

(No Model.)

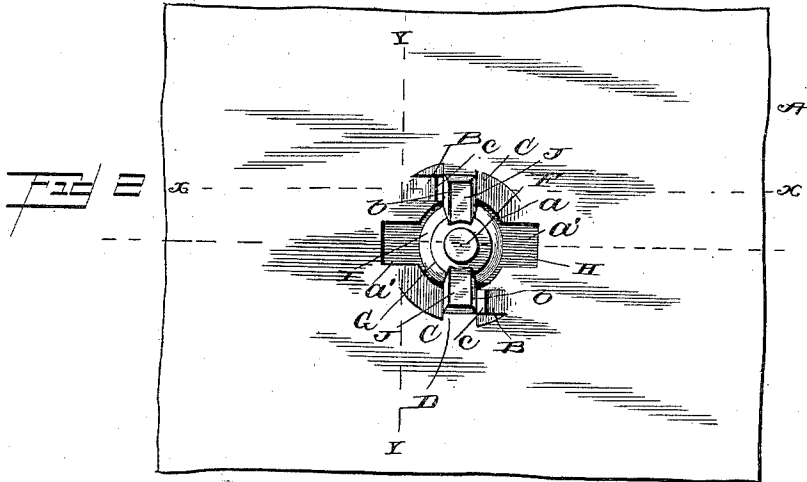
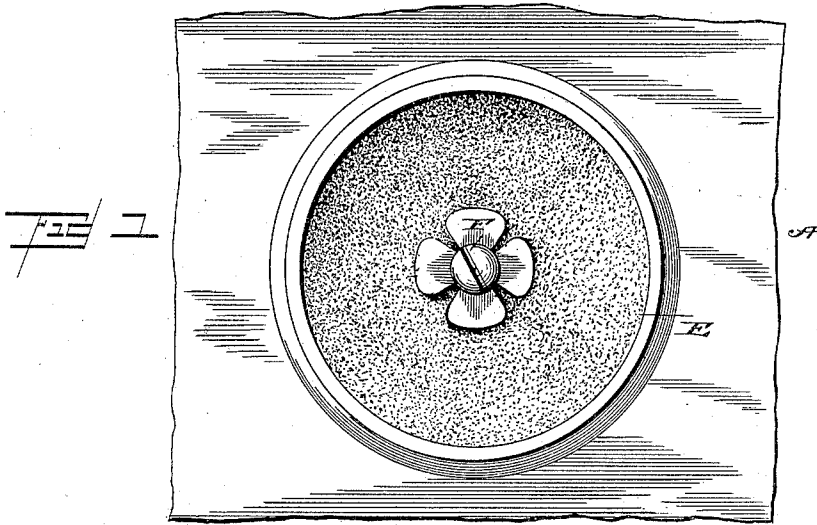
2 Sheets—Sheet 1.

J. A. KLINE.

ATTACHING PANELS OR THE LIKE TO METALLIC SURFACES.

No. 465,782.

Patented Dec. 22, 1891.



Witnesses

Chas. J. Lister,

M. J. McMahon,

Inventor

John A. Kline,

By His Attorney,

J. R. Littell,

(No Model.)

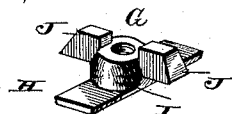
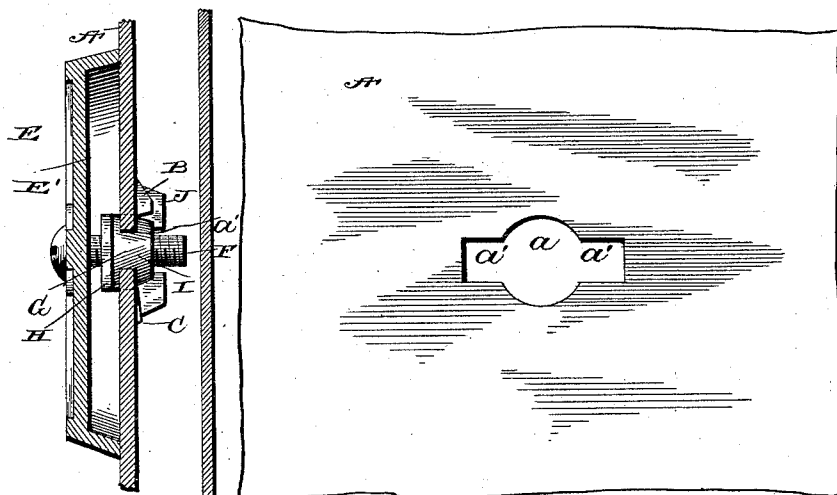
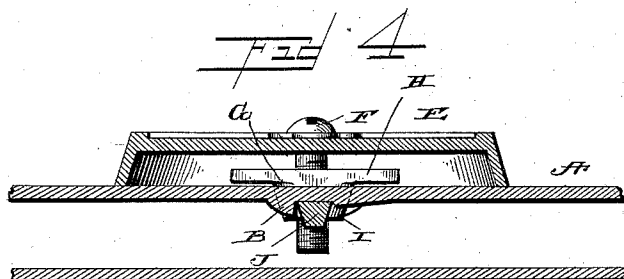
2 Sheets—Sheet 2.

J. A. KLINE.

ATTACHING PANELS OR THE LIKE TO METALLIC SURFACES.

No. 465,782.

Patented Dec. 22, 1891.



Witnesses

John Danie
Chas. J. Little

Inventor

John A. Kline,
By his Attorney, J. R. Littell

UNITED STATES PATENT OFFICE.

JOHN A. KLINE, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO
JOHN KAUFMANN, OF SAME PLACE.

ATTACHING PANELS OR THE LIKE TO METALLIC SURFACES.

SPECIFICATION forming part of Letters Patent No. 465,782, dated December 22, 1891.

Application filed August 1, 1891. Serial No. 401,381. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. KLINE, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Attaching Panels or the Like to Metallic Surfaces; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in attaching panels or the like to metallic surfaces; and it has for its object to provide means for this purpose where the rear side of such surfaces are inaccessible for purpose of placing nuts upon the securing-bolts.

A further object of the invention is to provide simple and improved means for securing the panels or like objects in such manner as will preclude the same from becoming accidentally detached.

In the drawings, Figure 1 is a front elevation illustrating a plate with a panel attached thereto. Fig. 2 is a rear elevation of the same. Fig. 3 is a sectional view taken centrally. Fig. 4 is a similar view on the line $x x$, Fig. 2. Fig. 5 is a similar view on the line $y y$, Fig. 2, looking toward the center. Fig. 6 is a front elevation illustrating the opening in the plate. Fig. 7 is a detail perspective view of the securing-nut.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the plate or surface to which the panel is applied. This plate or surface is provided with an approximately circular opening a , having at opposite sides thereof supplementary recesses or extensions $a' a'$. Upon the inner side of the plate A and at the periphery of the circular opening are cast or otherwise provided lugs B B, projecting at right angles to the plate and located diametrically opposite each other. Segmentally-curved projections C C are cast or otherwise formed at the periphery of the opening a . These projections are less prominent than the lugs, and are formed at their ends opposing the faces $b b$ of said lugs with a shoulder $c c$. From the latter the projections C are beveled and disappear at the

adjacent recess a' . Between the lugs and the projections a space D D is left, forming depressions at or below the level of the surface of the plate or surface and at right angles to the recesses a' , as will be clearly seen by reference to Fig. 2 of the drawings.

E designates the panel, which may be of any desired or ornamental construction and formed of any desired material. At the center of the panel is provided an opening e for the reception of a securing-bolt, and at the under side of the panel is formed a recess E' , with which the opening e communicates at the center of said recess, the purpose of which will hereinafter appear.

For securing the panel to the surface or plate A, I provide a bolt F, screw-threaded and of the usual pattern, and a retaining-nut G. The latter consists of a plate H, of greater length and breadth than the combined recesses a' , and centrally from the under side of said plate projects an approximately cylindrical or conical stud I. At opposite sides of the latter and at its end farthest from the plate are provided projecting lugs J J, located at right angles to both the stud and the plate. The stud and lugs conjunctively correspond to the opening a and the extensions a' thereof, by which they are received. All of the parts of the nut are preferably cast integral, and through the center of the plate and stud is provided a screw-threaded eye or opening K, designed to receive the threaded end of the securing-bolt.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. The office of the invention is to provide simple and improved means for attaching panels to metallic surfaces in cases where the rear side of such surface is inaccessible for purpose of applying retaining-nuts to the bolts and also for securing the panels against accidental detachment—as, for instance, applying panels or rosettes of an ornamental character to stoves or other metallic articles or structures. In practice the stud I and lugs J of the nut are passed through the opening a and extensions a' thereof in the surface to which the panel is to be applied. The plate H is turned to the right, the lugs passing over the beveled

projections C and into the depressions D, further movement being prevented by the lugs B. The panel is then placed in position and the securing-bolt passed through the opening 5 therein and screwed into the nut, the movement of the bolt being in the same direction as the nut. Slipping of the latter during the tightening of the bolt is prevented by the engagement of the lugs J with the lugs B. The 10 lugs of the nut are further drawn tightly within the depressions D as the bolt is screwed home, thus effectually locking the nut against accidental movement in either direction.

While I have herein shown and described 15 the panel as being secured by a single nut and bolt, it will of course be obvious that two or more may be employed—as, for example, in securing panels of oblong shape.

I claim as my invention—

20 1. As an improvement in means for attaching panels to metallic surfaces, the combination, with the surface plate provided with an approximately circular opening having extensions at opposite sides, lugs projecting from 25 the under side of said plate and diametrically opposite each other, and with beveled projections intermediate the lugs and having each a shoulder opposing the adjacent lug, of a nut provided with a stud having oppositely- 30 projecting lugs coinciding with the opening in the plate, the panel, and the securing-bolt passing through the nut, substantially as set forth.

35 2. As an improvement in attaching panels to metallic surfaces, the combination, with the surface plate provided with an elongated

opening and the panel, of a nut provided with a stud having oppositely-projecting lugs coinciding with the opening in the plate and adapted to engage the under side thereof, and 40 a securing-bolt passing through the panel and engaging the nut, substantially as set forth.

3. As an improvement in attaching panels to metallic surfaces, the combination, with the surface plate provided with an approximately 45 circular opening having extensions at opposite sides, lugs projecting from the under side of said plate and diametrically opposite each other, and beveled projections intermediate the lugs and having each a shoulder opposing 50 the adjacent lug, a depression being formed between the lugs and projections, of a nut provided with a stud having oppositely-projecting lugs adapted to be seated in the depressions, the panel recessed upon its under 55 side to accommodate the nut, and a securing-bolt passing through the panel and engaging the nut, substantially as and for the purpose set forth.

4. As an improved article of manufacture, 60 the herein-described clutch-nut, consisting of a plate, a stud projecting centrally therefrom, and lugs projecting from the free end of the stud and at right angles to the plate, said plate and stud being provided with a bore, substantially as set forth. 65

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

JOHN A. KLINE.

Witnesses:

ALICE KLINE,
JOHN KAUFMANN.