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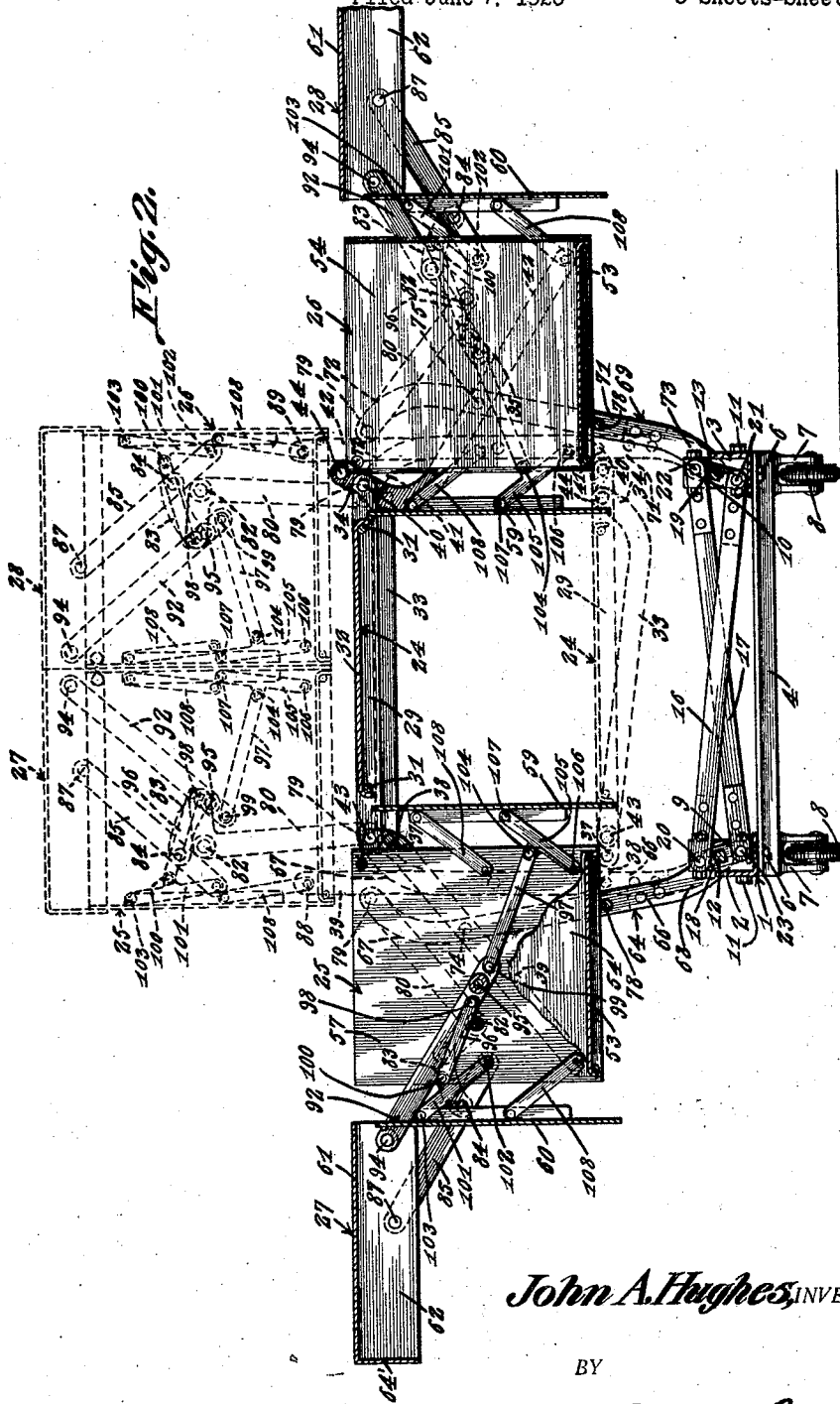
1,621,324

J. A. HUGHES

DESK CONSTRUCTION

Filed June 7, 1926

3 Sheets-Sheet 2



John A. Hughes, INVENTOR.

BY

Geo. P. Kimmel, ATTORNEY.

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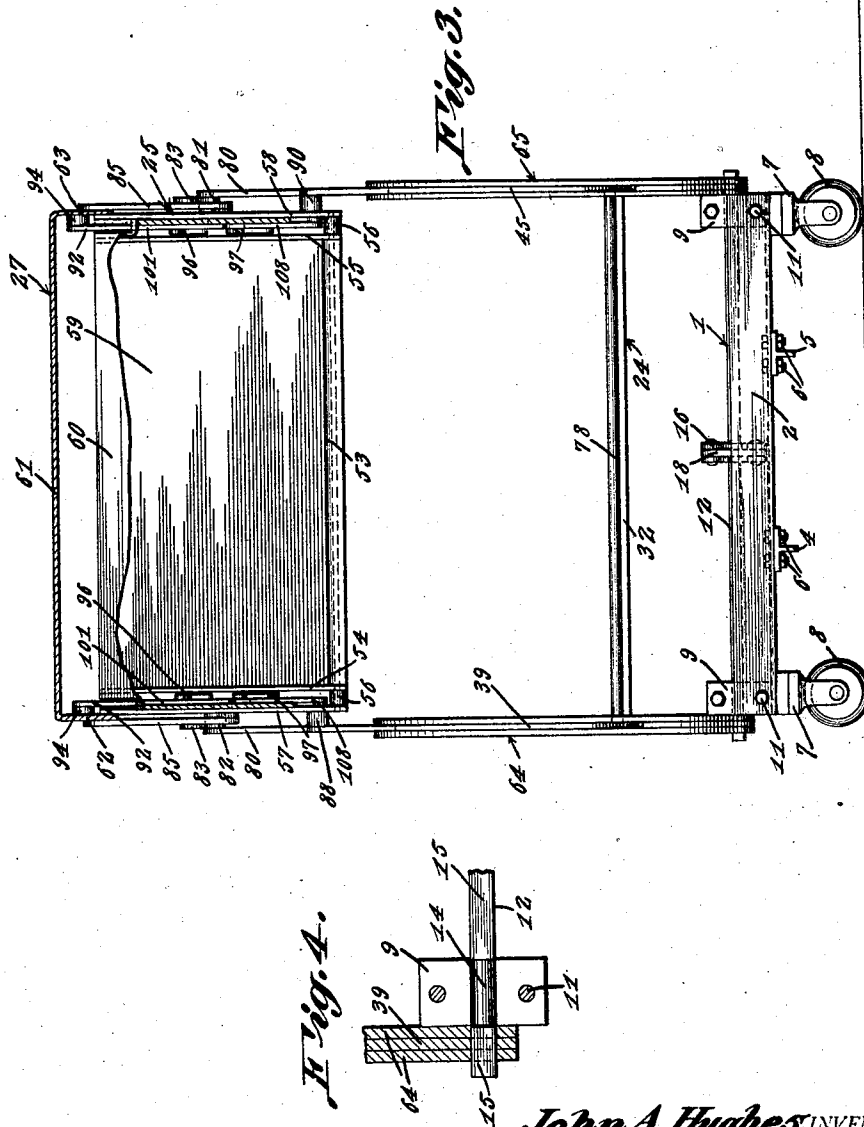
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UNITED STATES PATENT OFFICE.

JOHN A. HUGHES, OF WACO, TEXAS.

DESK CONSTRUCTION.

Application filed June 7, 1926. Serial No. 114,341.

This invention relates to desk constructions more particularly to an article of furniture for office use, a combination typewriter support and filing cabinet, and the invention has for its object to provide, in a manner as hereinafter set forth, an article of furniture of the class referred to having means in convenient reach of the typist for the filing of typed records or work, or for convenient access to filed memoranda or other papers to be removed and recorded thereon and replaced after the records have been made.

A further object of the invention is to provide, in a manner as hereinafter set forth, an article of furniture for office use, termed a combination typewriter support and filing cabinet capable of being folded in a compact manner when not desired for use and stored in a comparatively small space.

A further object of the invention is to provide, in a manner as hereinafter set forth, an article of furniture for office use, termed a combined typewriter support and filing cabinet and including a pair of file cases and a typewriter support, the cases and support being operatively connected together whereby on the extending of the device for use the support will be elevated to the desired position for the typist and the file cases will be thrown open and disposed at each side of the support within convenient reach of the typist or typists for the purpose of removing and storing memoranda or other papers within said cases and further whereby when the device is folded the file cases will be automatically closed and maintained in such position until the device is extended again for use.

A further object of the invention is to provide, in a manner as hereinafter set forth, an article of furniture for office use, termed a combined typewriter support and filing cabinet and including a vertically movable typewriter support and a pair of file cases, and with the support and file cases operatively connected together, whereby on the shifting of one of the cases to open position the other case will be moved likewise and the typewriter support shifted to the desired position for the typist or typists, and further whereby when one of the cases are moved to closed position the other case will be simultaneously moved to like position and the support lowered and overlapped by the file cases whereby these latter will act to protect

the typewriter or typewriters mounted upon the support.

Further objects of the invention are to provide, in a manner as hereinafter set forth, an article of furniture for office use, termed a combination typewriter support and filing cabinet and which is comparatively simple in its construction and arrangement, conveniently shifted manually to and from position for use, portable, strong, compact, when shifted to closed position, thoroughly efficient in its use, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is an end elevation of a combination typewriter support and filing cabinet in accordance with this invention and with the same in full lines illustrated as closed and in dotted lines in position for use.

Figure 2 is a sectional elevation of a combination typewriter support and filing cabinet, in accordance with this invention, and illustrating in full lines the same in position for use and in dotted lines closed.

Figure 3 is a fragmentary view in side elevation.

Figure 4 is a sectional detail.

Referring to the drawings in detail 1 generally indicates a truck formed of a pair of side bars 2, 3 and a pair of cross bars 4, 5. The cross bars 4, 5 provide means for connecting the side bars 2, 3 together and further for maintaining the side bars 2, 3 in spaced relation. The cross bars 4, 5 are secured against the bottoms of the side bars, 2, 3 by hold fast devices 6. Each side bar is in the form of an angle iron of appropriate length and each cross bar is in the form of a T-iron of appropriate length. The side bars 2, 3 are so disposed that the cross bars 4, 5 are secured to the lower faces of the horizontal legs of the said side bars. Each end of each side bar has suitably connected therewith a yoke-shaped carrier 7,

provided with a roller 8. Or in other words each end of each side bar is provided with a castor of any suitable construction. At each end of each side bar a boxing is
 5 secured in any suitable manner and the boxes carried by the side bar 2 are indicated at 9 and the boxes carried by the side bar 3 are indicated at 10. Hold fast devices 11 are employed for securing the boxes to the
 10 side bars of the truck. The boxes 9 and 10 provide bearings for rock shafts and the rock shaft mounted in the boxes 9 is indicated at 12 and the rock shaft mounted in the boxes 10 is indicated at 13. With
 15 reference to Figure 4 each rock shaft is provided at a point adjacent each end edge thereof with a cylindrical portion 14 which is journaled in a box and each rock shaft other than the two cylindrical portions
 20 thereof, is of polygonal contour throughout as indicated at 15.

The rock shafts 12 and 13 are connected together, so they will move in unison, through the medium of a pair of oppositely
 25 disposed connecting bars 16, 17 and a pair of lever arms 18, 19. The lever arm 18 is fixedly secured at the center thereof to the rock shaft 12 whereby said lever arm will project above and below the rock shaft 12
 30 an equal distance. The lever arm 19 is fixedly secured at its center to the rock shaft 13 whereby said lever arm 19 will project an equal distance above and below the rock shaft 13. The upper end of the
 35 connecting rod 16 is secured as at 20 to the upper end of the lever arm 18 and the lower end of the connecting rod 16 is connected as at 21 to the lower end of the lever arm 19. The upper end of the connecting rod
 40 17 is connected as at 22 to the upper end of the lever arm 19 and the lower end of the connecting rod 17 is connected as at 23 to the lower end of the lever arm 18. The connecting rods 16 and 17 extend at inclina-
 45 tions, and the rod 16 extends at a different inclination with respect to the rod 17 and said rods 16 and 17 as shown extend in opposite directions with respect to each other. By this arrangement if the rock shaft 12
 50 is shifted the rock shaft 13 will be carried therewith and if the rock shaft 13 is shifted the rock shaft 12 will be carried therewith. The means providing for the synchronous operation of the rock shafts will be pres-
 55 ently referred to and the connection between the rock shafts are such that they will synchronously operate together in a clock-wise and anti-clock-wise direction and when shifted in a clock-wise direction the article
 60 of furniture will be shifted to closed position and when moved in an anti-clock-wise direction the article of furniture will be shifted to an open position or position for use. The lever arms 18 and 19 are pro-
 65 vided with polygonal-shaped openings cor-

responding in contour to the polygonal shape or contour of the rock shaft so that when the lever arms are mounted on the rock shaft they cannot be shifted independ-
 70 ently with respect to these latter but bodily move with the rock shafts.

The article of furniture further includes a vertically movable typewriter support which is referred to generally by the
 75 reference character 24, and a pair of covered file cases referred to generally by the reference character 25, 26. The cover of the case 25 is referred to generally by the reference character 27 and the cover of the
 80 case 26 is referred to generally by the reference character 28. When the article of furniture is in a position for use, the file cases 25, 26 are suspended laterally with respect to each side of the typewriter sup-
 85 port 24 and in convenient reach of the typist or typists.

The typewriter support 24 consists of a pair of opposed carrier bars 29, 30 of appropriate length connected together by a
 90 pair of spaced combined brace and supporting bars 31 positioned an appropriate distance from the end of the carrier bars 29 and 30. Mounted on the bars 31, as well as overlapping the same and secured there-
 95 with is a platform 32 of the desired width and length to support a pair of typewriters which are oppositely disposed with respect to each other.

Arranged forwardly and slightly below the carrier bar 29 is a link 33 having an
 100 upturned end 34 and arranged forwardly of the carrier bar 30 is a link 35 having an upturned end 36. The links 33 and 35 are oppositely disposed with respect to each other. Pivotal-
 105 ly connected to one end of the carrier bar 29 as at 37 is the curved end 38 of a shifting arm 39. Pivotal-ly connected to the other end of the carrier bar 29, as at 40 is the curved end 41 of a shift-
 110 ing arm 42. One end of the link 33 is pivotally connected as at 43 to the curved end 38 of the shifting arm 39. The other end of the link 33 is pivotally connected as at 44, to the shifting arm 42. The arms
 115 39 and 42 provide means for elevating and lowering the typewriter support 24 at one end thereof and the link 33 connects the arms 39 and 42 together to provide for the synchronous operation thereof. The arms
 120 39 and 42 are oppositely disposed with respect to each other. The other end of the typewriter support 24 is elevated and lowered through the medium of a pair of op-
 125 positely disposed lifting arms 45, 46. The arm 45 is provided with a curved end 47 which is pivotally connected as at 48 to the carrier bar 30 and said curved end 47 is further-
 130 more pivotally connected with the curved end 36 of the link 35. The arm 46 is provided with a curved end 50 which

is pivotally connected as at 51 to the carrier bar 30 and also pivotally connected as at 52 to the other end of the link 35. The link 35 connects the arms 45 and 46 together to provide for the simultaneous operation thereof. The arms 45 and 46 are oppositely disposed with respect to the arms 39 and 42 and the link 35 is oppositely disposed with respect to the link 33. The manner in which the shifting arms 39, 42, 45 and 46 are actuated will be presently referred to. The said shifting arms are connected to the ends of the file cases and the connection between the arms and said cases will be hereinafter more specifically referred to.

As the file case 25, as well as the file case 26 are of like construction, but one will be described, as the description of one will apply to the other. Each file case comprises a body portion, see Figure 3, consisting of a bottom 53 and a pair of end walls 54, 55, which are secured to the ends of the bottom 53. Projecting outwardly from the lower portion of each end wall is a combined spacing and supporting means 56 for end plates 57, 58 which oppose and are arranged in parallelism with respect to the end walls of the body portion. Each filing case further includes a shiftable inner side wall 59 and a shiftable outer side wall 60, see Figure 2. The outer side wall of each file case is spaced from the closure or lid 26 or 27 when the file case is in position for use. When the file cases are positioned for use the side walls 59 and 60 are spaced from the body portion of their respective file case and by this arrangement, any filed paper desired, can be extended laterally from either side of the body portion for divisional purposes or to facilitate the locating of the same when desired. The side walls 59, 60 of the file case 25 are oppositely disposed with respect to the side walls 59, 60 of the file case 26. The closure, cover or lid element 27 is constructed similar to the element 28 and is larger than the body portion of its associated filing case whereby when the filing cases are shifted to inactive position the cover elements will extend over or overlap the upper part of the said body portions, as well as the side walls, and in this connection see Figure 1 of the drawings.

Each cover element consists of a top wall 61, a pair of end walls 62, 63 and an outer side wall 64. Each cover element is open at its inner side. When the cover elements are in closed position they overlap the end plates 57 and 58. See Figure 1.

Mounted on the rock shaft 12 at each end thereof is a pair of actuating members or rock arms. The members of each pair are of like construction and arranged in opposed spaced relation with respect to each other. The pair of actuating members at one end of the rock shaft is indicated gen-

erally at 64 and the pair at the other end of the shaft 12 is indicated generally at 65. Each actuating member of each pair consists of a straight intermediate portion 66, an inwardly curved end portion 67 and an inwardly curved end portion 68. See Figure 1. The end portion 68, which is the lower end portion, is fixed to the rock shaft 12 so as to be bodily carried therewith. Mounted on each end of the rock shaft 13 is a pair of actuating members and the actuating members of each pair is constructed similar to the actuating members just referred to. The pair of actuating members at one end of the rock shaft 13 is indicated generally by the reference character 69 and the pair at the other end of the rock shaft 13 is indicated generally by the reference character 70. Each actuating member of the pair 69 and the pair 70 includes an intermediate portion 71, an upper inwardly curved end portion 72 and a lower inwardly curved end portion 73, see Figure 1. The lower end portion 73 is fixed to the rock shaft 13 so as to be bodily carried therewith. The actuating members of the pair 69 oppose each other but are arranged in spaced relation and the actuating members of the pair 70 oppose each other and are arranged in spaced relation. The pairs of actuating members 69, 70 are oppositely disposed with respect to the pairs of actuating members 64, 65. All of the said actuating members are of like construction. The shifting arm 39 extends between the pair of actuating members 64 and is pivotally connected therewith as at 74. The shifting arm 42 extends between the actuating members of the pair 69 and is pivotally connected therewith as at 75. The shifting arm 45 extends between the actuating members of the pair 65 and is pivotally connected therewith as at 76. The shifting arm 46 extends between the pair of actuating members 70 and is pivotally connected therewith as at 77. The inner actuating member of the pairs of actuating members, carried by each rock shaft, are connected together by a stay bar 78 best shown in Figure 3. Pivotally connected to the upper end of each pair of actuating members as at 79, is a bell crank lever 80. The bell crank levers 80 which are pivotally connected to the pairs of actuating members 65 and 70, each is pivotally connected as at 81 to an end plate 58 upon the outer face thereof. The bell crank levers 80 which are pivotally connected to the pairs of actuating members 64 and 69, each is pivotally connected as at 82 to an end plate 57 exteriorly thereof. The bell crank levers 80 carried by the end plates 57 are oppositely disposed with respect to each other, and the bell crank levers 80 carried by the end plates 58 are oppositely disposed with respect to each other. The upper arm of each bell crank

lever 80 has pivotally connected therewith, one end of an outwardly extending curved link 83, and the other end of the link 83 is pivotally connected, as at 84 to a lifting arm 85. The lifting arms 85 are pivotally connected at their lower ends, as at 86 to the end plates 57, 58 and at their upper ends, as at 87 to the cover elements. The lifting arms 85 which are pivoted to the end plates 57 are oppositely disposed with respect to each other and the lifting arms 85 which are pivoted to the end plates 58 are oppositely disposed with respect to each other. Each cover element has a pair of lifting arms 85 pivotally connected therewith. The bell crank levers 80, in connection with the links 83 and lifting arms 85 provide means when the actuating members are moved in one direction to shift the closure elements to open position, as illustrated in Figure 2 and when the actuating members are moved in the opposite direction the closure elements are shifted to closing position with respect to the body portions of the file cases as illustrated in Figure 1.

The non-curved end of the shifting arm 39 is pivotally connected as at 88 to the end plate 57 of the file case 25. The shifting arm 42 is pivotally connected as at 89 to the end plate 57 of the file case 26. The shifting arm 45 has its non-bent end pivotally connected as at 90 to the end plate 58 of the file case 24 and the shifting arm 46 has its non-bent end pivotally connected as at 91 to the end plate 58 of the file case 26. Connecting the shifting arms to the end plates of the file cases, and as said shifting arms are pivotally connected to the actuating members, and also to the typewriter support 24, when the file cases are moved from the dotted line position shown in Figure 1 the typewriter support will be elevated to the dotted line position shown in Figure 1. When the file cases are shifted from the full line position shown in Figure 2, the lifting arms will provide for the lowering of the typewriter support 24 to dotted line position shown in Figure 2.

The closure or cover element 27, as well as the element 28, has a pair of lever arms 92, 93 connected therewith. The lever arms connected with the closure element 27 are oppositely disposed with respect to the lever arms connected to the closure element 28. The lever arms are pivotally connected to each end wall of a closure element as indicated at 94. Each lever arm 92 extends between a plate 57 and an end wall 55 and each lever arm 93 extends between an end plate 58 and an end wall 54. The lever arm 92, as well as the lever arm 93, is pivotally connected intermediate its ends as at 95. The lever arm 92, as well as the lever arm 93 has pivotally connected therewith a pair of oppositely extending actuating

arms 96, 97. The arm 96 is pivotally connected at its inner end, as at 98, forwardly of the pivot 95. The actuating arm 97 is pivotally connected at its inner end, as at 99 rearwardly of the pivot 95. The outer end of the arm 96 is pivotally connected as at 100 to a link 101 which has its inner end pivotally supported at 102 and its outer end pivotally connected to a side wall 60 as at 103. The actuating arm 97 has its other end pivoted as at 104 to a link 105, which has its inner end pivotally supported as at 106 and its other end pivotally connected as at 107 to a side wall 59. The construction and arrangement of the lever arms 92, 93 in connection with the actuating arms 96 and 97 provide means for holding the side walls of the file cases away from the body portions thereof as illustrated in Figure 2, when the file cases are positioned for use. As the cover elements move to open position they will actuate the lever arms 92 and 93 and provide for the shifting of the side walls. Link connections between the side walls and body portions of the file cases are indicated at 106. When the cover elements 27 and 28 are moved to closure position the lever arms 92 and 93 will be shifted closing the actuating arms to move the side walls of the file cases against the body portions of these latter which will permit of the cover elements assuming the position shown in Figure 1 of the drawings. When the cover or closure elements are in closure position, the various actuating arms, lever arms and links which are connected with the file cases will assume the dotted line position shown in Figure 2.

It will be assumed that the article of furniture is in the position as shown in Figure 1, now by pulling one of the file cases away from the other, both file cases will move in unison and at the same time the typewriter support 24 will start to move upwardly from the lower position. On the further movement of one file case away from the other the article of furniture can be swung to open position, which is the full line position shown in Figure 2 whereby the typewriter support, carrying the typewriters will be set in proper position for use and the file cases will be thrown open so that access can be had thereto when occasion requires. When it is desired to close the article of furniture one of the file cases is shifted upwardly which provides for an upward movement of the other file case, due to the fact that both file cases are connected up to move synchronously, and as the file cases move to closing position, the typewriter support will be lowered, and on a continued upward movement of one of the file cases, the file cases will abut, as shown in Figure 1 and the typewriter support will be moved to its lowered position. The arrangement of the

parts when the article of furniture is closed is as illustrated in dotted lines in Figure 2.

The pairs of actuating members or rock arms 64, 65 move away from the pairs of actuating members or rock arms 69, 70 when the article of furniture is to be opened for use and carrying the shifting arms 39, 42, 45 and 46 therewith, as well as provide a clearance for the upward movement of the support 24. When the actuating arms 64, 65, 69, 70 move outwardly the shifting arms swing on their pivot connections with the actuating arms due to the action of the file cases. The ends of the shifting arms that are connected to the file cases will move downwardly and the ends of the shifting arms that are connected to the support 24 will move upwardly carrying the support therewith. The link connections 33 and 35 will provide for the support 24 moving upwardly in an even manner and always sustain the support squared or in a non-tilted position. When the pairs of actuating members 64, 65 are moved towards the pairs of actuating members 69, 70, on the upward lift of a file case, the shifting arms will swing on their pivot connections with the actuating members in a manner whereby the curved ends of said shifting members will be moved downwardly carrying the support 24 therewith. When the parts are shifted to the full line position shown in Figure 2, the weight of the file cases will maintain the support 24 in an elevated position and the file cases in an open position, and when the parts have been shifted to the dotted line position shown in Figure 2, the weight of the file cases will maintain the support 24 in a lowered position and the file cases closed. The file cases provide what may be termed counter balances for the lever arm and link mechanisms when these latter are extended and folded. The shifting arms 32, 42, 45 and 46 are eccentrically pivoted respectively to the pairs of actuating members 64, 65, 69, 70.

The pairs of actuating members not only provide means, in connection with the file cases to, rock the shifting arms in both directions, but said actuating members further provide means for shifting the bell cranks 80 in opposite directions to provide for the moving of the closure elements to and from closure position, and whereby the closure elements will actuate the levers 82, 83 in both directions to project and withdraw the side walls of the file cases.

What I claim is:

1. An article of furniture for the purpose set forth comprising a truck, a pair of synchronously shiftable rock shafts journaled therein, a pair of actuating members fixed to each end of each shaft exteriorly of the truck and bodily carried with said shaft, a vertically movable article support ar-

ranged between the pairs of actuating members, a pair of normally closed file cases arranged over said article support and oppositely shiftable relatively to each other, a shifting arm pivotally connected between each pair of actuating members and further pivotally connected to said support, and connections between said actuating members, arms and cases to provide, on the manual shift of one case from the other the synchronous shifting of the cases to open position at the sides of said support and further for moving the support to its elevated position and on the manual shift of one case towards the other to synchronously shift said cases to closed position and in abutting relation above said support and further for moving the support to its lowest position.

2. An article of furniture comprising a truck, a pair of normally closed synchronously shiftable file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a vertically movable normally lowered article support, and means carried by the truck and connected to said cases and support to provide, on the shifting of one of said cases from the other, for the vertically moving of the support and the opening and positioning of the cases laterally with respect to the support and with the side walls and closure elements of the cases extended from the body portions thereof.

3. A portable article of office furniture comprising a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases, actuating connections between said cases and supports to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure elements of each case extended from the body portion thereof and said connections further providing on the manual shift of one case towards the other the lowering of the support and the closing and positioning of the cases over the support and with the cover elements of each case overlapping the body portion and side walls thereof.

4. A portable article of office furniture comprising a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases, actuating connections between

said cases and supports to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure elements of each case extended from the body portion thereof and said connections further providing on the manual shift of one case towards the other the lowering of the support and the closing and positioning of the cases over the support and with the cover elements of each case overlapping the body portion and side walls thereof, and said operative connections positioned at each end of each of said cases and support.

5. A portable article of office furniture comprising a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases actuating connections between said cases and supports to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure elements of each case extended from the body portion thereof and said connections further providing on the manual shift of one case towards the other the lowering of the support and the closing and positioning of the cases over the support and with the cover elements of each case overlapping the body portion and side walls thereof, said operative connections positioned at each end of each of said cases and support, and a truck having said operative connections attached to each corner thereof.

6. A portable article of office furniture comprising a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases, actuating connections between said cases and supports to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure elements of each case extended from the body portion thereof and said connections further providing on the manual shift of one case towards the other the lowering of the support and the closing and positioning of the cases over the support and with the cover elements of each case overlapping the body portion and side walls thereof, said operative connections positioned at each end of each of said cases

and support, a truck having said operative connections attached to each corner thereof, the operative connections arranged at one end of said cases and support being oppositely disposed with respect to the operative connections positioned at the other end of said cases and support.

7. A portable article of office furniture comprising a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases, actuating connections between said cases and supports to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure elements of each case extended from the body portion thereof and said connections further providing on the manual shift of one case towards the other the lowering of the support and the closing and positioning of the cases over the support and with the cover elements of each case overlapping the body portion and side walls thereof, said operative connections positioned at each end of each of said cases and support, a truck having said operative connections attached to each corner thereof, the operative connections arranged at one end of said cases and support, the operative connections arranged at one end of said cases and support being oppositely disposed with respect to the operative connections positioned at the other end of said cases and support, and the said operative connections having elements thereof for permanently connecting the side walls and cover elements of each case with its body portion.

8. An article of office furniture comprising a pair of synchronously operable rock shafts, supporting means therefor, a pair of upstanding actuating members connected to each end of and bodily movable with a rock shaft, a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases, actuating connections between said actuating members and said cases and said support to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure element of each case extended from the body portion thereof and further providing, on the shift of one case towards the other the lowering of the support and the

closing and positioning of the cases over the support and with the closure element of each case overlapping the side walls and body portion thereof.

5 9. An article of office furniture comprising a pair of synchronously operable rock shafts, supporting means therefor, a pair of upstanding actuating members connected to each end of and bodily movable with a rock
10 shaft, a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair of shiftable side walls and a shiftable closure, a normally lowered vertically movable
15 article support normally positioned below said cases, actuating connections between said actuating members and said cases and said support to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure element of each case extended from the body portion thereof and further providing, on the shift of one case towards the other the lowering of the support and the closing and positioning of the cases over the support and with the closure element of each case overlapping the side walls and
25 body portion thereof, the said actuating connections arranged at each end of said cases and said support, the actuating connections at one end of the cases and supports being oppositely disposed with respect to the actuating connections at the other end of the cases and the support.

10. An article of office furniture comprising a pair of synchronously operable rock shafts, supporting means therefor, a pair
40 of upstanding actuating members connected to each end of and bodily movable with a rock shaft, a pair of synchronously movable, manually shiftable, normally closed file cases each including a body portion, a pair
45 of shiftable side walls and a shiftable closure, a normally lowered vertically movable article support normally positioned below said cases, and said support to provide, on the manual shift of one case from the other, the vertical moving of the support and the opening and lateral disposition of said cases with respect to the support and with the side walls and closure element of each case extended from the body portion thereof and
50 further providing, on the shift of one case towards the other the lowering of the support and with the closure element of each case overlapping the side walls and body portion thereof, the said actuating connections arranged at each end of said cases and
60

said support, the actuating connections at one end of the cases and supports being oppositely disposed with respect to the actuating connections at the other end of the cases and the support, and certain elements of
65 said actuating connections permanently connecting the side walls and closure element of a file case to the body portion thereof.

11. In an article of furniture for the purpose set forth two oppositely disposed sets
70 of rocking elements, each set consisting of two pair of rock elements, one set opposing the other, means connected to the lower ends of said sets to provide for the synchronous rocking of said sets alternately in a direction away and towards each other, two oppositely disposed pair of support elevating and lowering arms, means for pivotally connecting each of said arms intermediate its ends to and eccentrically of
80 a pair of rock elements, a support pivoted to the inner ends of said arms, and means pivotally connected to the outer ends of said arms for rocking them on their pivots to provide for the elevating of the
85 support when the outer ends of the arms are lowered and the lowering of the support when the outer ends of the arms are elevated.

12. In an article of furniture for the purpose set forth two oppositely disposed sets
90 of rocking elements, each set consisting of two pair of rock elements, one set opposing the other, means connected to the lower ends of said sets to provide for the synchronous
95 rocking of said sets alternately in a direction away and towards each other, two oppositely disposed pair of support elevating and lowering arms, means for pivotally connecting each of said arms intermediate
100 its ends to and eccentrically of a pair of rock elements, a support pivoted to the inner ends of said arms, and means for connecting each pair of arms together to prevent the tilting of the support during the
105 vertical movement thereof.

13. A combined desk and file comprising a vertically movable support for carrying a typewriter or computing machine, normally closed filing units arranged over said
110 support, means for synchronously opening said units and elevating said support and for positioning the units laterally with respect to the support, and means for swinging each unit, when in a lateral position
115 with respect to the support, towards the latter.

In testimony whereof, I affix my signature hereto.

JOHN A. HUGHES.