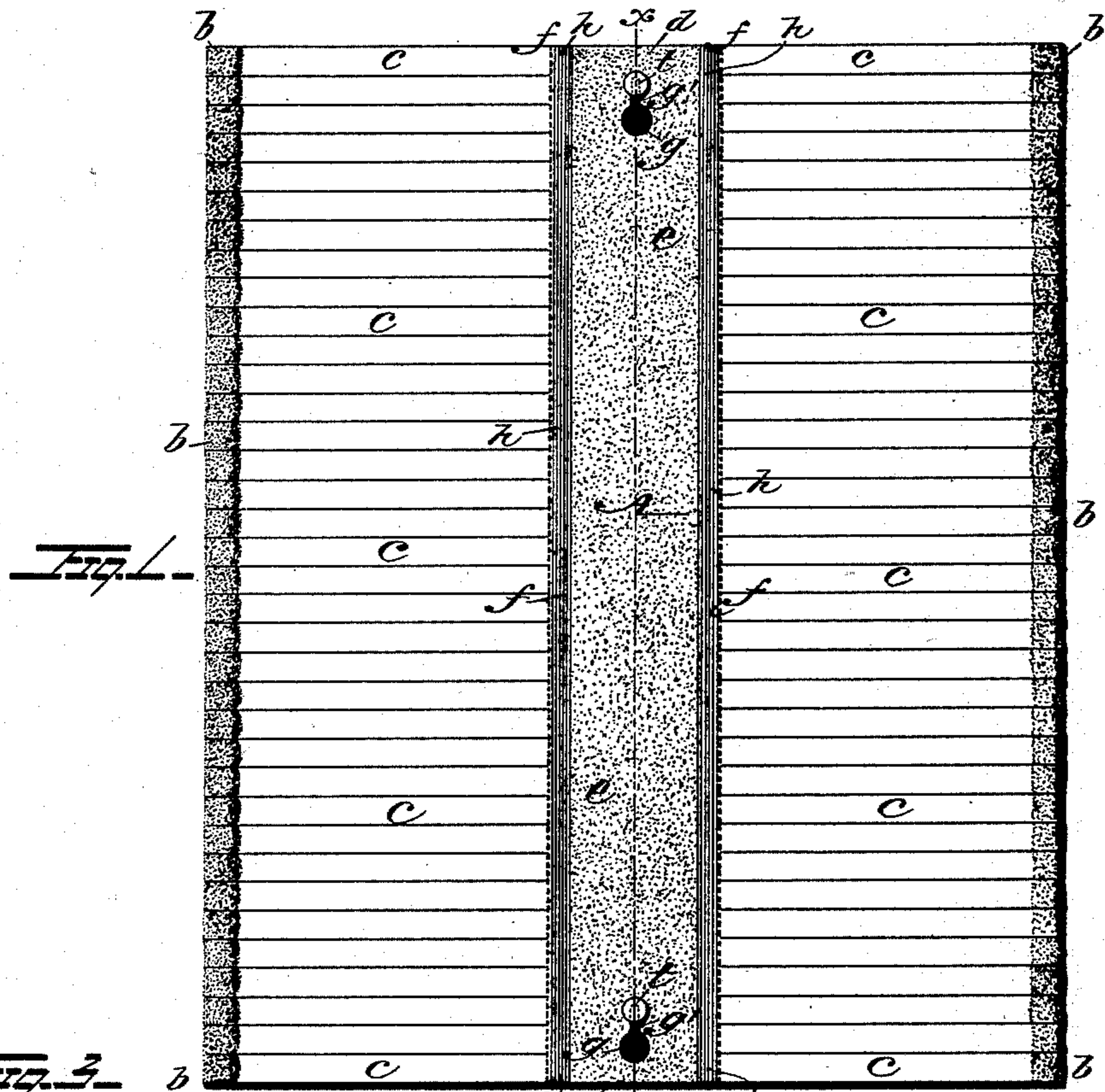


(Model.)

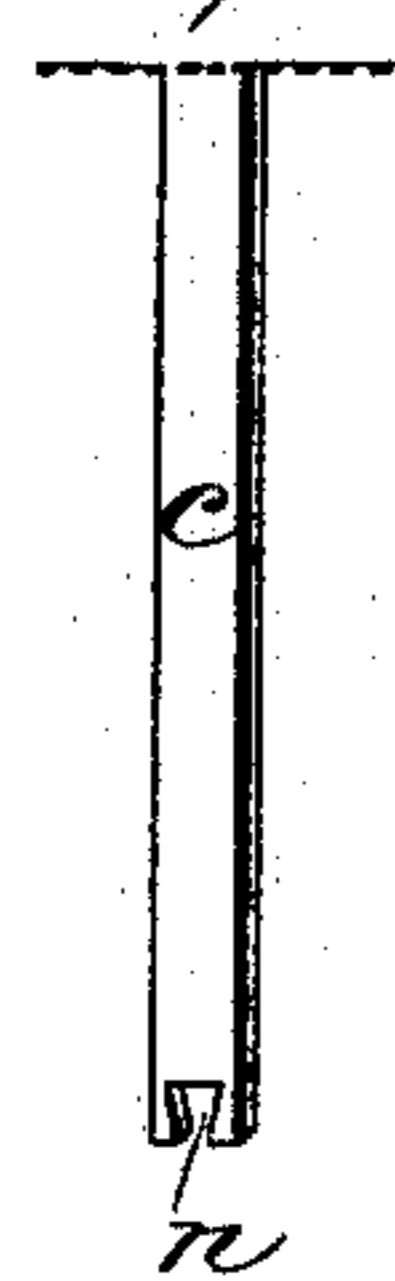
J. PUSEY.  
FRICTION MATCH CARD.

No. 483,165.

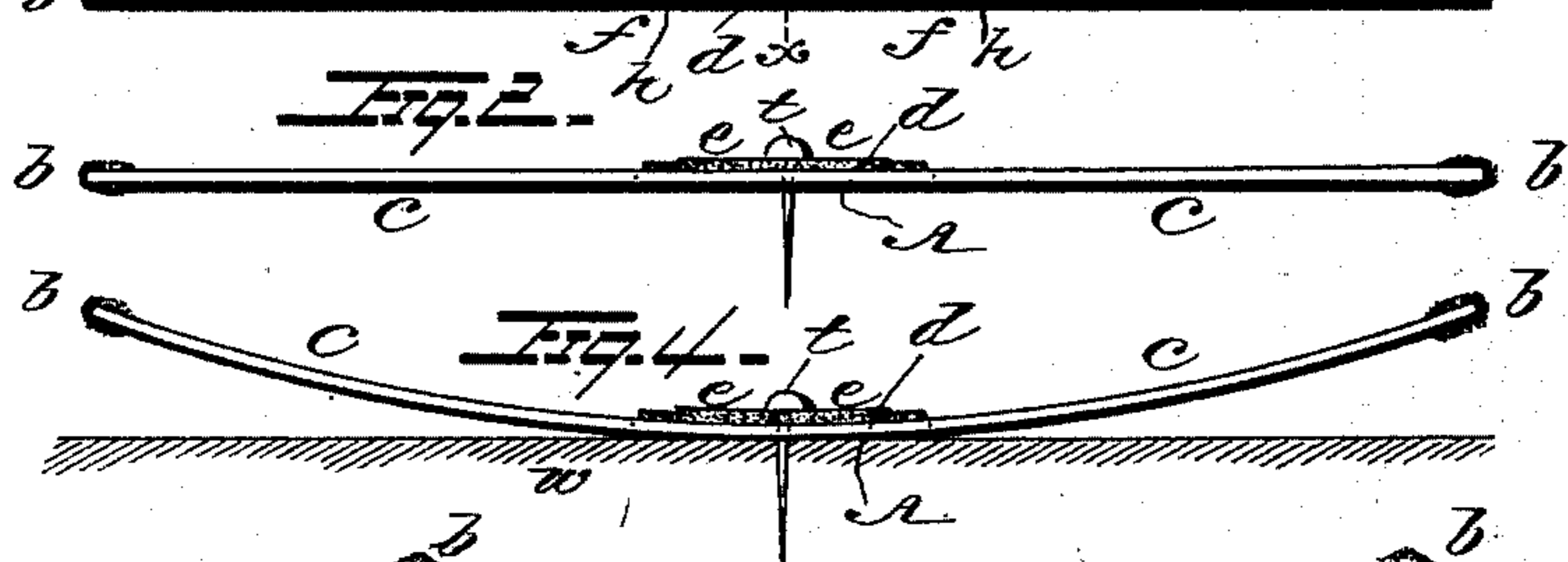
Patented Sept. 27, 1892.



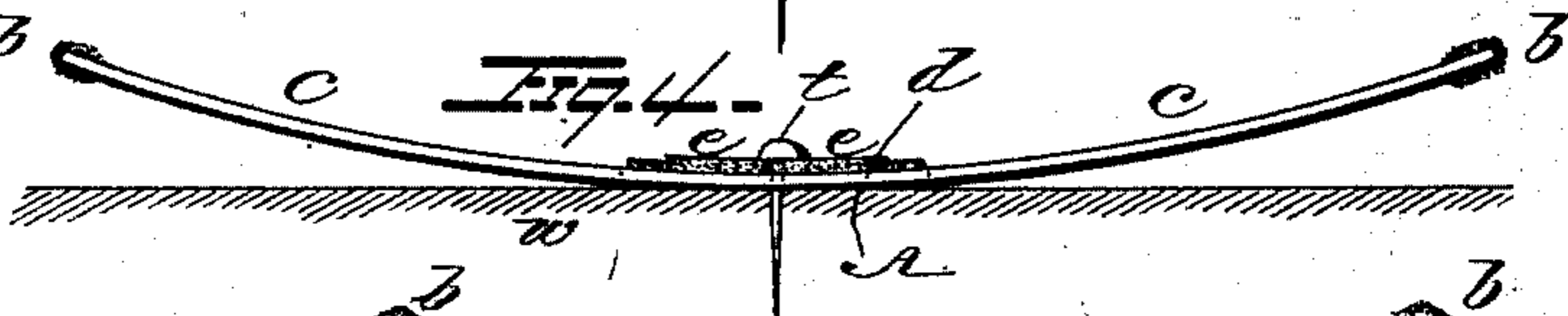
*Fig. 3*



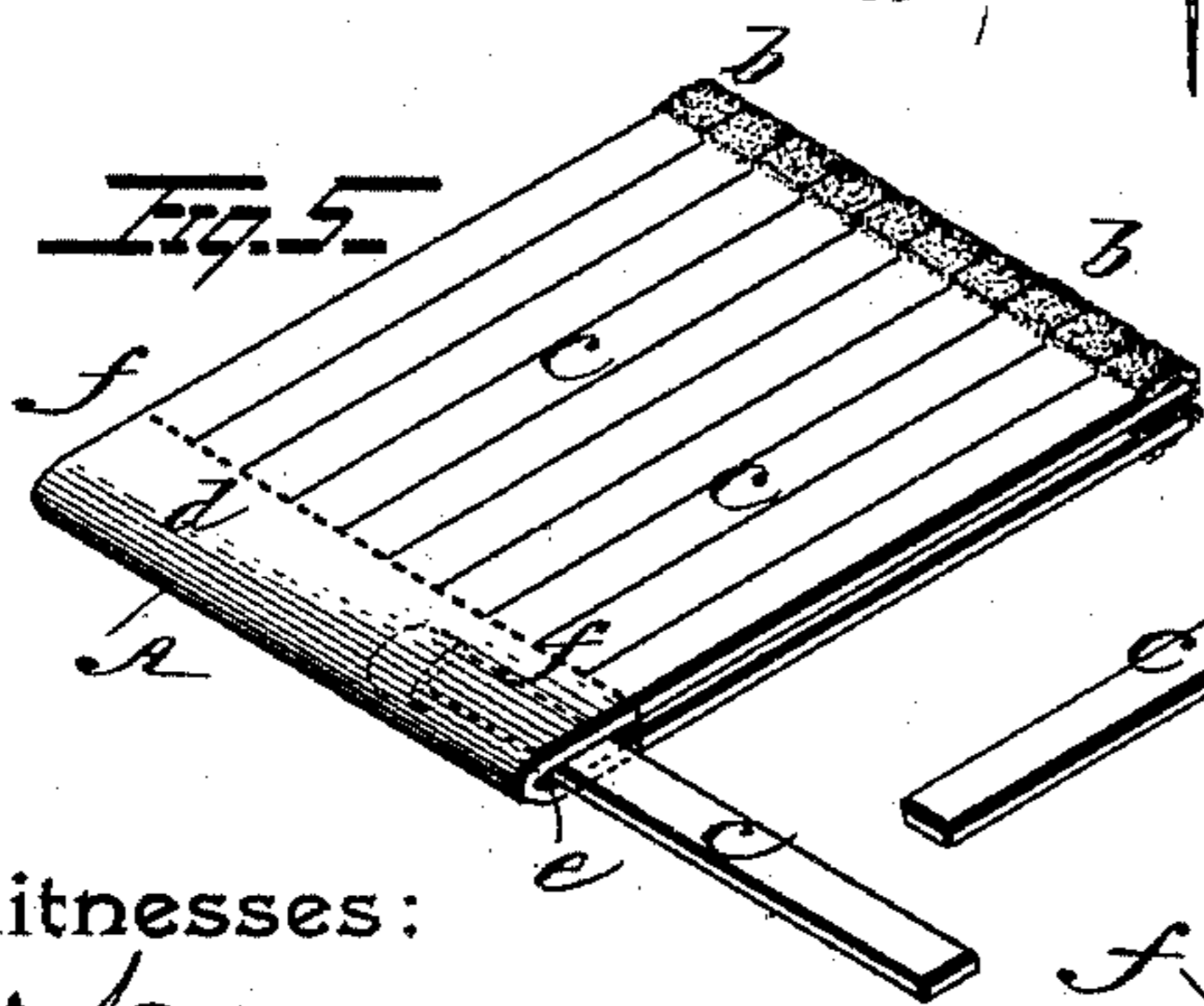
*Fig. 2*



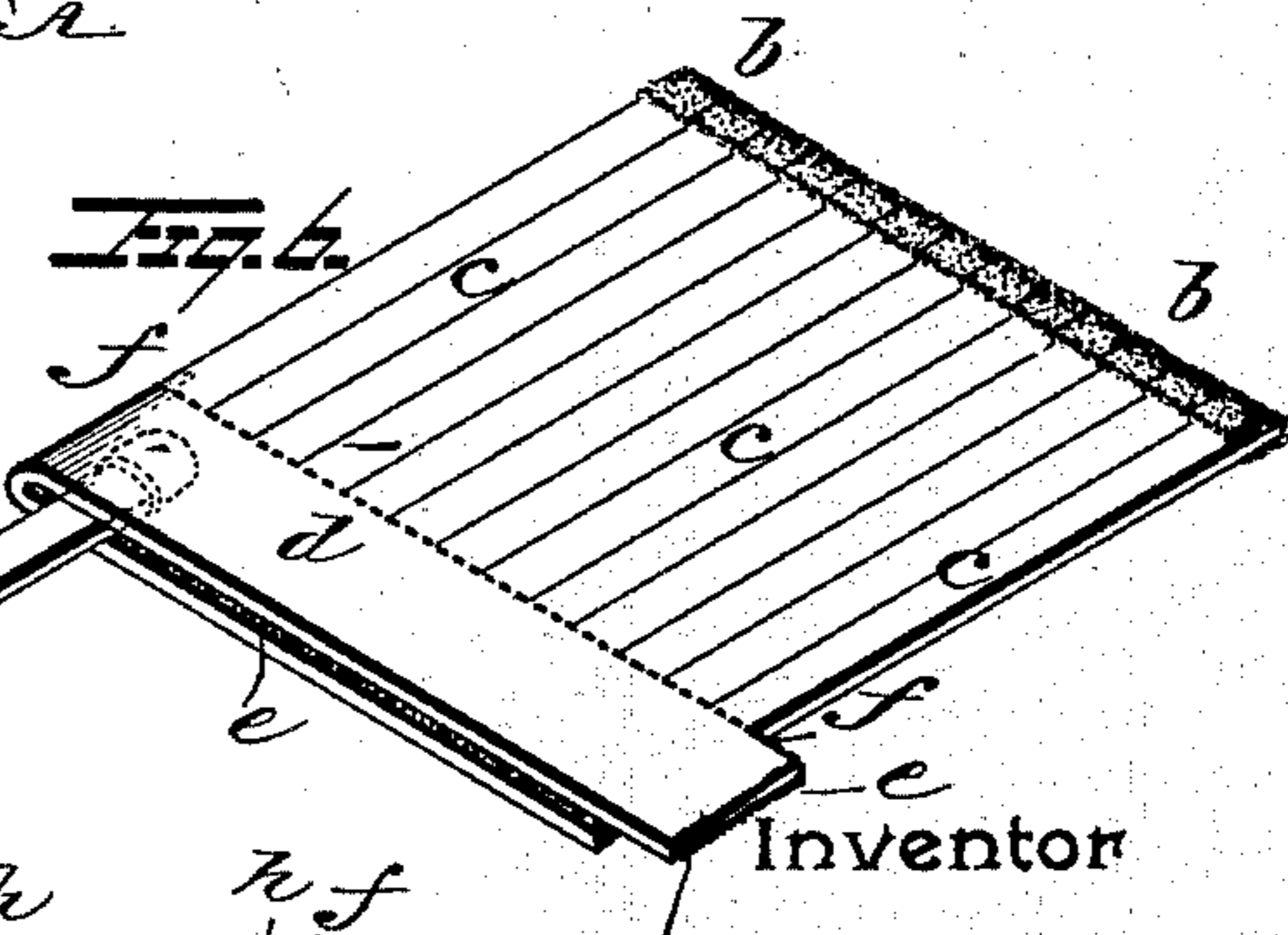
*Fig. 4*



*Fig. 5*



*Fig. 6*



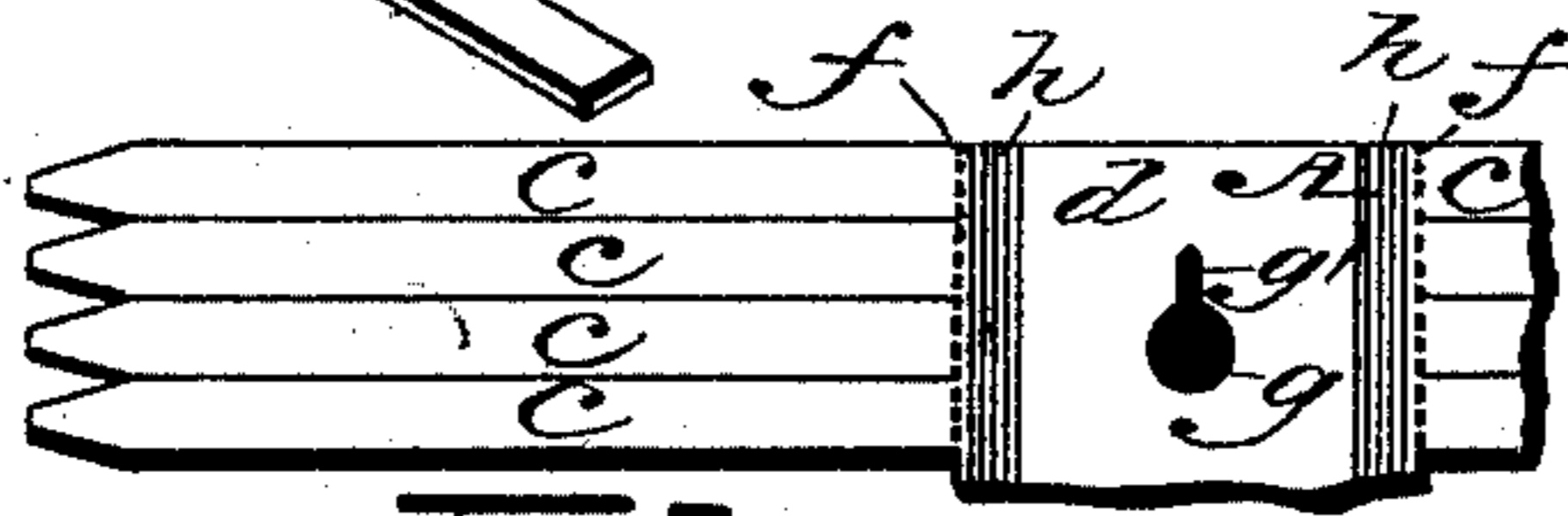
Witnesses:

*John Talan*  
*W. Buckley*

Inventor

*Joshua Pusey*

*Fig. 7*



# UNITED STATES PATENT OFFICE.

JOSHUA PUSEY, OF LIMA, PENNSYLVANIA.

## FRICITION-MATCH CARD.

SPECIFICATION forming part of Letters Patent No. 483,165, dated September 27, 1892.

Application filed August 6, 1889. Renewed November 8, 1891. Serial No. 410,732. (Model.)

*To all whom it may concern:*

Be it known that I, JOSHUA PUSEY, a citizen of the United States, residing at Lima, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Friction-Match Cards, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is an elevation as in position for use. Fig. 2 is an end or edge view detached. Fig. 3 is a splint, enlarged, before being tipped with the ignitable composition. Figs. 4, 5, and 6 illustrate modes of applying and using the device when of pliable material. Fig. 7 shows a preferred form of the ends of the splints to which the ignitable composition is to be applied.

The primary object of my invention is to provide a friction-match card designed to be attached to the wall, &c., in desirable and convenient locations, and which shall be cheap, handy, and safe, both in transportation and in use; and it consists of a series of separate splints of wood, paper, or other suitable combustible material, either rigid or pliable, the free ends of which splints are provided with a frictionally-ignitable composition, and the other ends of which are connected to a common margin or strip which is provided with a prepared igniting surface or composition, the device constituting a match-card which is adapted to be attached to the wall, &c., and whereby any one of the splints may be detached from said margin-strip, and its tipped end being struck against the igniting-surface the splint will be lighted as an ordinary match, the entire margin-strip remaining intact until all the splints have been detached.

The invention consists, further, in certain features or details of construction hereinafter described and duly claimed.

Reference being had to the accompanying drawings, which show the preferred form of my invention, A is a piece or sheet of wood, thick paper, or other combustible material, suitable for the purpose in view, which may be stiff or pliable, to the lateral edge or edges of which is applied any suitable ignitable composition *b*, such as is well known in the manufacture of ordinary "safety" or friction matches. This card is divided into strips or

splints *c*, leaving, however, a plain or undivided portion *d*, which is coated or provided on one or both sides with a surface or composition *e*, which will cause the ignition of the splints when the two compositions are brought into frictional contact. The composition may, however, extend over some distance onto the splint portion, in which case the plain or uncut part may be quite narrow. I usually make a line of perforations or scoring *f* where the splints are connected to the margin-strip, so that they may be readily detached.

As a ready and convenient means of attaching the card to the wall *w*, Fig. 4, or other surface I make a hole *g*, with slot *g'* leading thereto near each end of the margin, whereby by using ordinary tacks or nails *t*, with heads of a size to pass through the holes, the card may not only be attached and secured, but the margin-strip may be as readily removed when the splints are used up and it is desired to substitute another similar card.

It will be obvious that this match-card is not only in very convenient form, but also comparatively inexpensive to manufacture.

In using the device one of the splints is torn or broken off and the ignitable part or head is drawn over the igniting-surface *e*, which lights the splint. When the entire series of splints have been used up, the margin-strip remaining is removed and another similar card replaced.

In order that the card, and particularly the location of the igniting-surface and the line of connection of the splints to the margin-strip, may be discovered in the dark, a line or lines of luminous paint may be applied between said line and the igniting-surface, as shown at *h* in Figs. 1, 2, and 3.

When the card is made of material that can be readily flexed—as, for instance, of thick paper—the splints may be given a set or bend outwardly, so that they will project from the wall, as seen in Fig. 4, and thus they may be the more readily grasped in order to detach the same; also, when the card is sufficiently pliable it or a section cut therefrom transversely may be bent over upon itself, as on line *x*, Fig. 1, with the igniting-surface on the inner sides and the detached splint ignited by placing its tipped end between the two layers and sharply withdrawing it, at the

same time pressing the layers together to cause the necessary friction, (see Fig. 5;) or, the card may be divided longitudinally, as on the line *x*, Fig. 1, then folded over lengthwise, as in Fig. 6, (and thus more conveniently carried in the pocket,) the splint to be ignited being placed between and withdrawn transversely with relation to the igniting-surface.

Instead of applying the ignitable composition to the splint portion of the card before the latter is divided, as described, (which obviously should not be done unless the composition be such as would not be liable to ignite by the friction of the dividing knife or knives,) I usually prefer to apply the composition after the division. In such case before dipping, or immediately thereafter, I bend the ends of alternate splints out of line with the others, whereby they will not stick together. They can afterward be brought back into the same place. Thus another advantage results (so far as the manufacture is concerned) from using a flexible material for the cards. I generally prefer, however, to make the free ends of the splints in the manner illustrated in Fig. 7 of the drawings. This consists in pointing or relatively reducing the size of the ends *b* of the splints to which the composition is to be applied, so that an interspace is left between the adjacent splints of the series, whereby when the ends are dipped, either before or after the division into splint-strips, in the ignitable composition the latter will not bridge or fill the interspace, and thus there will be no sticking of the ends together.

When the card is of quite thick paper or wood, the ends of the splints may be pointed or beveled on all four sides instead of upon the two lateral edges, as shown. I sometimes, also, cut out a notch *n*, Fig. 3, at the end of each splint to which the composition is to be applied, so that there will be not only less projecting bulk of the latter, but more with relation to that part of the splint, and also so that there will be a continuity of the entire mass, (when the division into splints is made after the composition has been applied,) so as to produce quicker and more perfect ignition. I prefer to make said notch as shown—that is, narrowing toward the open end, whereby the composition will be the better retained in place.

I remark that my device is particularly advantageous by reason of its safety in handling, packing, and transporting when the splints are provided with a composition that will not ignite by friction, except when struck against the “complementary” composition, so to term it, upon the marginal strip. As the two surfaces are kept normally out of contact, it requires the act of detaching a splint before they can be brought together. When a number of the cards are packed together, they are laid one upon the other, and of course only like compositions are in contact.

I am aware that a match-splint provided

with an ignitable composition at or near one end and an igniting surface or composition at or near the other end is not new. Such is shown in United States Letters Patent No. 47,848, dated May 23, 1865, and in other patents; also, that a match-card has been described wherein a flat piece of wood is partly divided into splints, the ends of which are provided with an ignitable composition and some portion of the surface of the card provided with an igniting-surface, the splints being broken off longitudinally; also, that it is well known that common sulphur matches have been made in blocks partly severed into splints, the latter being broken off when to be used. None of these, however, combine the ignitable composition on the splints and the igniting surface or composition on a marginal strip, and at the same time adapted to be attached to the wall, &c., and any one of the splints to be detached and leaving the prepared marginal strip entirely intact until and after all the splints have been used up.

Having thus described my invention, I claim as new and wish to secure by Letters Patent—

1. A friction-match card or device consisting of a series of separate splints having their free ends provided with an ignitable composition and frangibly connected to a common marginal strip provided with an igniting surface or composition, whereby any one of said splints may be detached and struck upon said igniting-surface and the said strip remain intact after all the splints have been so detached, substantially as and for the purpose recited.

2. A friction-match card or device consisting of two series of separate splints provided with an ignitable composition at their free ends and having their opposite ends frangibly connected to a common strip, from which the respective series of splints extend laterally, together with the intermediate prepared igniting surface or composition, substantially as described.

3. The friction-match card or device consisting of a marginal strip provided with a prepared igniting surface or composition and a series of separate splints having their free ends provided with an ignitable composition and their opposite ends frangibly connected to said marginal strip and adapted to be detachably secured to the wall, &c., substantially as described.

4. The friction-match card consisting of an integral sheet of paper or other like suitable pliable material partially divided into a series of splints having their free ends provided with an ignitable composition, the surface of the plain or undivided portion of said sheet being provided with a prepared igniting surface or composition, substantially as described.

5. As a new and complete article of manufacture, the friction-match card consisting of a sheet of paper, wood, or other like suitable

material partly divided into a series of splints having their free ends provided with an ignitable composition and the undivided portion of the sheet provided with an igniting surface or composition and with the openings *g g'*, substantially as and for the purpose specified.

6. In combination with the card consisting of the series of match-splints connected to the marginal strip provided with the igniting-surface and the lines of luminous paint *h*

between the line of connection of the splints and said igniting-surface, substantially as specified.

In testimony whereof I have hereunto affixed my signature this 1st day of August, A. D. 1889.

JOSHUA PUSEY.

Witnesses:

JOHN NOLAN,

FRANCIS S. BROWN.