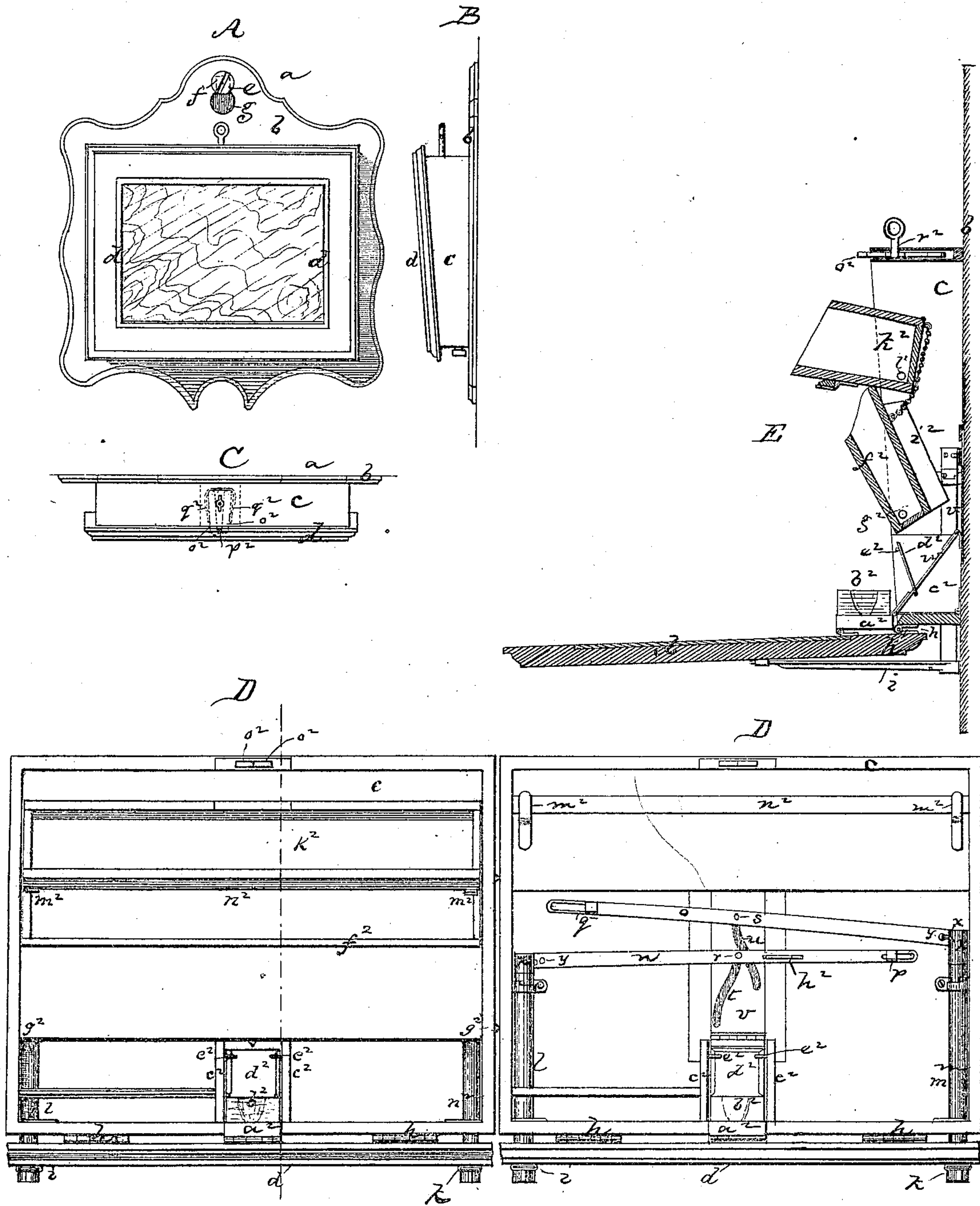


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Improvement in Wall-Desks.

No. 132,632.

Patented Oct. 29, 1872.



Witnesses.

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IMPROVEMENT IN WALL-DESKS.

Specification forming part of Letters Patent No. 132,632, dated October 29, 1872.

To all whom it may concern:

Be it known that I, THOMAS COGSWELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented a Wall-Desk; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention has reference to the construction of a desk to be hung against the vertical wall of a room, the back of the desk being preferably made so that it can be hung in position or removed from position without detachment of the fastenings that secure it in place, and being made with an upright or vertical lid hinged at bottom, and connected to movable supporting-arms, which are automatically thrown out to the front in position to support the desk-lid when it is dropped down for use, and are automatically thrown back and drawn up under and to the desk body or case when the lid is raised. The invention consists in such a wall-desk, and in details of construction pertaining thereto.

The drawing represents a desk embodying my construction.

A denotes a front view, B a side view, and C a plan, of the closed desk. D is a front view, and E a vertical central section, of the open desk. F is a view, showing the mechanism that operates the supporting-arms.

a denotes the wall against which the desk is hung. *b* denotes the back, *c* the body or case, and *d* the lid, of the upright desk. The back *b* is preferably formed with one or more slots, *e*, the upper part of each of which slots is made of just a size to receive the shank of a screw-pin, *f*, screwed into the wall, and the bottom or eye *g* of which is made large enough to pass over the head of the screw, the head and slot confining the desk in position, while the eye *g* permits the desk to be hung up or removed without disturbing the screws or fastenings *f*. The lid *d* is hinged at its lower edge, as seen at *h*, and when it is swung down upon its hinges it forms a horizontal or slightly-inclined leaf or writing-desk. When thus dropped the desk is supported by two horizontal arms, *i k*, these arms extending from the bottom of two vertical rods or shafts, *l m*,

which are located in the opposite rear corners of the case, each rod being supported in suitable bearings, and having a capability of rotative movement sufficient to carry its arm *i* or *k* from its desk-supporting position back ninety degrees to a position directly under the case *c* and against the back *b*. The arms *i k* necessarily stand some distance below the bottom of the case *c*, as seen at E, to support the desk, and to conceal them when the desk is closed. Each shaft, *l m*, is also made with provision for sliding vertically, so that when the desk is shut the shafts may not only be turned to bring the arms under the case, but may also be slid up to bring the arms up to the bottom of the case, where they will be effectually concealed by the projecting hinged edge *h* of the desk-lid.

To operate the arms automatically the two shafts are connected to the outer ends of two slide-levers, *n o*, fulcrumed at *p q*. From each lever a pin, *r* or *s*, projects into an inclined slot, *t* or *u*, made in a vertically-sliding plate, *v*, which is connected by a jointed link or connector, *w*, to the lid *d*. As the lid is raised the slide-plate *v* rises, and the two slots *t u*, acting on the pins *r s*, slide the levers *n o* outward, causing them to turn the shafts *l m* and throw in the arms *i k*, each shaft having pins *x* acting in holes *y* made in the lever ends. When the bottoms of the slots *t u* reach their pins *r s* the plate *v* raises the levers upon their fulcrums, thereby lifting the shafts *l m* and the arms *i k*. When the desk is opened the movements are reversed, the shafts and levers falling by gravity as the slide *v* falls, and the slots *t u* throwing the levers outward, thereby turning the shafts and throwing out the arms to receive the falling lid. Upon the lower joint *a*² of the connection *w* an inkstand, *b*², may be placed, this joint being so arranged that it always stands in horizontal position, moving out over the desk-lid when the desk is opened, and shutting back into the case *c*, between two cheeks, *c*², when the desk is closed. Said inkstand may be provided with an automatic cover, *d*², jointed to the link *w*, and moving against pins *e*², the cover rising with the link and sliding against the pins until the top of the inkstand reaches to or nearly to the level of the pins and then falling over upon and closing the inkstand, the pins causing the cov-

er to be thrown back from the inkstand when the lid d is dropped. Over the inkstand is a long box or receptacle, f^2 , for paper, &c., said box extending from side to side of the case, and being mounted upon pins g^2 , the box tipping to the front by gravity or by the action of a pin, h^2 , when the desk is open, and being thrown back into the case by gravity or by the lid d when the desk is closed. On the back of this box may be smaller compartments i^2 for receiving cards, &c. Over the box f^2 may be hung another box, k^2 , for holding any articles needed about the desk, this box being hung upon pins l^2 , and being drawn out or tipped to the front by hand or by gravity or by other means. In front of the box k^2 hooks m^2 may be placed for receiving a ruler, n^2 , and various other convenient appendages for holding pens, &c., may be applied to the boxes and case. When the lid is closed it may be secured by a pair of spring lever-hooks, o^2 , which project from the case and are thrown forward to catch a bar, p^2 , by the springs q^2 , the bar p^2 pressing them apart as the lid closes. The hooks are pressed apart to release the bar and open the desk by a suitable key, r^2 .

The desk made and hung substantially as described occupies but very little space, can be made an ornamental appendage to the wall of a room, and enables a desk to be placed in a room or office where there is no spot that can be conveniently used to receive a common desk, or where it is not desirable to have an article of furniture like a common desk. It will be obvious that an upright case, made

substantially as described, may be used for containing other than writing materials.

I claim—

1. A vertical desk made to be hung against a wall, and having a lid which is supported by arms automatically thrown out when the lid is lowered and thrown back when the lid is raised, the lid closing the desk when raised, substantially as shown and described.

2. In combination with the lid d lid-supporting arms, which, being automatically thrown out and in by the movements of the lid, are automatically raised when the lid is closed and dropped when the lid is opened, substantially as shown and described.

3. The arms i k , shafts l m , slide-levers n o , slide-plate v , inclined slots t u , and pins r s , combined and relatively arranged, and operating substantially as shown and described.

4. In combination with the lid d , the inkstand b^2 , located and moved as the lid opens and closes, substantially as described.

5. In combination with the automatically-moved inkstand b^2 , the cover d^2 , operated to close upon and rise from the inkstand, substantially as shown and described.

6. In combination with the case c the boxes or receptacles f^2 k^2 tipping to the front of the case and shutting within the case, substantially as shown and described.

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Witnesses:

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