(No Model.)

W. LANG.

PNEUMATIC WALL BRACKET.

No. 355,021. Patented Dec. 28, 1886.

Fig. 1.

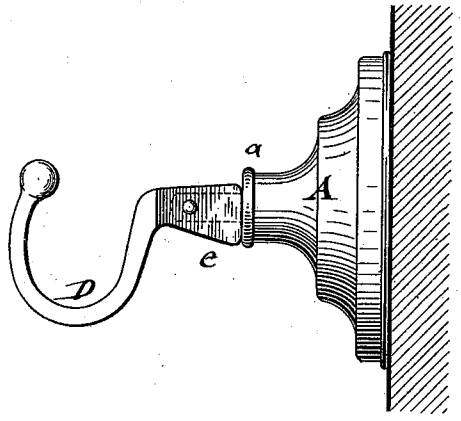


Fig. 2.

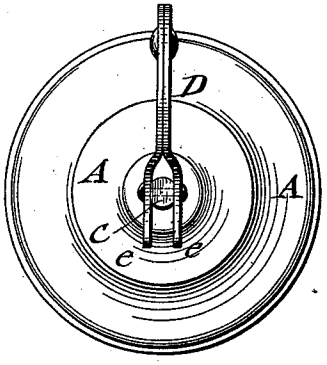


Fig. 3.

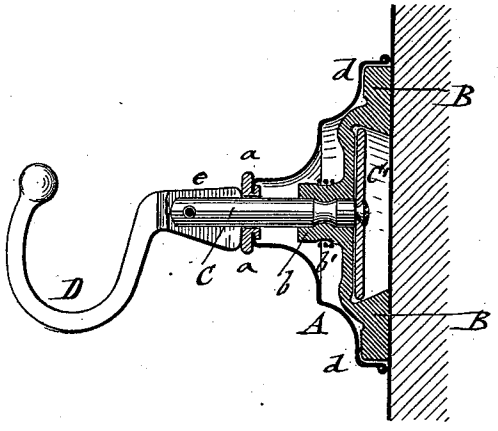
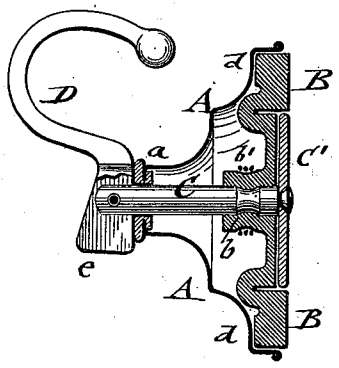


Fig. 4.



WITNESSES:

F. W. Rosenbaum.
Martin Petry.

INVENTOR

William Lang

BY

Goepel & Raegener

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM LANG, OF BROOKLYN, NEW YORK.

PNEUMATIC WALL-BRACKET.

SPECIFICATION forming part of Letters Patent No. 355,021, dated December 28, 1886.

Application filed January 20, 1886. Serial No. 189,222. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LANG, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pneumatic Wall-Brackets, of which the following is a specification.

This invention relates to wall-brackets of that class which are attached to the wall without screws or other fastening devices by atmospheric pressure; and the invention consists of a shell or bracket, an elastic diaphragm at the rear end of the bracket, a spindle applied to the diaphragm, and a hook pivoted to the front end of the spindle and provided with cam-shaped lugs back of the pivot, which lugs lock in position when placed in line with the spindle against the front part of the shell, so that the elastic diaphragm is held by atmospheric pressure on the wall.

In the accompanying drawings, Figure 1 represents a side elevation of my improved pneumatic wall-bracket. Fig. 2 is an end elevation of the same with the hook folded up. Figs. 3 and 4 are respectively vertical longitudinal sections showing the hook in horizontal position and folded up.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a hollow bracket or shell of annular shape, which is wider at the base, contracted at the front or apex, and provided with a guide-collar, *a*, at that point. A diaphragm, B, of rubber or other suitable elastic material, abuts against a shoulder, *d*, at the base of the bracket A, said diaphragm being applied, by a center hub, *b*, and wire *b'*, or other suitable fastening device, to a spindle, C, that extends through the guide-collar *a* to the front of the bracket A. The rear end of the spindle C is riveted to a sheet-metal disk, C', that is of a smaller diameter than the elastic diaphragm B and bears on the rear side of the same. To the front end of the spindle C is pivoted the forked rear end of a suspension-hook, D, which rear end is made in the shape of two cam-shaped lugs, *e e*, that are rounded off at the corners. The cam-shaped lugs *e e* are moved along the face of the guide-collar *a*, and are set into line with the spindle C, when the hook D is taken hold of and pulled in downward direction. The straight rear edges of the lugs *e e* abut against the collar *a*, as shown in Figs. 1 and 3. In this position of the hook D the central part of the elastic diaphragm B is pulled forward by the spindle C and disk C', while the circumference of the diaphragm is pressed against the wall and retained thereon by atmospheric pressure. D is lifted again to a position at right angles to the spindle. The spring action of the elastic diaphragm B moves the spindle C inwardly, so that the lugs *e e* of the hook D are pressed tightly by their sides against the collar *a*, as shown in Fig. 4.

When the pneumatic wall-bracket is applied for use, the bracket A is held by one hand and pressed firmly against the wall, so that the elastic diaphragm B hugs the same. The hook D is taken hold of by the other hand and pulled down, whereby the spindle C and elastic diaphragm B are moved in forward direction until the lugs *e e* of the hook are in line with the spindle and locked against the collar *a*. As the circumference of the elastic diaphragm B is tightly pressed against the wall, a vacuum is formed in the cavity formed between the elastic diaphragm and the wall, so that the bracket is securely held on the wall by the pressure of the atmosphere, and can be used for hanging up articles of all kinds. To detach the bracket, the hook is moved up again into a position at right angles to the spindle, in which position the bracket is carried in the pocket. The pneumatic bracket forms a convenient device for hanging up garments on a smooth wall, mirror, furniture, or other point of support, which can be readily detached after use and carried in the pocket.

I am aware that pneumatic brackets which are supported on a wall or other smooth support by atmospheric pressure, and in which a bracket, an elastic diaphragm, and means for pulling the latter away from the wall or other point of support, have been known heretofore, and I do not claim this feature, broadly.

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

The combination of a shell or bracket having a guide-collar at the front end, an elastic diaphragm at the base of the bracket, a spindle attached to the center of the diaphragm

extending forward through said collar, and a suspension-hook pivoted to the front end of the spindle and provided with cam-shaped lugs back of the pivot, said lugs bearing on the collar of the bracket and locking the hook to the collar in line with the spindle or at right angles to the same, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WILLIAM LANG.

Witnesses:
CARL KARP,
MARTIN PETRY.