

Syllabus.

Under this presumption of law, the reasoning of this court in *Ex parte Virginia*, 100 U. S. 339, applies and ought to control this motion. The inferior court having taken jurisdiction, the writ of *habeas corpus* is now applied for in the nature of an appeal from the judgment of that court.

This case is readily distinguished from *Kemmler's Case*, 136 U. S. 436; from *Mirzan's Case*, 119 U. S. 584; from *Royall's Case*, 117 U. S. 241; and from *Wales v. Whitney*, 114 U. S. 564.

Mr. Attorney General opposing.

MR. CHIEF JUSTICE FULLER delivered the opinion of the court.

The petitioners were indicted under sections 5508 and 5509 of the Revised Statutes, on the 20th of November, 1890, in the Circuit Court for the Southern District of Georgia, and have been taken into custody. They have not invoked the action of the Circuit Court upon the sufficiency of the indictment by a motion to quash or otherwise, but ask leave to file in this court a petition for a writ of *habeas corpus*, upon the ground that the matters and things set forth and charged do not constitute any offence or offences under the laws of the United States, or cognizable in the Circuit Court, and that for other reasons the indictment cannot be sustained. In this posture of the case we must decline to interfere.

The application for leave to file the petition is

Denied.

FOND DU LAC COUNTY v. MAY.

ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE
EASTERN DISTRICT OF WISCONSIN.

No. 61. Argued November 26, 1890. — Decided December 15, 1890.

Letters patent No. 25,662, granted to Edwin May, October 4, 1859, for an
"improvement in the construction of prisons," are invalid.

The novel idea set forth in the patent was to interpose a grating between

Opinion of the Court.

the jailer and the prisoners at every stage of opening and shutting a door. The mechanism of the patent, except the grating, was old.

As to claim 1, the angle door being old, its combination with a lock or bolt was not new or patentable.

As to claims 3 and 4, the mechanical devices were old, and operated in the same way, either with or without the grating.

Introducing the grating did not make a patentable combination, but only an aggregation.

AT LAW for the infringement of letters patent. Verdict for plaintiff and judgment on the verdict. Defendant sued out this writ of error. The case is stated in the opinion.

Mr. Charles E. Shepard for plaintiff in error. *Mr. J. H. McCrory* was with him on the brief.

Mr. M. C. Burch for defendant in error. *Mr. Duane E. Fox* was with him on the brief.

MR. JUSTICE BLATCHFORD delivered the opinion of the court.

This is an action at law, brought in the Circuit Court of the United States for the Eastern District of Wisconsin, on the 26th of September, 1885, by Sarah May against the county of Fond du Lac, a corporation of the State of Wisconsin, to recover damages for the infringement of letters patent No. 25,662, granted to Edwin May, October 4, 1859, for fourteen years from that day, for an "improvement in the construction of prisons."

The specification and claims of the patent are as follows: "Be it known that I, Edwin May, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful improvements in the construction and operation of prisons, of which the following is a full and exact description, reference being had to the accompanying drawings and the letters marked thereon. Figure 1 is a perspective and figures 2, 3, 4, 5, 6, 7, 8 are sectional views showing the construction and general arrangement of the same.

"A represents the side and end walls of the prison; B, the floor; C, the outside door; D, inside or angle door; E, mould-

Opinion of the Court.

ing or hood over door C; F, the cells; G, the small door of the safe or box J; H, the crank which operates the drum (*p*); I, bolt or lock to the angle door D; *a*, a bar connected with the bolts S, which are operated by the levers (*b*) for the purpose of fastening the cell doors (*j*); *c*, fulcrum of the lever (*b*); *d*, levers for operating the sliding doors (*l*); *e*, wire rope or endless chain which operates the levers (*d*); *f*, hinge joints to levers (*d*); *g*, support of pulleys for chain or wire rope; *h*, pulleys over which the chain or wire rope (*e*) operates; *i*, the grated partition; *j*, cell doors; *k*, slide or groove for doors (*l*) to work in; *m*, rollers for sliding doors (*l*); *n*, guard or slide for levers (*d*); *o*, staple to padlock levers (*b*); *q*, pawl or catch to hold the drum (*p*) in place; *r*, rollers for bar (*d*) to work over.

“The nature and extent of the improvement will be more readily understood by reference to the object sought, which is, avoiding the necessity of actual contact with the prisoners, while the keeper has perfect knowledge and control of them, and preventing their escape by knocking down the keeper, which has often occurred where the common arrangement of prisons has been used. It is peculiarly adapted to county prisons and that portion of State prisons appropriated to solitary confinement.

“The following is the manner of operating the same and managing the prisoners: The jailer, opening the outside door C, releases the edge of the small or safe door G, giving access to the crank H, which operates the doors (*l*) in the grated partition (*i*) by means of the endless chain or rope which passes around the drum (*p*) and is attached to the hinge or joint (*f*) of the lever (*d*). The angle door D is held by the bolt or lock I while the keeper is allowed to examine every part of the hall, which the peculiar shape of the angle door D allows. Should there be any prisoners in the first hall they are ordered to retire through the doors (*l*) in the grated partition (*i*). The doors (*l*) are then closed by operating the crank H, as has been shown. The keeper then, unlocking, passes through the angle door D into the first hall, being separated from the prisoners by the grating (*i*), through which he orders the prisoners each

Opinion of the Court.

to his cell, and to close the door after him. By operating the lever (*b*) the bars (*a*) are drawn, while the bolts *S*, being drawn over the doors, secure the same. He then passes in and locks the doors (*j*), whereby an iron grating is always kept between the keeper and the prisoners.

“What I claim and desire to secure by letters patent is —

“First. The angle door *D*, in combination with the safe lock or bolt *I*, when constructed and operated substantially as set forth.

“Second. The safe *J*, containing the drum (*p*) and bolt *I*, and being held by the outer door *C*, when constructed and operated substantially as and for the purposes set forth.

“Third. The endless chain or rope (*e*), in combination with the levers (*d*), when constructed and operated substantially as and for the purposes set forth.

“Fourth. The combination and arrangement of the levers (*b*), bar (*a*), and bolts or lugs *S*, when operated from without the grating *i*, substantially as and for the purposes set forth.”

The patent was, on the 4th of October, 1873, extended by the Commissioner of Patents for seven years from that day. The patentee, who was the husband of the plaintiff, died on the 27th of February, 1880. The plaintiff claimed that one Edwin Forrest May, on the 6th of March, 1880, was duly appointed executor of Edwin May by the proper tribunal; that, he having resigned his trust on the 7th of June, 1880, one McGinnis was duly appointed administrator *de bonis non*, with the will annexed, of Edwin May; and that McGinnis, on the 6th of March, 1882, under a proper order of the proper court to that effect, conveyed to the plaintiff all the title of the estate of the patentee under the patent and its extension, including all rights of action and claims for damages which the estate had by virtue thereof. Damages were claimed for the use of the patented invention, as covered by claims 1, 3 and 4, for the period of the extended term, from October 4, 1873, to October 4, 1880.

The defendant, by an answer and a notice of special matter, set up in defence the statute of limitations of the State of Wisconsin and want of novelty. The case was tried by a

Opinion of the Court.

jury, who found that during the extended term of the patent the defendant had infringed claims 1, 3 and 4; and they awarded to the plaintiff \$1774.68 damages. 27 Fed. Rep. 691. The defendant moved for a new trial on various grounds, including one that the court erred in not instructing the jury to render a verdict for the defendant, and another that the court erred in ruling that the plaintiff was the owner of the cause of action. This motion was denied; and the defendant then moved for an arrest of judgment, on the grounds (1) that the patent was void on its face, because none of the claims were for a patentable invention or combination, and that no one of the several combinations claimed in it as the patentee's inventions was a new or patentable invention; and (2) that the plaintiff was not the lawful owner of the cause of action sued upon. This motion was overruled, and judgment was entered for the plaintiff for \$1774.68 and costs. To review that judgment the defendant has brought a writ of error.

At the trial, when the patent was offered in evidence, it was objected to by the defendant on the ground that, on the face of the specification and claims, it was invalid. This objection was overruled, and the defendant excepted. The same objection was made to the certificate of extension, and overruled and the defendant excepted. The proceedings for the appointment of the executor and of the administrator *de bonis non*, and for the sale of the patent, the conveyance to the plaintiff, and the order of the court confirming the sale and conveyance, were then put in evidence under the objection and exception of the defendant that they did not vest in the plaintiff any title to the cause of action sued on.

One Luther V. Moulton was then introduced as a witness by the plaintiff, and testified as follows: "I live at Grand Rapids, Michigan; am a partner in a foundry there; I have had experience in mechanics and patents; have photographed models; have been consulted about the patentability of mechanical devices; have been an expert witness in patent causes; have done patent soliciting; am acquainted with the May patent in suit; know its specifications and claims, and am acquainted with its practical operation and effect."

Opinion of the Court.

It was contended that the defendant had infringed the patent by constructing and using a county jail containing the inventions covered by claims 1, 3 and 4. Models of a jail constructed according to the patent, and of the defendant's jail, were introduced in evidence by the plaintiff and identified as correct. A stipulation was then put in evidence, signed by the attorneys for the parties, to the effect that the device used by the defendant in its jail for fastening the doors had been in use therein since 1869. The witness Moulton then proceeded: "In my opinion the model representing the defendant's jail contains the mechanical equivalents of the devices described in the specification, and claimed particularly in the first, third and fourth claims of the patent in question. The results produced by the combinations claimed in the patent are produced by substantially the same means." On cross-examination he testified as follows: "The novelty and utility of this patented device consist in interposing a grating or wall between the person operating the mechanism for securing the doors and the prisoners, so that they can be observed through the door or grating and the corridor doors be closed and secured, or unlocked and opened, or the cell doors can be locked or unlocked, all without any contact between the jailer and the prisoners, and without the jailer being in the same apartment with the prisoners, and thus exposed to attack by them. The several elements of the device are probably old. The novelty consists in the particular combinations, whereby a new and useful result is produced. I think an angle door is old; have never seen them in jails; have seen angle doors and curved doors and illustrations of them in books many years ago, before 1859. Locks and bolts upon doors are also old, and to put a lock or bolt upon such a door would not be invention. In defendant's jail, the corridor doors are not closed by the fastening mechanism as described in the patent, but, when closed by the prisoners or turnkey, they are locked by bolts moved by rock-shafts extending from the outer apartment, through the wall, into the jail proper and to the corridor doors. There is nothing new in a rock-shaft as applied to the purpose of transmitting motion to bolts or other like uses; it

Opinion of the Court.

is the equivalent of an endless chain, or any other well-known device for transmitting motion ; it is very old. The operation and effect of the rock-shaft, the handle or lever that moves it, and the bolts that it moves in connection with the corridor doors thereby locked and unlocked, are precisely the same with or without a wall or grating interposed between the handle or lever and the door locked, and also the same as the corresponding parts in the May patent. In the Fond du Lac jail the handle of this rock-shaft and the place where it is operated are a few feet distant from the angle door. There is an embrasure or slit in the wall by these handles to the rock-shafts, through which two corridors, one over the other on one side of the jail, can be observed ; but the other side of the jail with its two corridors and two tiers of cells, cannot be observed. The doors of all four corridors are locked by rock-shafts, all starting and moved from the same point. The operation and effect of the arrangement of the lever (*b*), bar (*a*), and bolts or lugs (*S*), as described in the patent, for locking and unlocking the cell doors, are precisely the same whether the lever is operated through a wall or grating, or whether there is none there. Mechanically, the effect is precisely the same with or without the grating, so far as fastening and unfastening the doors is concerned. The only difference is in the effect of the grating to protect the jailer and guard against escapes. Every separate element of the combination of the fourth claim is old—the bar, the lever, the lugs or bolts, and the grating. Levers have long been used, long before this patent, to move a long bar and thereby to move bolts, lugs, or the like, at a distance ; so, also, similar devices passing through a wall, to open and close and secure window shutters and the like ; but the particular combination adapted to interpose protection between the person operating the device and those on the other side of the wall or grating was new and patentable, and so patented to Mr. May. The grating has nothing to do directly with locking or unlocking the doors. It affords protection to the operator while so doing. So with the second claim in suit, which is the third of the patent. All its separate elements are old. It is only the par-

Opinion of the Court.

ticular combination applied to this purpose that is new and patentable."

The plaintiff then gave evidence to show that the patented contrivance was useful and economical, and for much of the time since it was patented had been in use in sundry jails and prisons in this country. It was further proved that the defendant had used in its jail, ever since 1869, the outside angle door, the contrivance for locking and unlocking the corridor doors, and the contrivance for locking and unlocking the cell doors, which were exhibited by the model of its jail which had been put in evidence. Other evidence was given on the part of the plaintiff, but none to contradict what had been testified to by the witness Moulton; and at the close of the plaintiff's case the defendant moved that a verdict be directed for it, on the grounds, among others, that the patent was void for lack of novelty, and that the combinations described in it were not operative combinations, and were old and well-known devices applied to similar uses. This motion was overruled, and the defendant excepted.

Thereupon the defendant proved that at the Wisconsin State prison at Waupun, the Chemung County jail at Elmira, New York, and elsewhere, there had been in common and public use, well known to many persons, for many years before 1859, a device consisting of a lever, a bar, and lugs or bolts attached, operated substantially as described in said patent, to lock or unlock the cell doors, but without any intervening wall, corridor grating or other protection to the jailer against attack; that such device, except for the absence of a corridor wall or grating, was substantially identical with, and a mechanical equivalent of, the device described in said patent, and claimed in the fourth claim thereof, and that it was used, and operated in the same way, to lock or unlock the cell doors after they had been closed.

No evidence in rebuttal was offered by the plaintiff, and, the testimony being closed, the defendant renewed its motion for a verdict to be directed for it, on the grounds before stated; but the motion was denied, and the defendant excepted.

The defendant then prayed that the jury be instructed that

Opinion of the Court.

each of the claims, 1, 3 and 4 was void; that claim 1 did not claim a new device, nor was the combination claimed therein an operative combination, but was a mere aggregation; that claim 3 did not describe a new device; and that it was a question for the jury whether there was an invention, or exercise of the inventive faculty, in the construction of the devices described in the patent. Each of these instructions was refused, and the defendant excepted to each refusal. The case was submitted to the jury under instructions from the court, the defendant excepting thereto because the court did not submit it to the jury to say whether the elements specified in each of the several combinations in claims 1, 3 and 4 appeared together in a practical combination, or whether it was a mere aggregation.

We are of opinion that the court ought to have directed a verdict for the defendant, on the ground that the patent was void; and that the judgment must be reversed. The objects sought to be accomplished by the patentee were twofold, — safe observation of the prisoners while they were out of their cells but within the outer inclosure of the jail, and a safe mode of locking them in their cells without risk of personal contact with them. These objects he sought to attain by three contrivances, which are the foundations of the four claims of the patent. Proceeding inwards from the outside of the jail, these three contrivances are as follows: (1) An angle door D, with the angle in the middle line of the door, projecting inward, a safe or box J, containing a drum (*p*) operated by a crank H, and a bolt or lock I to the angle door D. This contrivance, which is the subject of claim 1, enables the jailer, after he opens the extreme outer door of the jail, to have access to the angle door, so as to look through its grated bars in all directions by means of the angle, while that door is securely held by the bolt or lock I, and to inspect the interior of the prison and observe the prisoners, and direct them to retire behind the corridor or partition doors (*l*) in the grated partition (*z*). This partition separates an outer hall or space from the corridors which run along the tiers of cells. (2) When the prisoners have thus retired behind the corridor or partition doors (*l*), the

Opinion of the Court.

next step is to open the safe or box J, from the space between the outer door and the angle door, and by the crank H operate the drum (*p*), which carries the wire rope or endless chain (*e*), which, by pulleys, levers and hinges, opens or shuts the corridor or partition doors (*l*). Those doors being closed while the jailer is still outside of the angle door, he can then open the angle door and go into the inner hall. The mechanism thus explained is the foundation of claims 2 and 3. (3) Then the jailer, having between him and the prisoners the grated partition (*v*), with the doors in it closed, can direct each prisoner to retire to his cell and to close the cell door after him. The jailer then, by operating the lever (*b*), can draw the bars (*a*) and carry the bolts or lugs S over the cell doors, and thus secure them. He can then advance into the corridor and further secure the cell doors by ordinary locks on them. This mechanism is the foundation of claim 4.

The novel idea set forth in the patent is to interpose a grating between the jailer and the prisoners at every stage of opening or shutting a door. Previously, there had been between the jailer and the prisoners no intervening wall, corridor grating or other protection against attack; but, with that exception, the prior device used in the Wisconsin State prison and the Chemung County jail was substantially identical with, and a mechanical equivalent of, the device claimed in claim 4 of the patent, and operated in the same way to fasten and unfasten the cell doors.

The several elements of the patented device were old. Moulton testified that he had seen angle doors and curved doors, and illustrations of them in books, before 1859; that in the defendant's jail the corridor doors were not closed by the fastening mechanism described in the patent, but, when closed by the prisoners or the turnkey, were locked by bolts moved by rock-shafts extending from the outer apartment, through the wall, into the jail proper and to the corridor doors; that there was nothing new in a rock-shaft applied to the purpose of transmitting motion to bolts or to other like uses; that it was the equivalent of an endless chain or any other well-known device for transmitting motion, and was very old; that the

Opinion of the Court.

operation and effect of the rock-shaft and handle or lever that moved it and the bolts that it moved, in connection with the corridor doors thereby locked and unlocked, were precisely the same with or without a wall or grating interposed between the handle or lever and the door locked; that the operation and effect of the arrangement of the lever (*b*), bar (*a*), and bolts or lugs S, as described in the patent, were precisely the same, whether the lever was operated through a wall or grating or not; that mechanically the effect was precisely the same with or without the grating, so far as fastening and unfastening the doors was concerned; that the only difference was in the effect of the grating to protect the jailer and guard against escapes; that every separate element of the combination of claim 4 was old, the levers, the bars, the bolts or lugs and the grating; that levers had been used long before the patent to move a long bar and thereby move bolts, lugs or the like at a distance, and so had similar devices passing through a wall to open and close window-shutters and the like, but that the particular combination adapted to interpose protection between the person operating the device and persons on the other side of the wall or grating, was new; that the grating had nothing to do directly with locking or unlocking the doors, but afforded protection to the operator while so doing; that all the elements of claim 3 of the patent were old; and that it was only the particular combination applied to the purpose indicated that was new.

As the angle door was an old contrivance, it is manifest that the combination of it with the safe lock or bolt I, claimed in claim 1, was not new or patentable. As the witness Moulton says, locks and bolts upon doors are old, and to put a lock or bolt upon an angle door would not be invention. Nor is the combination of an angle door, with a lock of any kind, a patentable invention, even though the particular lock had not before been put upon an angle door. Moreover, the combination claimed in claim 1 is one of the angle door with the particular lock or bolt I, that is, such lock or bolt as an integral part of the safe or box J, with its drum (*p*) and connections, in which view the apparatus in the defendant's jail does not infringe claim 1.

Opinion of the Court.

As to the patentability of claims 3 and 4, the feature which it is alleged makes both of them patentable is the interposition of a barrier between the jailer and the prisoners. In claim 3, the sliding doors are opened and closed, while the angle door is still locked. In claim 4, the cell doors are fastened by means of the bolts or lugs S, during the time the grated doors in the corridor are securely closed. In view of the evidence, it is clear that the devices covered by claims 3 and 4, as mechanical devices, existed before, having the same mechanical elements and the same mechanical operation and effect. The whole combination was the same, so far as it was a mechanical or patentable combination, namely, a lever, a bar passing through an interposed barrier, a lever or its mechanical equivalent at the other end, and something to be moved by the motion thus transmitted through the barrier. The patentee merely used the same devices which had before been used by other persons, between one side of an interposed barrier and the other, with the same mechanical effect. His motive was, and his use of the device was, to protect the jailer, by a sufficient barrier, from being injured by the prisoners; but neither the motive nor the strength of the barrier can enter as an element into the question. The case is one merely of a double use. The mechanism was old in its use to move a door or a gate at a distance, and the mechanical operation of the device was the same, whether the mechanism passed through a solid iron barrier, or a grated iron barrier, or a barrier of another material, or through no barrier at all. Mr. Moulton testifies that the mechanical effect is precisely the same with or without the grating, so far as fastening and unfastening the doors is concerned, the only difference being in the effect of the grating to protect the jailer and guard against escapes. *Tucker v. Spaulding*, 13 Wall. 453; *The Corn Planter Patent*, 23 Wall. 181, 232; *Brown v. Piper*, 91 U. S. 37; *Dunbar v. Myers*, 94 U. S. 187; *Vinton v. Hamilton*, 104 U. S. 485, 491; *Heald v. Rice*, 104 U. S. 737, 754; *Hall v. Macneale*, 107 U. S. 90; *Thompson v. Boisselier*, 114 U. S. 1; *Stephenson v. Brooklyn Cross-Town Railroad Co.*, 114 U. S. 149; *Aron v. Manhattan Railway Co.*, 132 U. S. 84; *Watson v. Cincinnati &c.*

Opinion of the Court.

Railway Co., 132 U. S. 161; *Hill v. Wooster*, 132 U. S. 693; *Burt v. Evory*, 133 U. S. 349; *St. Germain v. Brunswick*, 135 U. S. 227.

As the mechanical operation and effect of the patented devices are the same, whether there be a grating or other barrier or not, there is no patentable combination between the devices and the grating. The grating performs no mechanical function and has no mechanical effect. The case is one of mere aggregation. *Pickering v. McCullough*, 104 U. S. 310, 318; *Double-Pointed Tack Co. v. Two Rivers Mfg. Co.*, 109 U. S. 117; *Stephenson v. Brooklyn Cross-Town Railroad Co.*, 114 U. S. 149; *Hendy v. Miners' Iron Works*, 127 U. S. 370; *Aron v. Manhattan Railway Co.*, 132 U. S. 84.

This patent was granted under the act of July 4, 1836, chap. 357, the sixth section of which, 5 Stat. 119, provides for the granting of a patent for "any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement in any art, machine, manufacture, or composition of matter." It was not granted for an art or process, that is, "an act or a series of acts performed upon the subject matter to be transformed and reduced to a different state or thing." *Cochrane v. Deener*, 94 U. S. 780, 788. So far as the grating is sought to be made an element in the combinations of claims 3 and 4, it is not an element of the mechanism. It is no part of the machine, and has no effect upon its operation. Nor is the apparatus a manufacture or a composition of matter. In the patent, the invention is called one of an "improvement in the construction of prisons," and in the specification it is called an invention of "improvements in the construction and operation of prisons." In *Jacobs v. Baker*, 7 Wall. 295, suit was brought on four patents for "improvements in the construction of prisons." One was for a secret passage or guard-chamber around the outside of an iron-plate jail, and between the jail and the surrounding inclosure, constructed for the purpose of allowing the keeper to oversee and overhear the prisoners without their being conscious of his presence. Another was for improved iron walls for iron-plate jails. Another was for an improvement in joining the metal

Opinion of the Court.

plates. Another was for arranging iron-plate cells in jails. This court held that an improvement in the construction of a jail did not come under the denomination of a machine, or a manufacture, or a composition of matter; and that it was doubtful whether it could be classed as an art. But, however this may be, the grating, in the present case, cannot be considered as a part of a patentable mechanical combination. *Brown v. Davis*, 116 U. S. 237, 249, and cases there cited; *Forncrook v. Root*, 127 U. S. 176, 181.

The judgment is reversed, and the case is remanded to the Circuit Court, with a direction to grant a new trial.

MAY v. JUNEAU COUNTY.

ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE
WESTERN DISTRICT OF WISCONSIN.

No. 94. Argued and submitted November 26, 1890. — Decided December 15, 1890.

The decision in *County of Fond du Lac v. May*, ante, 395, as to the invalidity of letters patent No. 25,662, granted to Edwin May, October 4, 1859, for an "improvement in the construction of prisons," affirmed.

Want of patentability is a defence to a suit for the infringement of a patent, though not set up in an answer or plea.

AT LAW, for an infringement of letters patent. Verdict for defendant and judgment on the verdict. The plaintiff sued out this writ of error. The case is stated in the opinion.

Mr. M. C. Burch for plaintiff in error. *Mr. Duane E. Fox* was with him on the brief.

Mr. S. U. Pinney, for defendant in error, submitted on his brief.

MR. JUSTICE BLATCHFORD delivered the opinion of the court.

This is an action at law, brought in the Circuit Court of the United States for the Western District of Wisconsin, by Sarah