

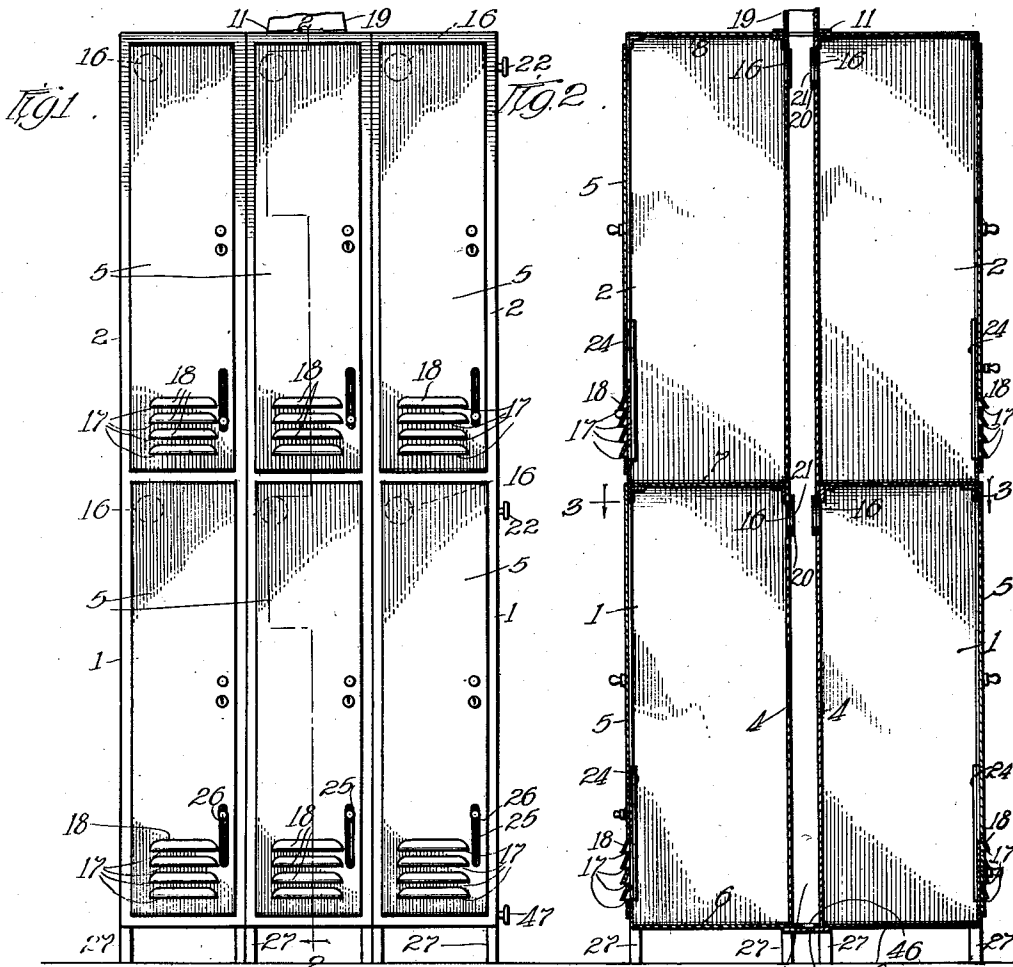
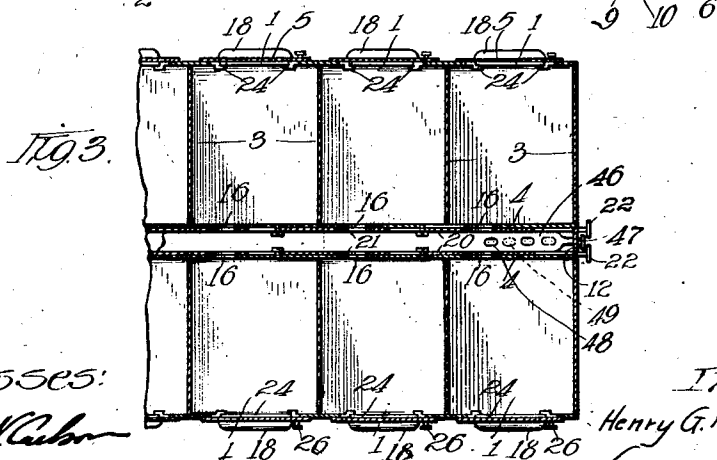
H. G. ARMSTRONG.  
LOCKER.

APPLICATION FILED MAR. 8, 1915.

Patented June 13, 1916.

2 SHEETS—SHEET 1.

1,186,964.



Witnesses:

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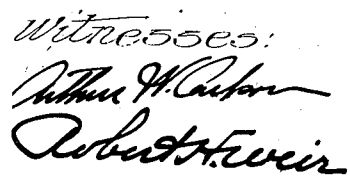
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2 SHEETS—SHEET 2.

**1,186,964.**



Inventor  
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# UNITED STATES PATENT OFFICE.

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## LOCKER.

1,186,964.

Specification of Letters Patent. Patented June 13, 1916.

Application filed March 8, 1915. Serial No. 13,011.

*To all whom it may concern:*

Be it known that I, HENRY G. ARMSTRONG, a citizen of the United States, residing at Taylorville, in the county of Christian and State of Illinois, have invented certain new and useful Improvements in Lockers, of which the following is a description.

My invention belongs to that general class of devices known as lockers, and relates more particularly to an improved locker system, and construction of lockers, for use wherever found applicable. My locker is designed to be employed particularly in manufacturing plants, coal mining wash and locker rooms, or gymnasiums, clubs and the like, for the storing of various articles, particularly clothing and personal effects. Often the clothes or other articles may be placed in the locker in a damp or wet condition, which may cause the same to deteriorate or be ruined, or make the same extremely unhealthful if put on, as for example, the next day, or before the same has had time to thoroughly dry. Often where the clothes or wearing apparel of many persons is gathered together, as in a locker system, the same may be very unsanitary and promote disease, particularly should one of the locker users develop a contagious disease. It is a well known fact that most locker rooms are close and poorly ventilated, and if the clothes have not been dried, particularly if damp with perspiration, the air in the locker room will be extremely sickening, and, as stated, probably very unhealthy. With my improved locker and locker system the lockers and locker rooms are properly ventilated, the clothes and wearing apparel and other articles thoroughly dried, and if desired, disinfected, or deodorized, and in cold weather, when the clothes are dried even if extremely wet, the lockers and locker rooms are at the same time heated.

The invention has broadly among its objects the production of a device of the kind described that is simple, convenient, durable, compact, efficient, effective and satisfactory, which will overcome the objections and disadvantages of the ordinary lockers and locker system and accomplish the improved results enumerated.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described,

and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts, Figure 1 is a front elevation of several lockers; Fig. 2 is a sectional view taken substantially on line 2, 2 of Fig. 1; Fig. 3 is a sectional view taken substantially on line 3, 3 of Fig. 1; Fig. 4 is a plan view of a portion of a locker room and wash house; Fig. 5 is a sectional view through the same, looking substantially from line 5, 5 of Fig. 4; Fig. 6 is a sectional view taken substantially on line 6, 6 of Fig. 7; Fig. 7 is a cross sectional view through several lockers, illustrating a slightly modified construction, and Fig. 8 is a sectional view taken substantially on line 8, 8 of Fig. 7.

In the drawings, I have illustrated the lockers and locker system as applied to a locker and wash house, suitable for coal mines or other similar industries. This particular industry is referred to, as it is one of the cases where the apparel stored in the lockers is frequently wet or damp when placed in the locker, and sometimes very much soiled, and often needs disinfecting. The miner hangs his wet or damp clothing in the locker, and unless some provision is made for drying the clothes, the same will be damp, if not wet, when he enters upon his next shift, tending to bring on rheumatism, tuberculosis, pneumonia, and many other ills; or if provision is not made for the drying and storing of his clothes, he may wear them home, thereby creating unsanitary conditions at his home.

In the locker system illustrated in the drawings, a plurality of lockers are shown, these being preferably arranged in series or stacks of the desired height and number, and two stacks arranged back to back, with a distance therebetween, the same being suitably inclosed as set forth. The lockers themselves may be made of steel, wood or other suitable material, metal being preferred. I have not considered it necessary to illustrate all of the details of construction of each individual locker, as this varies to a considerable extent with the styles of the locker manufacturers, or the cost of construction of the locker. Referring particularly to Figs. 1 to 3, I have shown a series of lockers 1, each arranged in two stacks back to back, with the second series 2 ar-

ranged above and carried by the lower stack for economy in construction, the several lockers having parts in common and consisting of the sides 3 formed with backs 4, doors 5, and bottom 6, combined top and bottom 7, and top 8. The two stacks are separated so as to provide a distributing space 9, which is preferably closed at the bottom by the plate 10, at the top by plate 11, and at the ends by plates 12, it being understood that the plate 12 may be of sufficient size to form the sides of the end lockers. Arranged at some suitable place in each locker, preferably in the backs 4, are openings 16, and also arranged in the locker walls, as shown, in the doors, are openings 17. The openings 17 may be formed by offsetting portions 18, the same also serving as guards, the openings shown being in the form of narrow slits. I have preferably placed openings 16 near the tops of the backs, and the openings 17 near the bottom of the doors. The main opening or inlet to the space 9 is formed by a pipe 19, or the equivalent, connected to suitable apparatus, as hereinafter set forth. The arrangement or positions, size and contour of openings 16 and 17 may be varied from the arrangement shown, that being only for illustration of one construction.

If desired, suitable means may be provided for varying the size of the openings 16, a very convenient construction being slides 20, having holes 21 arranged to register with holes 16. I have shown the slides arranged to be controlled at the exterior of the cabinet, so that all the openings in a series may be controlled at one time. This is done in a simple manner by forming slides in one piece, and extending a portion of the same to the exterior of the cabinet at one end, as at 22. By shifting the slides 20 the admission of air through the openings 16 may be controlled as desired. I have also shown means for controlling the passage of air from the lockers through the openings 17. For this purpose I have shown a slide 24, suitably mounted on the door, it being understood that any preferred construction may be employed. In the construction shown, the slides are secured against movement by thumb screws 26, or the equivalent, extending through slots 25 in the front of the door. The doors 5 may, of course, be provided with the usual locks, hinges, and usual fixtures, not necessary to describe in detail. I have shown the lockers supported by the legs 27, this being more sanitary than to have them sitting on the floor, as it prevents mice, rats, as well as bugs, collecting under the lockers.

I have shown the lockers connected with the ventilating, heating, drying and disinfecting apparatus by a pipe 28, to which the pipes 19 extend. Pipe 28 is shown connected

to a fan 29, which is driven by a motor 35, or equivalent means. An extending part 30 connects the fan with the part 31, which is connected to the intake 32, arranged to take fresh air from the exterior of the plate. Heating pipes or coils 33 extend into the heating chamber 31, forming a simple means of heating the ingoing air. For disinfecting purposes I have shown a container 34, carrying a wick 36, which extends into the path of the ingoing air. Any disinfectant, deodorizer, or the like, may thus be dispensed and be taken up by the air. This form of dispenser is shown merely for illustration, as any preferred type may be employed. Ventilators 39 may be arranged in the roof, or other suitable part of the building. I have also shown valves or dampers 37 in the pipes 19 (see Fig. 5) for controlling the passage of the fluid, such as the air moving through the pipes. Referring particularly to Figs. 2 and 3, I have shown a slide 46 at the bottom of the space between the lockers, the same being provided with openings 48, arranged to register with openings 49 in the bottom plate 10 when desired. The slide may be shifted by means of the shift rod 47, extending to the exterior of the lockers. While these slides are not essential in most cases, and in others not desirable, it provides an additional regulation that may at times be convenient. Ordinarily the openings 49 are closed by the slide.

In operation, assuming that the fan is driven so as to take air in through the intake 32, the same passes through the parts 31 and 30 into the fan, being sufficiently heated, and taking up the desired amount of disinfectant. The same is then pumped through pipe 28 and pipes 19 into the spaces 9 in the different stacks. It then passes through the opening 16, and into and through the lockers, and then out through openings 17, into the room; then passes through the ventilators 39 to the exterior of the building. This air being thoroughly warmed and carrying the desired disinfectant or deodorizer, thoroughly dries, disinfects and ventilates the lockers and the contents, and then heats, ventilates and disinfects the room. The amount of air supplied, the disinfecting or the heating and drying may be controlled by the pump, heater and disinfector. The admission of the same to the lockers may be controlled by the dampers or valves 37, or slides 20, and it may be put under pressure in the lockers by adjusting the slides 24. Where any bank or series of lockers is not employed, the slide 20 controlling the admission of air to that bank may be shut off, thereby increasing the flow of the other lockers. Likewise the openings 49 may be uncovered by shifting the slides 46. The air, or a portion of the same, may then escape without passing directly through

the lockers. In this case, however, it heats the lockers to a considerable extent. While the flow of air may at times be reversed, if so desired, the same is preferably circulated in the direction indicated.

The construction illustrated in Figs. 7 and 8 is substantially identical with the forms of lockers shown in the other figures, but for the sake of clearness I have not embodied the same in those figures. In this construction the locker is designed to receive clothes that are extremely wet, and from which the water may drip for some time before drying. Referring to these two figures, the locker bottom 41 is preferably sloping, and may be formed with grooves 42. It terminates in a discharge outlet 43, emptying into a discharge pipe 44. This prevents the accumulation of water in the locker, and dripping of the same from around the door openings, or its leaking into adjacent lockers. This is not shown embodied in Figs. 2 and 3, for the reason stated, to-wit, to avoid confusion in these figures, and also for the additional reason that where the clothing is not excessively wet, it need not be employed.

The construction herein shown and described, and the system of drying and disinfecting, has many advantages, among which may be mentioned that it is not necessary to remove the clothing from the locker to dry the same, and the employee's clothing being in the locker and locked, there is no chance for confusion among the property of different persons, and consequent loss either accidentally or by theft. The clothing is perfectly dried and most efficiently disinfected and deodorized. Any odors are ordinarily killed by the disinfectant and deodorizer in a few moments time, and by the pure air, which is a most efficient disinfectant. The damp air escapes through the ventilators 39, or their equivalents. With this system there is no question of the warm dry air reaching the clothing, nor of the same not being completely disinfected. Likewise the locker room may be kept at a comfortable temperature. The construction and system is most convenient and economical in operation, is compact, and is secure and safe.

Having thus described my invention, it is obvious that various immaterial modifica-

tions may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement or combination of parts herein shown and described, and use mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. In a locker system, the combination of a plurality of lockers suitably assembled together with a heat distributing chamber arranged therebetween, each of said lockers having an opening connecting the interior of the same with said chamber, and provided with an opening through one of the exterior sides, and means for circulating heated air through said lockers from said chamber.

2. The combination in a locker system of a plurality of lockers arranged back to back with a space therebetween, said space closed about the lockers at the tops and the sides and bottoms thereof, each locker having an inlet opening connecting the interior of the same with said space, and provided with a discharge opening through one of the exposed sides, and means for conducting a current of air to said inclosed space controlling the passage therefrom through the several lockers at will.

3. The combination in a locker house of the kind described of a plurality of lockers, suitably assembled together, each comprising suitable walls, said locker house provided with an air intake and outlet, means for circulating air within said locker house from said intake through the lockers, and thence out through the said outlet, means for heating said air between the intake and the lockers, and means for charging the air with a suitable disinfectant between said heating means and said lockers, whereby fresh heated air and a disinfectant are circulated from the exterior of the building through the lockers, and thence into the locker room.

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

HENRY G. ARMSTRONG.

Witnesses:

C. T. HEWITT,  
F. C. ASHENBACH.