R. L. JOHNSON.

MUSTER CHECK BOARD.

APPLICATION FILED NOV. 19, 1918.

1,393,136. Patented Oct. 11, 1921.

Fig. 1

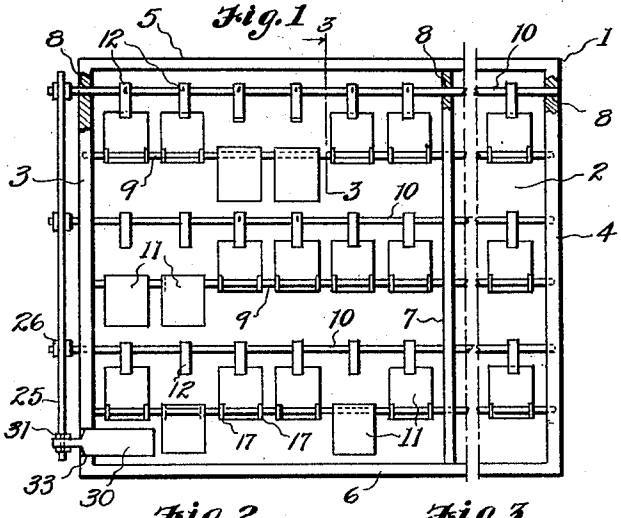


Fig. 4

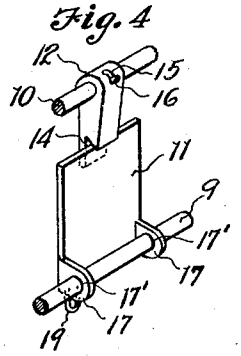


Fig. 5

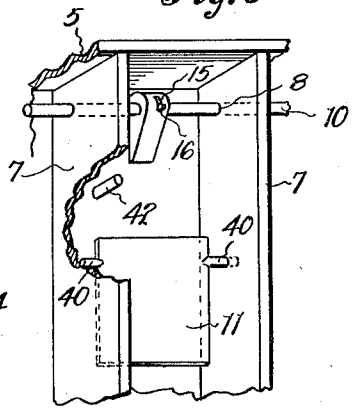


Fig. 2

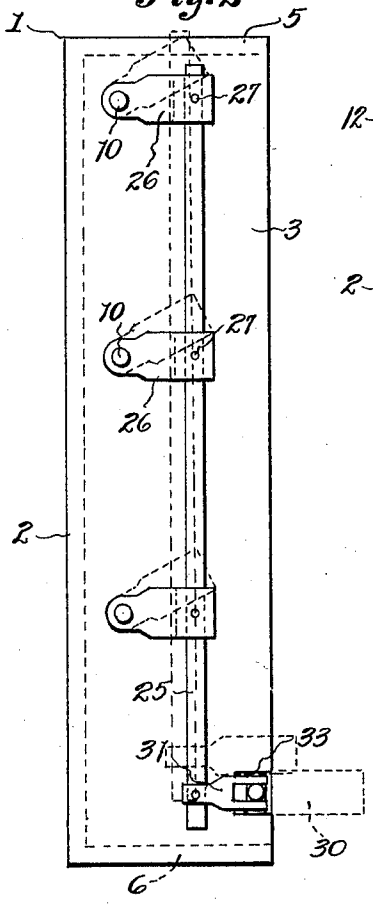


Fig. 3

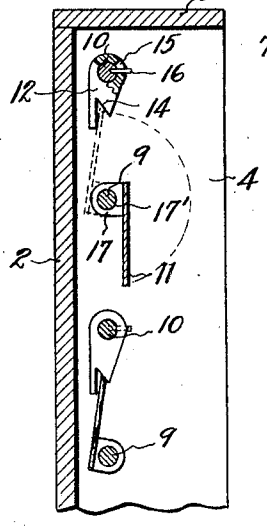


Fig. 6

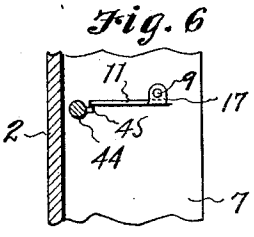


Fig. 8

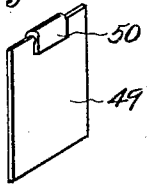
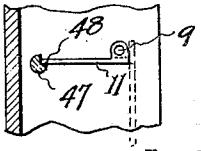


Fig. 7



Inventor

ROSAMOND L. JOHNSON

By Richard J. Cook

Attorney

UNITED STATES PATENT OFFICE.

ROSAMOND L. JOHNSON, OF PORT ORCHARD, WASHINGTON.

MUSTER-CHECK BOARD.

1,393,136. Specification of Letters Patent. Patented Oct. 11, 1921.

Application filed November 19, 1918. Serial No. 263,227.

To all whom it may concern:

Be it known that I, ROSAMOND L. JOHNSON, a citizen of the United States of America, and resident of Port Orchard, in the county of Kitsap and State of Washington, have invented a new and useful Improvement in Muster-Check Boards, of which the following is a specification.

This invention relates to improvements in muster check boards, and has for its principal object to provide a device of that character which permits a speedy checking in of employees reporting for duty, an easy recording of the checks after a reporting period and the simultaneous resetting of all the individual checks on the board in readiness for the following reporting period.

It is also an object of the invention to provide a muster check board of the above character, whereon the muster checks are permanently retained in a pivotal manner which permits each check to be reversed on the board to indicate by the position assumed, whether or not the employee assigned thereto has, or has not, reported for duty, and to provide mechanical means whereby the checks may be released so that they will automatically clear the board for the following report.

In accomplishing these and other objects of the invention, I have provided the improved details of structure, the preferred forms of which are illustrated in the accompanying drawings, wherein:

Figure 1 is a front view of a muster check board constructed according to the present invention, showing the checks in different positions.

Fig. 2 is an enlarged end view of the device, illustrating the check releasing, or resetting mechanism.

Fig. 3 is an enlarged vertical section of a part of the device on the line 3—3 of Fig. 1.

Fig. 4 is a detail perspective view of one of the checks and its retaining dog.

Fig. 5 is a detail perspective view illustrating an alternative construction of check and check-holding dog.

Figs. 6 and 7 are two different constructions for supporting the checks in upturned position, which could be used instead of the dogs.

Fig. 8 is a perspective view of a check covering plate.

Referring more in detail to the drawings; 1 designates the muster check board as a whole, which comprises an open front box construction, having a back wall 2, opposite side walls 3 and 4, top and bottom walls 5 and 6, respectively, and one or more vertical partitions 7, the number of which is determined by the length of device constructed and the character of the check used in the device.

Mounted within the box, by extending the same through alining apertures 8, in the end walls and partitions thereof, are a plurality of horizontally disposed rods designated alternately by numerals 9 and 10; the rods 9 each being adapted for pivotally supporting thereon a plurality of spaced-apart muster checks 11, and the ends thereof terminate within the end walls of the board, and the rods 10 are revolubly mounted, and at one end extend from the bar to permit the attachment thereto of mechanism whereby they may be partially rotated, as will be presently described.

Mounted on each of the rods 10 within the box, in coöperative relation to the checks that are mounted on the rods 9, adjacently below the same, are depending latch dogs 12 whereby the ends of the checks may be releasably retained to hold the checks in an inverted position.

A preferred type of dog, or latch, employed comprises a downwardly tapered member having a downwardly opening notch 14 at its lower end and provided at its upper end with a slot 15, adapted to receive a pin 16 therethrough which extends into the rod mounting the dog to retain the latter against movement longitudinally of the rod but permits a limited rearward swinging movement of the lower end of the dog.

The preferred type of muster check used, as shown particularly in Figs. 1 and 3, consists of a flat plate having wings 17 bent rearwardly from its opposite side edges at its upper end which are provided with apertures 17′ for receiving the rods 9. These plates are of such length that when swung pivotally upward their swinging ends will engage the lower end of their respective latch dogs on the rods next above the same to swing the dogs slightly rearwardly and permit the plates' ends to drop within the end notches of the dogs and to thereby retain the plates in this inverted position until they are released by a forward movement of the dogs, produced by partially rotating their supporting shafts.

The means for retaining the checks properly spaced on their supporting shafts comprises staples 19, Fig. 4, which are extended into the shafts 9 to inclose wings of the plates to prevent any movement thereof longitudinally of the shaft.

The means for simultaneously actuating the rods 10 to move the dogs to release all of the plates which may be retained, comprises a vertical shaft 25, operatively connected with the extended ends of the shafts 10 by means of levers 26 which have their rearward ends fixedly secured to the shafts 10 and their outer ends pivotally attached by pins 27 to the shaft 25, so that on moving the latter shaft vertically the levers will rotate all of the shafts 10 to actuate the dogs outwardly at their lower end and thereby release all of the upturned checks.

I have also provided a device for actuating the vertical rod 25 and for locking the same against movement, which consists of a handle 30 that is pivotally mounted in a forwardly extending bracket 31, attached to the rod 25, in such a manner that it may swing laterally and horizontally into or from a notch 33 that is cut in the edge of the side wall 3. When the handle is turned laterally to extend through the notch it locks the bar 25 against longitudinal movement and prevents releasing of the checks, but when turned outwardly from the notch, it releases the rod so that it may be shifted in a vertical direction to rotate the rods 10 and dogs 12 to release and reset all the upturned checks.

As an alternative construction I have provided the plates and dogs as illustrated in Fig. 5. In this construction the plates are provided at opposite side edges near their upper ends with laterally extending pivot pins 40, whereby the plates may be mounted between partitions of the board, to swing on their mountings the same as the plates, previously described. The dogs in this illustration are tapered to a point at their swinging ends and do not have the notches for receiving the ends of the plates, as in the preferred type; the plate ends being retained in upturned position back of these dogs and against the outer ends of pegs 42, extended from the back of the board.

Other forms of plate sustaining members are illustrated in Figs. 6 and 7; the means illustrated in Fig. 6 consisting of horizontal rods 44 provided with forwardly extending buttons 45 against which the end of the plates may be supported when moved back of the dogs. The means illustrated in Fig. 7 consists only of a rod 47 having a longitudinally extending shoulder 48 thereon for likewise supporting the ends of the plates. In both instances the plates are released by rotating the rods downward, and this may be done by rod turning mechanism, as illustrated in Fig. 2.

Fig. 8 illustrates a cover which may be placed over unassigned checks and consists of a plate 49 having a laterally turned end portion 50 forming a hook which frictionally receives the end of a check plate to hold the cover thereon.

The checks of the device may be numbered on each side, one side being marked "In" and the other side "Out", and employees may be assigned to certain numbers corresponding to the checks on the board.

With the device so constructed and assembled, in using the same, assuming that the checks are all released from the dogs and depending in "out" position, when employees report for duty they simply select their individual checks and swing them upwardly until the lower ends thereof are caught and held by the corresponding latch dogs.

The time keeper then, after each reporting period, may make a notation of those checked in or absent and then clears the board for the following reporting period. This is done by grasping the handle 30, turning it so that it is clear of the notch 33, and then moving it upwardly to shift the vertical shaft 25, which in turn actuates all the horizontal rods 10 to move the dogs outwardly and thereby release all the checks that are held thereby so that they will fall to initial position.

It is apparent that such a device will afford a means for speedy checking in and may be quickly cleared after a record has been made.

Having thus described my invention what I claim as new and desire to protect by Letters Patent is:

1. A muster check board of the character described, comprising a frame, a plurality of horizontal rods mounted in said frame, a plurality of checks spaced apart and pivotally suspended by their upper ends from each alternate rod, latch dogs mounted on alternate rods above each check to engage and retain the ends of the checks when the latter are swung upwardly to inverted position, a lever fixed to each of the dog supporting rods, a rod connecting all of said levers and a handle on said rod whereby the same may be moved to rotate the dog supporting rods to actuate the dogs to release the checks.

2. A muster check board of the character described comprising a frame having vertical end walls and partitions, check and dog supporting rods mounted revolubly and horizontally in spaced apart relation in said frame with the ends of each dog supporting rod extending from the end of the frame, a plurality of spaced apart checks swingingly suspended from each check supporting rod and adapted to be swung upwardly to inverted position, latch dogs mounted on the dog supporting rods to

be engaged and to retain the ends of the checks when the latter are swung upwardly, forwardly extending links fixed to the extended end of each dog supporting rod, a vertical rod pivotally fixed to the outer ends of said links, a handle attached to said vertical rod whereby the same may actuate the links to rotate the dog rods to actuate the latter to release the checks held thereby, and means for locking the vertical rod against movement.

3. In a muster check board of the character described, a horizontal check supporting rod, a check pivotally suspended from said rod from its upper end, a second rod revolubly mounted above the first named rod, a dog having a downwardly opening notch in its lower end mounted on said second rod, said dog having a slot therein and a pin extended through said slot into said rod to prevent free outward swinging of the dog but permitting a limited rearward movement thereof sufficient to receive the lower end of said check within the notch thereof when the check is swung to inverted position and means for rotating the dog supporting shaft to actuate the dog outwardly to release and return the check to normal position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROSAMOND L. JOHNSON.

Attest:
T. M. Moore,
J. C. Brown.