

(No Model.)

F. VAN BENTHUYSEN.

BRACKET FOR HOLDING PAPER IN A SUSPENDED POSITION.

No. 446,486.

Patented Feb. 17, 1891.

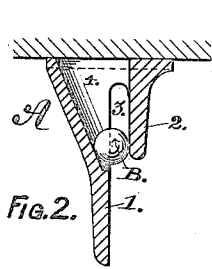


Fig. 2.

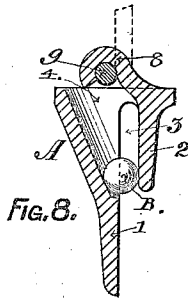


Fig. 8.

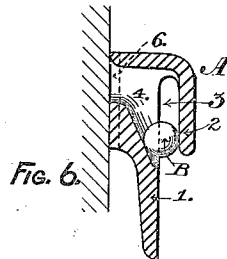


Fig. 6.

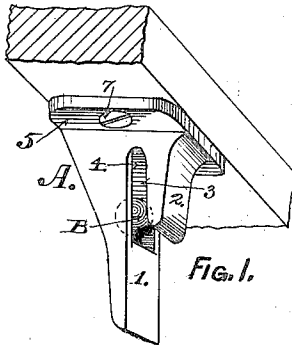


Fig. 1.

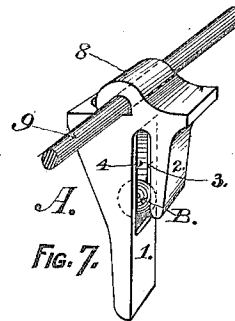


Fig. 7.

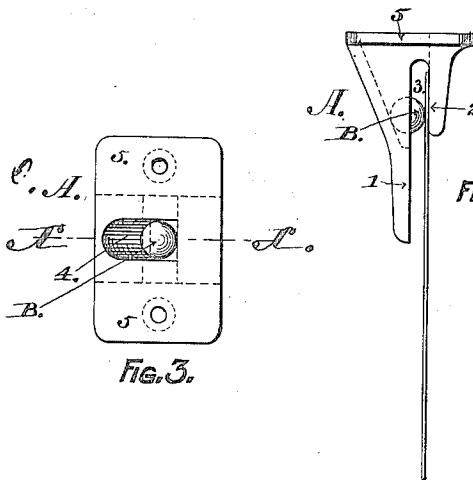


Fig. 3.

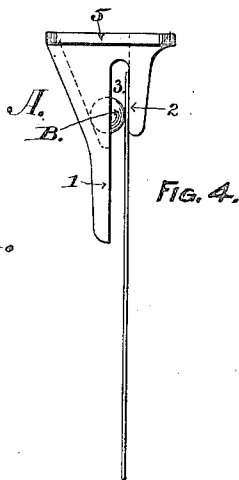


Fig. 4.

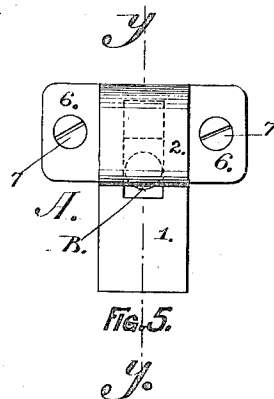


Fig. 5.

Witnesses:

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BRACKET FOR HOLDING PAPER IN A SUSPENDED POSITION.

SPECIFICATION forming part of Letters Patent No. 446,486, dated February 17, 1891.

Application filed June 16, 1890. Serial No. 355,633. (No model.)

To all whom it may concern:

Be it known that I, FRANK VAN BENTHUYSEN, of the city and county of Albany, in the State of New York, have invented new and useful Improvements in Brackets for Holding Paper or other Sheet Material in a Suspended Position, of which the following is a specification.

My invention relates to a bracket or hanger for holding paper or other sheet material in a suspended position; and it consists of a body-piece provided with means for attaching it to horizontal or vertical surfaces or to a rope or wire, said body-piece being also provided with a pendent arm containing an inclined channel-way and with a pendent flange arranged oppositely to the open side of said channel-way, whereby a vertical groove is formed between said arm and flange, said channel-way containing a rolling weight, which normally forms a movable bar across said vertical groove, said weight being easily displaced by the introduction of a sheet of paper or other material into the vertical groove, such displacement being but momentary, and the return movement of said weight effects a gripping hold of the sheet of sufficient tenacity to effectually resist a downward removal of the sheet from the hanger.

The object of my invention is to provide a cheap and simple device for suspending sheets of paper or other material in a pendent position, and I attain this object by the means illustrated in the accompanying drawings, which are herein referred to and form part of this specification, and in which—

Figure 1 is a perspective view of my invention as adapted for use in a pendent position on a horizontal surface. Fig. 2 is a vertical section of the same at the line X X on Fig. 3. Fig. 3 is a plan view. Fig. 4 is a side elevation showing a sheet of material held pendently by my device. Fig. 5 is a modified form of my device adapted for attachment to a vertical surface, said figure showing a front elevation of said modification. Fig. 6 is a vertical section of the same at the line Y Y. Fig. 7 is a perspective view of another modification of my device adapted for use on a horizontal rope or wire, and Fig. 8 is a vertical section of the same.

As represented in the drawings, A designates the body-piece of my device, which is provided with a pendent arm 1, whose outer face forms a vertical plane, and with a pendent flange 2, whose inner face is parallel to the face of the arm 1, and thereby a groove or passage 3 is formed between the parallel faces of said arm and flange. The pendent arm 1 is provided with a channel-way 4, which is open at the side next to the passage 3, and which has its opposite side inclined from the vertical side of said arm. As shown in Figs. 1, 2, 3, 4, 7, and 8 said channel-way is open at the top of the body-piece A, and it becomes closed when the device is attached in place. As shown in Figs. 5 and 6 the channel-way 4 is open on the rearward side of the body-piece, and is closed by the act of securing the device in place.

In the form of body-piece A shown in the first four figures lateral flanges 5 are formed on the upper part of said body-piece to conform to the plane of its upper end, and in the form shown in Figs. 5 and 6 the lateral flanges 6 conform to the plane of the rearward face of said body-piece; but in both forms said flanges are provided with suitable holes for receiving screws 7, whereby the device is secured to its place. In the form shown in Figs. 7 and 8 the body-piece A is made of malleable metal and is provided with a lug 8 on its upper end. Said lug, before the device is fixed in place, is made to project at a right angle to the face of the upper end of the body-piece, as indicated by dotted lines in Fig. 8; but in attaching the device to a wire or rope 9 said lug is bent over to form a clasp on said wire or rope.

A rolling weight B, which is preferably made in a spherical form, as shown in the drawings, is placed loosely in the channel-way 4 and is left free, so that its gravity will keep it normally in contact with the inner face of the pendent flange 2 to form an easily-movable barrier across the passage 3. Said weight is inserted in the channel-way 4 before the body-piece is fixed to its place, and the operation of securing the device in place effectually closes the channel-way to prevent the accidental escape of said weight therefrom.

My hanger operates in the following manner: A sheet of paper or other material to be suspended is pushed edgewise into the passage 3 in an upward direction, and by the rolling

weight B said sheet is deflected to the inner face of the pendent flange 2. Said weight, yielding to a slight upward pressure, permits the sheet to pass freely between the inner face of said flange and the perimeter of the weight until the sheet has attained the required height in the passage 3. Then the pressure of said weight against the face of the sheet will effectually clamp the latter against the face of the pendent flange 2 in such manner that the sheet will remain suspended, the effect of the weight of the sheet being to increase the pressure of the rolling weight by causing the latter to move downwardly on the inclined surface of the channel-way 4. When force is applied to draw the sheet in a downward direction, the gripping effect of the rolling weight is correspondingly increased. To remove the sheet from the hanger, the sheet should be pushed upward to release it from the grip of the rolling weight, and then drawn endwise out of the passage 3, and in effecting these latter movements the rolling weight will present no resistance to the free passage of the sheet.

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

1. In a bracket or hanger of the character

herein described, the combination of a body-piece provided with a pendent flange and a pendent arm whose adjacent faces form the opposite walls of a groove or passage, said pendent arm containing a channel-way whose one side is open into said groove and whose opposite side inclines downwardly toward said groove, and a rolling weight placed loosely in said channel-way, as and for the purpose herein specified.

2. In a bracket or hanger of the character herein described, the combination of a body-piece provided with a pendent flange and a pendent arm whose adjacent faces form the opposite walls of a groove or passage, said pendent arm containing a channel-way having one side open to said groove and the opposite side inclining downwardly toward said groove, a rolling weight placed loosely in said channel-way, and the means herein described for securing the body-piece in position, whereby the opening for inserting said weight in the body-piece is closed, substantially as specified.

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