

Opinion of the Court.

SARGENT v. HALL SAFE AND LOCK COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE
SOUTHERN DISTRICT OF OHIO.

Argued January 21, 26, 1885.—Decided March 30, 1885.

In letters patent No. 186,369, granted to James Sargent, January 16, 1877, for improvements in time-locks, the combination-lock forming a member of the combinations claimed by the two claims of the patent, is one which has a bolt or bearing that turns on an axis or revolves, as distinguished from a sliding-bolt, and those claims are not infringed by a structure in which the combination-lock has not a turning or revolving-bolt.

Claim 2 of the patent requires that the tumblers of the combination lock and its spindle shall be free to rotate while the bolt-work is held in its locked position, by the bolt or bearing of the combination-lock.

In patents for combinations of mechanism, limitations and provisos imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor, and in favor of the public, and looked upon as in the nature of disclaimers.

Bill in equity to restrain the infringement of a patent. The facts which make the case are stated in the opinion of the court.

Mr. Edmund Wetmore and *Mr. George T. Curtis* for appellants.

Mr. Edward N. Dickerson and *William C. Cochran* for appellee.

MR. JUSTICE BLATCHFORD delivered the opinion of the court.

This is a suit in equity, brought in March, 1877, in the Circuit Court of the United States for the Southern District of Ohio, by James Sargent, the appellant, against the Hall Safe and Lock Company and others, the appellees, for the infringement of letters-patent No. 186,369, granted to Sargent, January 16, 1877, for improvements in time-locks. It was afterwards consolidated, as of November, 1879, with another suit in equity, brought in July, 1876, in the same court, by the same plaintiff

Opinion of the Court.

against the same defendants, for the infringement of reissued letters patent No. 6,787, granted to Sargent, December 7, 1875, for improvements in time-locks, on the surrender of original letters patent No. 121,782, granted to Stephen W. Hollen, December 12, 1871. The Circuit Court heard the case on pleadings and proofs and dismissed the bill. The plaintiff has appealed, but no claim is made in this court to recover on the Hollen reissue.

The specification and claims of No. 186,369 are as follows:

“Be it known that I, James Sargent, of Rochester, in the county of Monroe, and State of New York, have invented certain new and useful improvements in locks for safe and vault doors, of which the following is a specification:

“This invention relates to certain improvements in locks for safe and vault doors, its object being to construct a time-movement in such a manner as to have it guard, and operate in conjunction with, a combination-lock, so as to render said combination-lock, when locked, inoperative and incapable of being unlocked until the arrival of the appointed hour, at which time the time-mechanism will liberate or cease its guarding action on the combination-lock, and admit of said lock being operated and unlocked by the person having knowledge of the combination upon which said lock is set, so as to enable the bolt-work of the safe or vault door to be retracted and the door opened.

“My invention consists in combining a time-mechanism with a combination-lock, and adapting the same to operate in connection with the bolt-work of a safe or vault door, the time-mechanism being constructed to act in conjunction with, and guard, dog, or render inoperative, the aforesaid combination-lock, when locked, the said combination-lock having a bolt or bearing specially constructed and arranged, so that, when in one position, it will rest upon or receive the pressure of the bolt-work of the door when the latter is thrown out and the lock locked, and thus prevent the retraction of the bolt-work.

“This arrangement retains the bolt-work in a locked condition during the hours appointed for it to remain locked, and prevents the lock from being unlocked by any one having legiti-

Opinion of the Court.

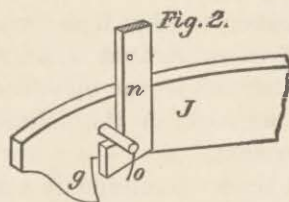
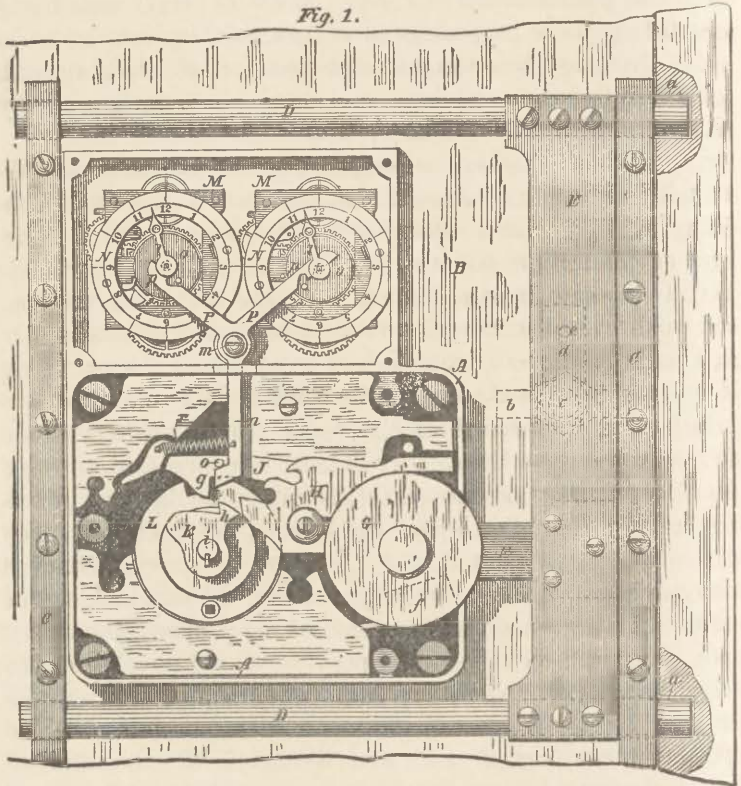
mate or surreptitious knowledge of the combination upon which the lock is set, until the arrival of the appointed hour, when the time-mechanism will cease its dogging or guarding action upon said combination-lock, and admit of said lock being operated by those in possession of the combination, so as to enable them to place the bolt or bearing of the lock in such position as to enable the retraction of the bolt-work, whereby the safe or vault door can be opened.

“The invention further consists in a certain combination, substantially as hereinafter set forth, that is to say, a union consisting of a combination-lock, a time-movement and a yoke-lever or connection, adapted to be placed upon a safe or vault door, to operate in conjunction with the bolt-work thereon, said yoke-lever or connection being constructed and located in such respect to the combination-lock as to render the unlocking of the same absolutely impossible when locked, and so remain locked until the arrival of the appointed or predeterminate time, at which time the said yoke-lever or connection, through the action of the time-movement, is caused to cease its guarding or dogging action upon the combination-lock, at which time, or any time after during the time the time-mechanism has ceased its dogging or guarding action, the said lock can be unlocked by the person in possession of the proper combination upon which the lock is set, the peculiarity and novelty of this union being, that, when the said combination-lock, with its time-mechanism, is arranged upon a safe or vault door, to operate in conjunction with the bolt-work thereon, and all locked, the tumblers or combination-wheels of said lock, and the spindle of the same, together with its usual indicator, are all left free to be moved or rotated without exerting any unlocking action or strain whatever upon the mechanism composing the combination-lock, or the delicate mechanism composing the time-movement.

“In the drawings, figure 1 represents a portion of a safe or vault door, illustrating therein a bolt-work and a combined time-mechanism and combination-lock, with covers removed, the bolt-work being thrown out into the jamb of the door, and the combination-lock locked and guarded by the time-move-

Opinion of the Court.

ment. Fig. 2 is a detail view, illustrating a yoke-lever or connection adapted to connect with the dog, angle-bar, or fence of the combination-lock. Fig. 3 represents a portion of a safe

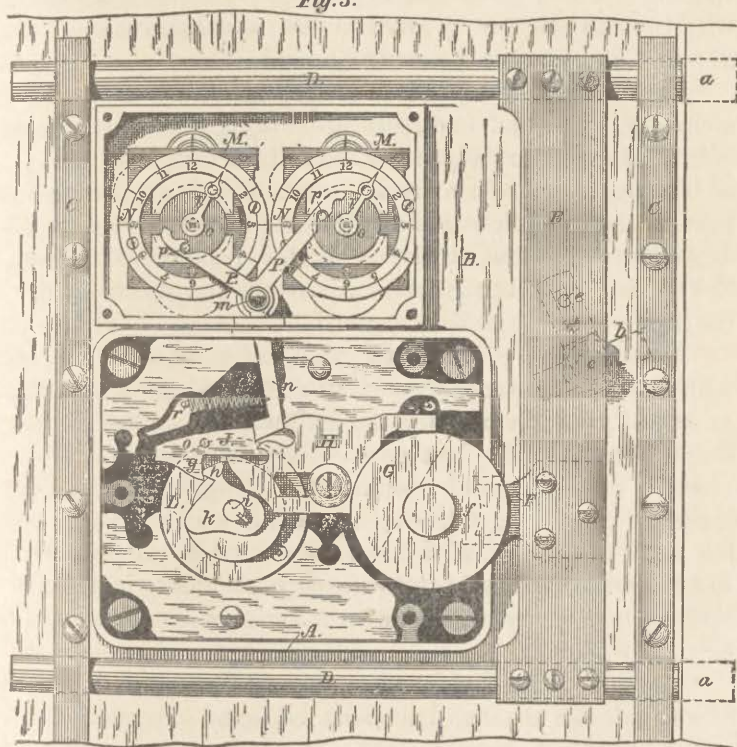


or vault door, having thereon a bolt-work and a combined time-mechanism and combination-lock, the combination-lock being unlocked and the bolt-work retracted.

Opinion of the Court.

“Referring to the drawings, the letter *A* designates the case of a combination-lock, the lock-works of which may be of any of the well-known forms now in use, provided the same is supplied with a lock-bolt or a bearing, constructed and arranged so as to connect with or receive the pressure of the bolt-work located on a safe or vault door, when said lock-bolt or bearing and the bolt-work are placed in a position for locking the door.

Fig. 3.



“The combination-lock illustrated in the drawings is one known as ‘Sargent’s Automatic Bank-Lock,’ upon which letters patent were granted August 28, 1866, reissued January 2, 1872.

“Said combination-lock is shown as applied upon a safe or vault door, *B*, upon which is arranged a bolt-work, consisting of the usual bolt-supporting bars, *C*, bolts, *D*, carrying-bar, *E*.

Opinion of the Court.

having a tongue-piece, *F*, said carrying-bar serving as a medium for projecting or retracting the bolts into and out of the sockets, *a*, constructed in the jamb of the safe or vault, for the purpose of locking or unlocking the door, as shown in Figs. 1 and 3.

“The bolt-work has the requisite projecting or retracting motion imparted to it from the outside of the door, when opened or closed, through the medium of the usual knob, *b*, and the spindle, *c*, which spindle passes through the door, and connects with the carrying-bar by any suitable fastening, such as a slot, *d*, pin, *e*, and suitable fastening-nut.

“The lock-bolt or bearing of the combination-lock may be of a circular, segmental, or other desired form, provided said lock-bolt is arranged and adjusted so as to turn upon a suitable axis or bearing, and is so constructed that, in one position, it will prevent the retraction of the bolt-work, so as to retain the safe or vault door locked, while, in another position, it will admit of the bolt-work being retracted for the purpose of allowing the safe or vault door to be opened.

“In the present example, the lock-bolt is shown as provided with an offset or recess, *f*, which offset or recess is brought in or out of coincidence with the tongue-piece on the carrying-bar, to admit of the bolt-work being projected or retracted through the medium of a sliding-bar, *H*, which carries a dog, fence, or angle-bar, *J*, having a hook, *g*, which engages with the bit, *h*, of the cam, *K*, secured upon the dial-spindle, *i*, which spindle passes through the safe or vault door, in the usual manner, and serves to operate the series of tumblers or combination-wheels, *L*.

“The sliding bar *H* is connected with the lock-bolt or bearing in any suitable manner, its object being to impart motion to said lock-bolt or bearing, to secure the objects above specified.

“The said lock-bolt or bearing, it will be perceived, is located in its casing, so as to rest closely in the rear of the tongue-piece or connection secured upon the carrying-bar, and is isolated, so to speak, from the tumblers or combination-wheels and the other main working parts of the lock, and, therefore, any strain which is brought to bear upon it by the heavy bolt-work will

Opinion of the Court.

be expended upon the bolt or bearing and its axis or bearing, and not upon the tumblers or combination-wheels.

“It will be seen that, to unlock the combination-lock, the hook of the dog, angle-bar, or fence, *J*, will drop into the notches or slots of the tumblers or combination-wheels, when the notches are brought into juxtaposition by the operator who has possession of the combination upon which the lock is set, at which time the bit, *h*, of the cam, *K*, will also engage with the hook, *g*, of the said dog, angle-bar, or fence, when, by moving the dial-spindle, the lock-bolt or bearing can be moved or rotated so as to admit of the tongue-piece or connection, with the carrying-bar and bolt-work, being moved back or retracted, as in Fig. 3 of the drawing, and the safe or vault door opened; but, when said combination-lock is locked, the hook of the dog, angle-bar, or fence, *J*, is elevated, due to the combination-wheels being disarranged, as in Fig. 1 of the drawings, and then no action can be had upon the connecting-bar, dog, angle-bar, or fence, or upon the lock-bolt or bearing, by turning of the dial-spindle, and hence the tongue-piece or connection on the carrying-bar of the bolt-work rests upon, or connects with, the lock-bolt or bearing, and the bolt-work is securely retained in a locked condition.

“With such combination-lock, or one of substantially the same construction and operation, constructed to be applied for use upon a safe or vault door, to operate in connection with the ponderous or great bolt-work thereon, is combined a time-mechanism, the works of which may be of any of the improved or desired kinds, since its action is to measure time correctly, the object being, that, during the interval that the combination-lock is locked and the time-movement wound up, the same, through a suitable connection made between it and said combination-lock, will guard the said lock, and prevent its being unlocked, even by a cashier or other person in possession of the combination upon which the said combination-lock is set.

“In the present example, a duplex or double time-movement is illustrated, such being preferable to a single time-movement, as a safeguard against stopping.

“Each of the time-movements, which are designated by the

Opinion of the Court.

letters *MM*, which may consist of a chronometer or clock movement, is supplied with a pointer or hand, attached to a spindle *l*, in such a manner as to be capable of being moved backward to set any elected number on the dials, *N*, said dials being spaced off, or marked with a scale of hours and divisions, from one upward, to any desired number, according to the mechanism of the chronometer or clock. With each of the dials are combined adjusting disks or arms, *O*, or some equivalent mechanical device, each of which carries a stud, or a pin or projection, which acts upon a yoke or lever, which connects with and guards the combination-lock the number of hours or time for which it is designated said lock is to remain locked, and thus controls the action of its lock-bolt or bearing while the same is in a locked condition.

“The yoke lever or connection is designated by the letter *P*, and it is pivoted or loosely fixed on its support or axis, as at *m*, or otherwise arranged so as to operate in conjunction with the moving or revolving disks or arms *O*, the object being, that the yoke lever or connection and the disks can be adjusted with respect to each other, so as to connect with the dog or fence or other working part of the lock, and thus control the movement of the lock-bolt or bearing, and hence the locking and unlocking of the combination-lock.

“One end of the extension of the yoke lever or connection, in the present example, has a suitable hook, *n*, that engages with a pin, *o*, on the dog, angle-bar, or fence, *J*, by striking under it, in which case it holds said dog, angle-bar, or fence elevated out of contact with the tumblers or combination-wheels and the cam of the dial-spindle. The arms of said yoke lever or connection connect with, or rest upon, the axis or spindle of the adjusting disks or arms; and the arrangement of the studs, pins or projections on said disks or arms is such, that, when the indicators have reached the proper number on the dials, said studs, pins or projections will have acted upon the yoke lever or connection, and moved it sufficient to withdraw the cam-hook from beneath the pin *o*, and thus allow the dog, angle bar, or fence to fall, ready to engage with the tumblers or combination-wheels and the lock-bolt or bearing, at which time

Opinion of the Court.

the combination-lock can be operated by the person in possession of the combination, as the time-movement has ceased its guarding or dogging action.

“Notches, *pp*, should be formed in the yoke lever or connection, to allow the studs, pins or projections to fall therein, when the disks or arms and the indicators have reached the designated number, thus serving as stops for the adjusting disks or arms, and prevent the same from moving on, beyond the prearranged hour, to reset the yoke lever or connection upon the studs or projections, for, if some such provision were not made, the combination-lock could not be opened until the disks or arms, with the indicators, came around again to said previously appointed hour; at least, there might be danger of such occurring.

“The double time-pieces are employed, as hereinbefore stated, so as to insure the releasing of the combination-lock in case one of the time-works should stop or fail to come to proper position. A spring, *r*, or an equivalent, such as a weight, should be connected with the lower end of the yoke lever or connection, to produce the necessary reaction to bring the hook of the yoke lever or connection under the pin on the dog, angle-bar, or fence.

“Thus it will be seen, from the foregoing, that the bolt-work of the safe or vault door connects with, or rests upon, the bolt or bearing of the combination-lock, and that the yoke lever or connection of the time movement connects with the dog, angle-bar, or fence of said combination-lock, rendering the said combination-lock inoperative when locked, that is to say, said yoke lever or connection has the effect of dogging or guarding the combination-lock during the time it is locked, and prevent its being unlocked until the arrival of the hour previously designated by the time-movement; and, should pressure be exerted upon the great or ponderous bolt-work of the door, when locked, it will be received and arrested and retained by the lock-bolt of the combination-lock, and will not be transmitted to the tumblers or combination-wheels of the combination-lock, or to the time-movement, or to the yoke lever or connection.

“In lieu of the lever connecting with the dog or fence, it may

Opinion of the Court.

be made to connect or operate on the lock itself, and thus secure the result hereinbefore recited.

“The time-mechanism may be in the same case containing the works of the combination-lock; or it may be in an apartment connected with the case of the combination-lock, or in a case separate and distinct from the case containing the combination-lock.

“The advantages of this invention over common time-locks is, that, when the time-mechanism releases the lock-mechanism, that is, ceases its dogging or guarding action, it does not admit of the unlocking of the bolt-work of the door, but simply leaves the combination-lock in the condition that it can be unlocked by the person in possession of the proper combination upon which said lock is set, thus securing the advantages of a combination-lock for use during the day, with a time-mechanism for guarding and protecting said lock during the night.

“This improvement is of the utmost importance, for, during the hours when the time-mechanism is set, no one, not even the officers of a bank or other institution, can open the combination-lock; and, when said time-mechanism is not set or adjusted, no one, except the holder of the combination upon which the lock is set, can open it. No one who has the combination, whether obtained surreptitiously or otherwise, can open the lock when the time-movement is set, for the simple reason that no connection can be made between the tumbler or combination-wheels, the dog, angle-bar, or fence, the spindle, and the lock-bolt or bearing.

“Further: Another feature of the utmost importance present in the combination of parts brought together is, that the connection between the time-movement and the combination-lock is such, that, when the time movement is set, the parts adjusted, and the safe doors closed, the combination-lock will be rendered inoperative until a predeterminate hour, during which interval of time the unlocking action of the combination-lock will be suspended by the time-movement, while the tumblers or combination-wheels of the aforesaid combination-lock are left free to rotate, if power is exerted upon the dial-spindle for the purpose of twisting said spindle out of place, or impairing the

Opinion of the Court.

lock mechanism, and, by such, the working parts of the combination-lock cannot be injured or rendered useless for future action.

“I have made a special claim, in a separate application for letters patent, for the combination of a time-movement and a lock with a lever adapted to be connected with the dog of said lock, to hold it from falling into the slots or notches of the combination wheels except when released by the time-movement. So, therefore, in this application, such special construction and arrangement of parts is not specially claimed.

“Having thus described my invention, what I claim and desire to secure by letters patent is :

“1. The combination, substantially as hereinbefore set forth, of a time-mechanism and a combination-lock with the bolt-work of a safe or vault door, the time-mechanism being constructed to act in conjunction with, and render inoperative, the combination-lock when locked, said lock having its bolt or bearing constructed to receive the pressure of the series of bolts constituting the bolt-work of the door, when locked, and prevent the unlocking of said bolt-work until the arrival of a certain predeterminate hour.

“2. The combination, substantially as hereinbefore set forth, of a combination lock, and the series of bolts constituting the bolt-work of a safe or vault door, with a time-movement and a yoke or lever connection, said lever being constructed and located to render the bolt or bearing of the combination-lock inoperative, when locked, the tumblers of the combination-lock and its spindle being free to rotate, while the bolt-work is held in its locked position by the bolt or bearing of the combination-lock.”

An analysis of this specification, to ascertain, in view of the state of the art and of the history of the application for the patent, as it passed through the Patent Office, what is the proper construction of the claims allowed, will conduce to a solution of the questions involved. The object of the invention is stated to be to have a time-movement guard, and operate in conjunction with, a combination-lock, to prevent the action of the combination-lock until a time previously appointed by the

Opinion of the Court.

setting of the time-movement shall have arrived, in the ordinary running of the time-movement, at which time, and not before, the combination-lock will come into action, when operated in the usual way, as if there were no time-movement. In other words, by the setting of the time-movement, the connection between the combination-lock and its lock-bolt or bearing is interrupted, so as to destroy the capacity of the combination-lock to unlock the bolt-work, until the time fixed by the setting of the time-movement shall, by the ordinary running of the time-movement, have arrived, when the connection between the combination-lock and its lock-bolt or bearing is automatically restored, through the action of the time-mechanism. The combination-lock is to remain with its organization unchanged, but the time-mechanism is to alternately interrupt and restore its connection with its lock-bolt or bearing, and the action of the bolt-work.

There are two parts to the invention, represented by the two claims. Both of them are claims to combinations of mechanism. The first claim is a claim to a combination, substantially as set forth in the descriptive part of the specification, of three elements—(1) a time-mechanism; (2) a combination-lock; (3) the bolt-work of a safe or vault door. But, as the claim says that the time-mechanism is to be constructed to act in conjunction with, and render inoperative, the combination-lock, when locked, it follows that the expression “time-mechanism” includes the means of connection between the time-movement and the parts on which the combination-lock operates. Otherwise, there could be no operative co-action of the three elements named in the claim. The expressions “time-mechanism” and “time-movement” are carefully used in the specification and claims, as having different meanings, the former including the latter and its means of acting in conjunction with the combination-lock. There is a limitation in the first claim, to the effect that the combination-lock is to have its bolt or bearing constructed to receive the pressure of the bolt-work, when the lock is locked, and prevent the unlocking of the bolt-work till the predetermined time shall have arrived.

The second claim is a claim to a combination, substantially

Opinion of the Court.

as set forth in the descriptive part of the specification, of four elements—(1) a combination-lock; (2) the bolt-work of a safe or vault door; (3) a time-movement; (4) a yoke or lever connection, constructed and located to render the bolt or bearing of the combination-lock inoperative, when the lock is locked. In the second claim, the time-mechanism of the first claim is broken up into a time-movement and a yoke or lever connection. There is a limitation in the second claim, to the effect, that the tumblers of the combination-lock and its spindle are free to rotate during the time the bolt-work is held in its locked position by the bolt or bearing of the combination-lock. This freedom of rotation is referred to in the specification as being peculiar and novel, and consisting in the fact, that, while the combination-lock and the bolt-work are locked, the tumblers or combination-wheels of the combination-lock, and its spindle, are free to rotate without exerting any unlocking action or strain on the mechanism composing the combination-lock, or the delicate mechanism composing the time-movement.

It is also to be noted, that the specification states, that the lock-bolt or bearing of the combination-lock may be of a circular, segmental or other desired form, “provided said lock-bolt is arranged and adjusted so as to turn upon a suitable axis or bearing,” and is so constructed as, in one position, to prevent the retraction of the bolt-work, and, in another position, to permit it. The kind of combination-lock referred to is indicated by the one illustrated in the drawings, and which the specification states to be the one of Sargent’s patent No. 57,574, granted August 28, 1866, and reissued as No. 4,696, January 2, 1872. No. 4,696 states that such combination-lock has no sliding lock-bolt, but has combined with its working parts a bolt turning on a pivot or bearing, and so isolated or removed from contact with the combination-wheels, as to receive any pressure applied through the bolt-work of the door, and cut off the communication between such bolt-work and the wheels or fence lever of the combination-lock; and that such bolt turning on a pivot or bearing, instead of the sliding bolt theretofore in use, is an important feature. The first claim of No. 4,696 is in these words: “In a combination-lock for safe or vault

Opinion of the Court.

doors, a bolt *I*, which turns on a pivot or bearing, when said bolt *I* is used in a lock having no ordinary sliding lock-bolt, and in connection with the separate bolt-work of the door, and so arranged as to receive the pressure of the said bolt-work, without transmitting it to the wheels or other equivalent works of the lock."

The history of the application of Sargent for No. 186,369, so far as it is important to the present case, is this: On June 11, 1873, having his reissued patent No. 4,696, for his combination-lock, in the form shown in the drawings of No. 186,369, he made application for a patent for combining a time-movement with the lock-works of a combination-lock. The drawing showed the combination-lock of No. 4,696; and the specification set forth the invention to be so combining a time-movement with the lock-works as to prevent the lock from being unlocked by the release of the time-movement, and to require it to be unlocked by being set on the combination, after such release. There was a time-movement, consisting of two clocks, and a lever to hold up the dog or angle-bar of the lock, until released by the arrival of the predetermined hour. No bolt-work was shown or described. There was no idea of patenting any combination of which the bolt-work formed a part. The specification had two claims: 1. "In a combination-lock, I claim the combination with the lock-works and with a time-movement that controls the same, of a connection, *H*, or equivalent, so arranged that when the time-movement releases the lock-works, the latter still remain locked, substantially as specified. 2d. I claim, in combination with a time-movement, and a lock, the lever *H*, or equivalent, connected directly with the dog *C*, to hold it elevated from the wheels, substantially as specified." The specification stated that Sargent did not "claim broadly the combination of a time-movement with a lock," that is, a time-movement or clock employed to prevent the unlocking of a lock till the arrival of a predetermined time in the running of the clock.

The first claim of the application was rejected, June 12, 1873, by a reference to patent No. 121,782, granted to S. W. Hollen, December 12, 1871. Nothing was said as to the

Opinion of the Court.

second claim. Sargent then disclaimed Hollen's arrangement, as being the combination of "a clock-movement with an ordinary key-lock, by means of a lever, so that, when the clock-work releases the latch, the latch remains locked;" and altered his claim so as to read thus: "1st. In a combination-lock, the series of wheels of which are set in succession and operated by a spindle, I claim the combination with the lock-works, and with a double-time movement that controls the same, of a connection, *H*, whereby, when the time-movement releases the lock-works, the latter still remains locked, substantially as and for the purpose specified. 2d. I claim, in combination with a time-movement, and a lock, the lever *H*, or equivalent, arranged so as to be connected with the dog, substantially as described."

The first claim was again rejected, June 23, 1873, by a reference to Newton's Journal of 1832 (Rutherford's patent of 1831), as describing the application of a double time-movement "to any bolt of a lock, bar or other fastening," and to the American patent of Holbrook, of 1858, as showing a double time-movement. The letter of rejection, referring to the Hollen patent, says, that Hollen "applies the movement to a tumbler lock, which has to be operated by a key after the time-movement releases it. To double the time-movement in one lock is considered to be one and the same thing with doubling it in any other. To grant Hollen a patent for applying this time-movement to a tumbler lock, and then to issue other patents for using it with other locks, is simply to nullify Hollen's patent. Sargent is entitled to a limited claim for his way or adaptation, but nothing more." This last observation meant that the second claim would be allowed, but not the first. The point of this ruling was, that it was not a patentable invention or combination to unite a time-movement with a combination-lock instead of with a tumbler-lock, each of which required to be unlocked after its release, or to double a clock in connection with one lock after it had been doubled in connection with another; but that the special arrangement of a lever connection between the time movement and the dog might be patented.

Two new claims were then substituted by Sargent as follows:

Opinion of the Court.

"1. I claim, in combination with a combination-lock having a spindle and combination-wheels, and with two or more separate time-movements, a single lever, or equivalent connection, *H*, connecting the lock and the time-movements; the whole so arranged that said lock is released either by a simultaneous action of the time-movements, or by one of them if the other fails, and the lock still remains locked, when so released, as specified. 2. I claim, in combination with a time-movement and a lock, the lever *H*, or equivalent, connected with the dog *C*, to hold it from falling into the slots or notches of the combination-wheels, except when released from the clock-work, as specified."

The first claim was again rejected, July 5, 1873, on the ground that the change in it did not take the case out of the references; and, on the 28th of July, 1873, Sargent appealed to the board of three examiners-in-chief. The decision of the board sustaining the decision of the examiner was rendered October 7, 1873. It refers to the English patent of Rutherford, of 1831, and says: "The patent of Rutherford describes an ordinary key-lock, to which the time-movement is so connected that it may be set for a given hour, before which it cannot be unlocked, but may be at any time thereafter. Rutherford also foresaw that one time-movement might stop, and suggested two. Rutherford, as the references show, is not the only one who has thought of thus connecting a time-movement to a lock. It happens, however, that the locks shown in the references are all key-locks, while applicant's is a combination-lock, and it is upon this that the claim is founded. While it is undoubtedly true that the combination-lock is the better, there does not appear to be, in any true sense, any new combination in what applicant claims. It may be said that he has substituted, in the Rutherford combination (for example), one well-known element for another, and that the result, namely, the security against unlocking before a given hour, is exactly the same in both cases. And it must be remembered that this is the whole end and scope of the combination claimed—not to prevent breakage, or picking, or bursting with gunpowder, but simply unlocking before the hour appointed. It is true, that

Opinion of the Court.

the lock connected to the time-movement in the manner shown is rendered secure against unlocking by unauthorized persons who pick up the combination, when the dog rests on the periphery of the cams; but it appears clear that this results from the peculiar mode of application, and is covered by the second claim. Whatever the advantage, then, arising from the substitution for the key-lock, so far as has been pointed out to us, it results from the superiority of the former over the latter, and not from the combination. Nor, so far as we see, has any invention been exercised. The time-movement was originally invented to prevent locks from being prematurely unlocked, and, when once the combination had been invented, it is obvious that it was as applicable to one form of locks as to another; and, to grant a patent for the union of the time-movement with every old form of lock, or with every new form which might appear, would manifestly place unjust restrictions on the original invention and defeat the very purpose of the law. We understand only the first claim to be rejected."

These observations are true, as the record in this case shows, and it also shows many patents in which, prior to 1873, one clock or two clocks were employed to relieve, at a predetermined time, the bolts of a door from a dog obstructing their retraction, so that the door could be opened when that time had arrived, but not before.

Nothing more was done with this application till March 18, 1875, when Sargent presented a new specification and claims, making prominent the feature of the free rotation of the tumblers of the combination-lock through the medium of the lock-spindle, during the suspension, by the time-movement, of the unlocking action of the combination-lock, and changing the claims to read thus: "1. The combination of a time-movement with a combination-lock and a lever constructed and located to render inoperative such combination-lock until a predeterminate hour, the tumblers of the combination-lock being free to rotate through the medium of the lock-spindle, while the unlocking action of the combination-lock is suspended by the time-movement. 2. I claim, in combination with a time-movement and a lock, the lever *H*, or equivalent, connected with the dog *C*,

Opinion of the Court.

to hold it from falling into the slots or notches of the combination-wheels, except when released by the clock-work, substantially as described." On the 24th of March, 1875, the first claim was again rejected by references to the Hollen patent, of December, 1871, and the Rutherford patent, of 1831. The letter of rejection said: "Hollen shows the combination of a time-movement and a lock, with a lever constructed and located to render inoperative such lock until a predeterminate hour, the tumblers of the lock being free to rotate through the medium of a key, while the unlocking action of the lock is suspended by the lever. Rutherford shows (figures 1, 2, 3, 4, and 5, sheet 2) the combination of a time-movement and a lock, with a lever arranged to engage with the bolt of a lock and render inoperative such lock until a predeterminate hour. To merely substitute the ordinary combination lock, such as shown, for example, in the patent permutation-lock of James Sargent, August 28, 1866, for the lock shown in either of the above references, is not regarded as a patentable difference. . . . The second claim is not objected to. The first claim is again refused."

This application was not further prosecuted. On the 12th of July, 1875, Sargent addressed a letter to the Patent Office, entitled in the case, in which he said: "So many amendments and actions having been made in the above-entitled case, I desire to withdraw and abandon it, for the purpose of filing a new application. I, James Sargent, have this day filed said application for the invention, and request that the model of the case above named be applied as a model in the application filed to-day. I intend and request that this application be a substitute application for the one so withdrawn."

Up to this time no bolt-work had been shown or described. The object of the new application was to introduce bolt-work as an element in the device. The drawings were the same as those in No. 186,369, showing bolt-work, with the time movements and the combination-lock. Bolt-work was added to the former model. The specification contained three claims, as follows: "1. The combination, substantially as hereinbefore set forth, of a time-mechanism and a combination-lock with the bolt-work of a safe or vault door, the time-mechanism being

Opinion of the Court.

constructed to act in conjunction with and render inoperative the combination-lock when locked, said lock having its bolt or bearing arranged to rest upon and receive the pressure of the bolt-work of the door when locked, and prevent the unlocking of said bolt-work until the arrival of a certain predeterminate time. 2. The combination substantially as hereinbefore set forth, of a combination-lock and the bolt-work of a safe or vault door, with a time-movement and a lever connection, said lever being constructed and located to render the bolt or bearing of the combination-lock inoperative when locked, the tumblers of the combination-lock and its spindle being free to rotate while the bolt-work of the door rests upon the bolt or bearing of the combination-lock. 3. In combination with a time-movement and a lock, a lever, or its equivalent, adapted to be connected with the dog of said lock, to hold it from falling into the slots or notches of the combination-wheels, except when released by the time-movement, substantially as described."

On the 31st of July, 1875, claims 1 and 2 were rejected by references to the patent of Hollen, of December, 1871, and that of Rutherford, of 1831; and a time-lock arranged in connection with the bolt-work of a door, in the time-lock of Little, patented in January, 1874, was referred to. Those claims were again rejected, September 6, 1875, in a letter which said: "The employment of locks of various kinds for securing the bolt-work of a door is too common and well-known to require further references. Either Hollen's or Rutherford's lock can be applied to the bolt-work of a door without the least change being made to adapt it thereto. The mere substitution of one well-known kind of locks for another kind equally well-known has been decided again and again as not a patentable difference."

On December 3, 1875, an interference was declared between claims 1 and 2 and four other applications; and between claim 3 and four other applications. On February 12, 1876, the interference as to claims 1 and 2 was dissolved, and they were again rejected. A further amendment of the specification was made February 15, 1876, and claims 1 and 2 were altered, so as to read as follows: "1. The combination, substantially as hereinbefore set forth, of a time-mechanism and a combination-

Opinion of the Court.

lock with the bolt-work of a safe or vault door, the time-mechanism being constructed to act in conjunction with and render inoperative the combination-lock when locked, said lock having its bolt or bearing constructed to receive the pressure of the series of bolts constituting the bolt-work of the door when locked, and preventing the unlocking of said bolt-work until the arrival of a certain predeterminate time. 2. The combination, substantially as hereinbefore set forth, of a combination-lock and the series of bolts constituting the bolt-work of a safe or vault door, with a time-movement and a lever connection, said lever being constructed and located to render the bolt or bearing of the combination-lock inoperative when locked, the tumblers of the combination-lock and its spindle being free to rotate while the bolt-work is held in its locked position by the bolt or bearing of the combination-lock." The claims were not allowed, but a new interference as to them was declared, March 8, 1876, with the same four applications, the subject matter being, "The combination of a time-mechanism, and a combination-lock, with the bolt-work of a door."

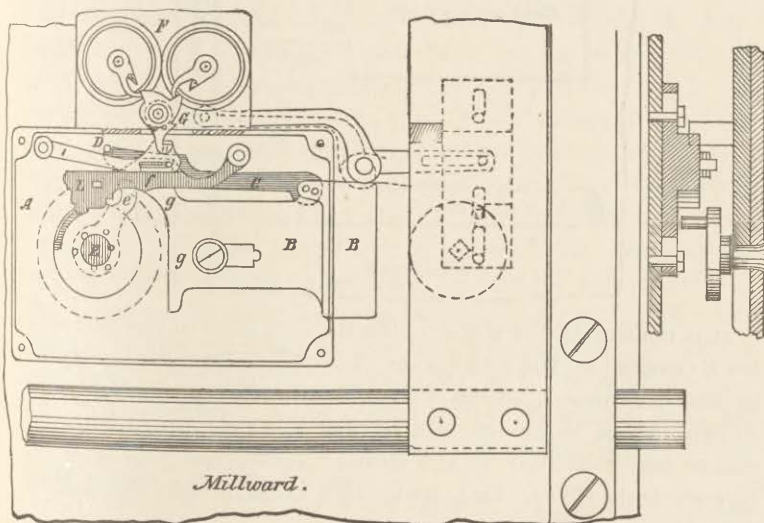
On the 11th of January, 1877, the application was amended by withdrawing claims 1 and 2. Two days before this, and on January 9, 1877, Sargent had filed the application on which No. 186,369 was granted. The special construction and arrangement of parts, a claim for which, as the specification of that patent states, was made in a separate application, was covered by the claim of patent No. 198,157, granted to Sargent, December 11, 1877, in pursuance of the application of July 12, 1875, that claim being as follows: "In combination with a time-movement and a lock, a yoke-lever or equivalent, adapted to be connected with the dog, fence or angle-bar of said lock, to hold it from falling into the slots or notches of the combination-wheels, except when released by the time-movement, substantially as described." The present suit does not involve any infringement of No. 198,137.

As before remarked, the specification of No. 186,369, the patent here sued on, contains the following statement: "The lock-bolt or bearing of the combination-lock may be of a circular, segmental, or other desired form, provided said lock-bolt is

Opinion of the Court.

arranged and adjusted so as to turn upon a suitable axis or bearing, and is so constructed, that, in one position, it will prevent the retraction of the bolt-work, so as to retain the safe or vault door locked, while, in another position, it will admit of the bolt-work being retracted, for the purpose of allowing the safe or vault door to be opened." This clause had not appeared in any of the specifications from and including that filed June 11, 1873, until it was inserted in the one filed January 9, 1877, on which the patent No. 186,369 was granted. It is a limitation without which it must be assumed, in view of the numerous prior rejections, the claims allowed would not have been granted. The same clause was inserted, May 7, 1877, in the specification of the application of July 12, 1875, as it remained after claims 1 and 2 therein were withdrawn January 11, 1877, and that clause appears in the specification of No. 198,157, as issued December 11, 1877.

The defendants' lock, which it is alleged infringes the two claims of No. 186,369, is of the construction shown by the following drawing, made by the plaintiff's witness Millward :

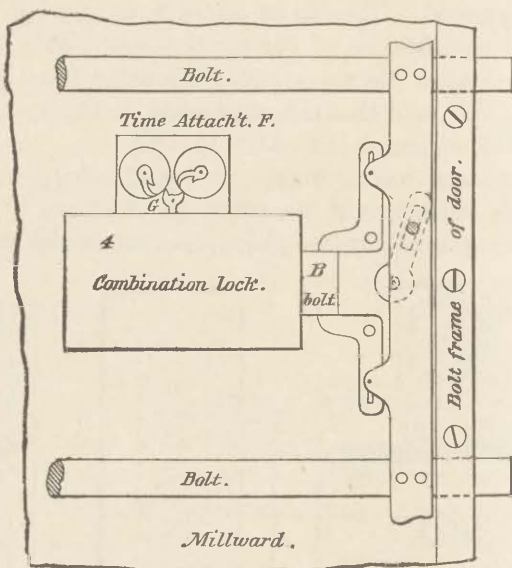


In that drawing *A* is the case of the lock; *B*, the bolt; *C*, the dog, pivoted in the bolt at *c*, and engaging, when held up

Opinion of the Court.

by the time-mechanism, behind a fixed stump, *D*; *E*, the arbor of the lock, the hook, *e*, of which engages with the hook, *f*, of the dog, and throws the bolt *B* back, when the dog is released by the time-mechanism. The same hook, *e*, by running on the surface *g*, throws the bolt *B* out, to lock the door. *F* is the time-attachment, which has a lever, *G*, the arm of which, extending through the case of the lock, has the hook *H* at its lower end, which holds up the pivoted arm *I*, and through it the dog *C*.

Another form of the bolt-work of the defendant's lock is shown by the following drawing:



It is contended for the defendants, that each of the combinations covered by the two claims of No. 186,369 must be limited to the particular devices described in the specification and shown in the drawings, and to their mode of operation, both claims being limited by the words "substantially as hereinbefore set forth;" and that, under this construction, the defendants do not infringe.

The second claim imposes on the combination claimed in it the limitation, that the tumblers of the combination-lock and

Opinion of the Court.

its spindle shall be free to rotate, while the bolt-work is held in its locked position by the bolt or bearing of the combination-lock. This is enforced by the language of the specification, which, in stating in what the invention consists, states that "the peculiarity and novelty" of the union or combination, consisting of a combination-lock, a time-movement, and a yoke or lever connection, is, that "when the said combination-lock, with its time-mechanism, is arranged upon a safe or vault door, to operate in conjunction with the bolt-work thereon, and all locked, the tumblers or combination-wheels of said lock, and the spindle of the same, together with its usual indicator, are all left free to be moved or rotated without exerting any unlocking action or strain whatever upon the mechanism composing the combination-lock, or the delicate mechanism composing the time-movement." Again, the specification says: "Another feature of the utmost importance present in the combination of parts brought together is, that the connection between the time-movement and the combination-lock is such that, when the time-movement is set, the parts adjusted, and the safe doors closed, the combination-lock will be rendered inoperative until a predeterminate hour, during which interval of time the unlocking action of the combination-lock will be suspended by the time-movement, while the tumblers or combination-wheels of the aforesaid combination-lock are left free to rotate, if power is exerted upon the dial-spindle for the purpose of twisting said spindle out of place, or impairing the lock mechanism, and, by such, the working parts of the combination-lock cannot be injured or rendered useless for future action." This feature, thus declared to be peculiar and novel, of the free rotation of the tumblers, is not shown to exist in the defendants' lock. The plaintiff's expert, Mr. E. S. Renwick, testifies that this peculiarity is not found in the defendants' lock, and that, for that reason, that lock does not embody the combination of claim 2 of No. 186,369.

As to claim 1, it is limited, by the language of the specification, to a combination-lock having a bolt or bearing which turns on an axis or revolves. The defendants' lock has a sliding-bolt. It was not new, at the time of Sargent's invention,

Opinion of the Court.

to apply a time-movement to dog the sliding-bolt of a lock; and, it is plain that he limited himself to a rotating bolt. The specification makes it as necessary that the combination-lock should have a turning or revolving bolt or bearing as that such bolt or bearing should have the quality of receiving the pressure of the bolt-work, when locked. This turning or revolving feature of the bolt or bearing is made, by the specification, as necessary to the combination-lock of claim 2 as to that of claim 1.

In patents for combinations of mechanism, limitations and provisos, imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed, against the inventor, and in favor of the public, and looked upon as in the nature of disclaimers. As was said in *Fay v. Cordesman*, 109 U. S. 408, 420, "The claims of the patents sued on in this case are claims for combinations. In such a claim, if the patentee specifies any element as entering into the combination, either directly by the language of the claim, or by such a reference to the descriptive part of the specification as carries such element into the claim, he makes such element material to the combination, and the court cannot declare it to be immaterial. It is his province to make his own claim, and his privilege to restrict it. If it be a claim to a combination, and be restricted to specified elements, all must be regarded as material, leaving open only the question whether an omitted part is supplied by an equivalent device or instrumentality. *Water Meter Co. v. Desper*, 101 U. S. 332; *Gage v. Herring*, 107 U. S. 640."

These considerations lead to the conclusion that the decree of the Circuit Court was correct and must be

Affirmed.