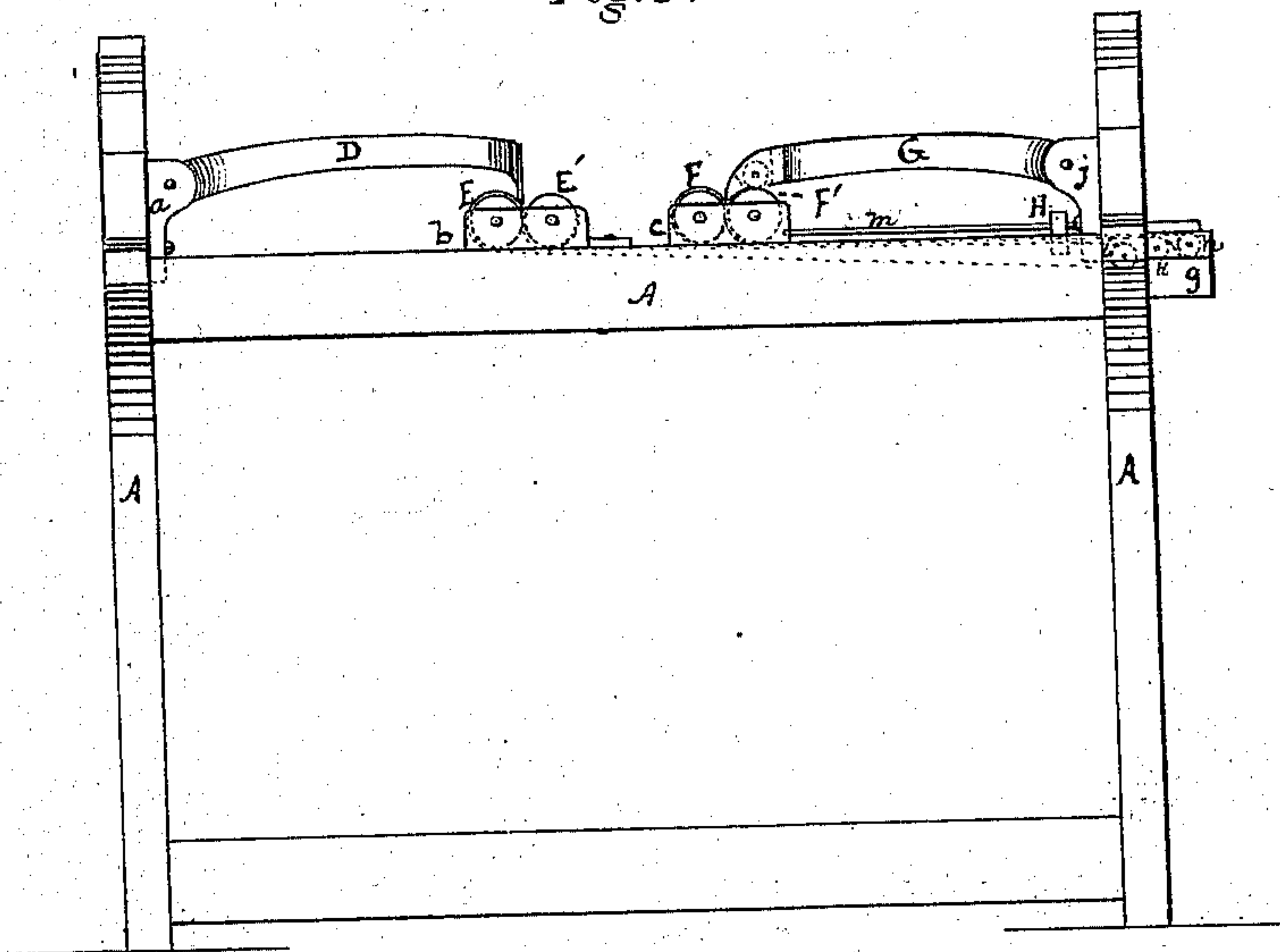
Chas. F. Pansbury

*W. Mendham,  
Paper Folder.*

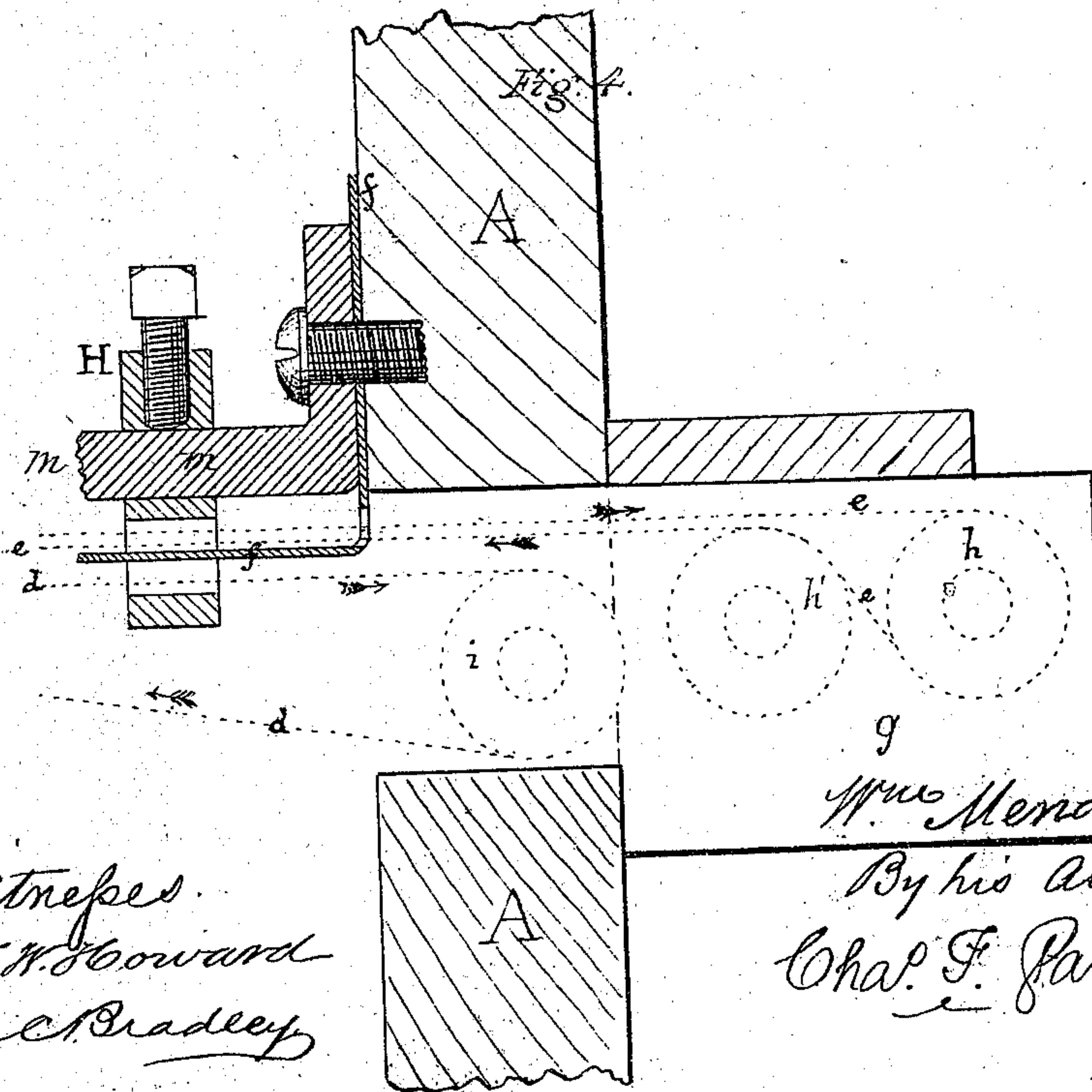
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*Fig. 3.*



*Fig. 4.*



*Witnesses.  
E. H. Howard  
A. C. Bradley*

*W. Mendham  
By his attorney  
Chas. F. Pansbury*



# UNITED STATES PATENT OFFICE.

WILLIAM MENDHAM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
EDWIN CHAMBERS AND CYRUS CHAMBERS, JR., OF SAME PLACE.

## IMPROVEMENT IN PAPER-FOLDING MACHINES.

Specification forming part of Letters Patent No. **104,621**, dated June 21, 1870.

*To all whom it may concern:*

Be it known that I, WILLIAM MENDHAM, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Paper-Folding Machines; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a side elevation of my improved machine. Fig. 2 is a top view or plan; Figs. 3 and 4, detail views.

The same letter refers to the same part in the several figures where it occurs.

This invention is an improvement on the machine patented by Cyrus Chambers, Jr., the 27th of November, 1860, numbered 30,719. That machine was for doing 12mo. folding, and combined the mechanism for cutting off the "inset," placing it on the "outset" or main sheet, in proper position, and folding it therewith. In that machine the friction between the inset and outset was relied upon as the impelling force to carry the two along to the proper position for being folded together.

My improvement relates to the mode of carrying the inset and outset to the point where they are to be folded together; and consists in conveying them to that position independently of each other, in the manner hereinafter set forth.

The drawing represents only so much of the mechanism as is concerned in the conveyance of the inset and outset to the position at which they are to be folded together, the other portions of the machine being the same in construction and operation as the parts for corresponding purposes of the machine described in the patent of Chambers before referred to.

In the drawing, A marks the frame of the machine, B and C indicating the cross-rails which support the folding-rollers. D is a folding-knife, hung to lugs *a a*, attached to the inside of the frame. The office of this knife is to introduce the main sheet or outset, after severance from the inset, between the rollers E E', which are hung in journal-boxes *b b* on cross-rails B C. Over roller E pass the conveying-tapes *d d*, which are also supported by the small rollers *i i*, hung in brackets *g g*, at-

tached to the outside of the frame. A second pair of rollers, F F', hung in the boxes *c c* on rails B C, receives and conveys the inset after its severance from the outset. It is introduced between them by the knife G, hinged to lugs *j j* on the frame. Tapes *e e*, passing around rollers F and *h*, support the inset during its passage to the stop H. The rollers *h h* are hung to brackets *g g*. The stop H is adjustable on the rods *m*. To the cross-bar K are attached two thin bars, *f f*, which intervene between the returning side of the tapes *e e* and the carrying side of the tapes *d d*, to prevent the outset from being disturbed by the returning tapes and to hold it properly to its carrying-tapes. The tape runs through an opening in the angle-piece, as seen in Fig. 4.

It will be observed that the peculiarity of this invention consists in arranging two rollers instead of one at the point where the inset is turned upside down, in close proximity to each other, and in passing around said rollers a set of tapes, which will conduct the inset independently of the outset until its cut edge strikes the stop H, while at the same time the outset is carried by another set of tapes from the rollers which gave it its second fold to the proper position under the inset to be folded with it, and this regardless of the relative time in which the two are carried, instead of depending, as in Chambers' machine, patented October 7, 1856, upon the friction of the outset to carry the inset.

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

In a paper-folding machine, in which an inset and outset are folded together, the conveying-tapes *e*, supporting the inset continuously to the stop, combined with the outset conveying-tapes *d*, the separating-bars *f*, and covering-bars *m*, all constructed substantially as and for the purpose described.

The above specification of my said invention signed and witnessed at Philadelphia this 19th day of March, A. D. 1870.

WILLIAM MENDHAM.

Witnesses:

THORWALD CHR. DAMBORG,  
W. PRICE DAVIS.