

iron lever, working in a steel socket at one end, in which lever the upper cutter is fixed, and a spring fastened to it to throw it up after it is forced down. The upper lever has also a side cutter screwed to it, for cutting off the rods at the same time that the die cuts and shapes the nail. The heading is formed by concave dies fixed in two side or horizontal levers, in the ends of which are mortices to receive a tenon fitted on the centre bolt, held firm by a pin;—springs to each of these levers, to throw them back after heading the nail. The lever containing the upper cutter, is forced down by an axis in a shaft, cutting the nails lengthwise of the rod, whilst hot, on the under cutter which holds them fast, while the side levers force up the, heading dies, which action is by means of secondary levers, or by the axis of a wheel during the revolution of which the cutting and heading levers are disengaged, at the same period the nails are pushed out by springs, and the rods are pushed forward by hand in constant succession.

Let us now compare this machine, as to its-component parts and mode of operating, with Perkins's machine. The parts of the former are, as has been stated, cutters fixed in a lever and a fixed piece of iron. Concave dies fixed in side levers for forming the head of the nail, with springs in both sets of levers to open them after they have performed their parts, and other springs to extricate the nails. Secondary levers, or a wheel which in its revolutions disengages at the same moment the cutting and heading levers. The manner in which it operates, is by forcing down the upper lever so as to bring the 'cutters into contact, and thus to cut and shape the nail. By the pressure of the horizontal levers containing the concave dies, against the sides of the cutters when closed, the head is formed, which action is performed by means of secondary levers, or by the axis of a wheel during its revolutions and the nails when thus completed are forced out by springs. The parts of Perkins's machine are the jaws of a vice, the one fixed and the other movable, with cutters fixed in them, and a heading die in the moveable jaw; a lever, with a toggle joint at the end of it to force the cutters together and also to force up the heading die at the same pressure of the lever. The manner in which it operates is by the toggle joint, which, by the pressure of the lever, forces the cutters together, so as to cut off the nail, whilst the lever, by an instantaneous but successive motion, forces up the heading die to complete the nail; the whole operation being

carried on during the same pressure of the lever. The two machines agree in the following particulars: Each of them have cutters for separating the nail from the rod, and dies for forming the heads by pressure. Here the similitude ceases. The one has one lever, which is the great agent, by the power of which, and at the same motion, the whole operation is performed. The other has a lever for cutting, and levers for heading, which are put into operation by another set of levers, or by the axes of a wheel. The latter requires, as appears by the specification, the aid of a machine which the other does not, that is, a blacksmith's furnace to heat the iron. This is certainly a very material difference, and we must suppose it to be indispensable, and without which the operation could not proceed. But the important difference is in the mode of operating. Perkins's machine makes the nail by one and the same pressure of the lever, Chandler's, so far as the court can perceive, effects nothing more by the pressure of the lever, than the cutting of the nail rod; but, by what power the side or horizontal levers which form the head, are moved, does not appear, otherwise than as it is stated in the specification, to be by the action of what is called secondary levers, or the axes of a wheel during its revolutions. But, by what power are these secondary levers or wheel worked? This is not stated, and it is most obvious that it cannot be by the downward pressure of the first lever; and therefore it is reasonable to conclude, that some other power is used to act upon the secondary levers or on the wheel. In short, the court finds it impossible to discover in what manner the complicated parts of this machine are worked, beyond the pressure of the lever which cuts the nail. If they act by means of some other power, it certainly cannot be pretended that the two machines are substantially the same, and operate in the same manner to produce the same result. They are materially unlike in their parts, in their structure, and in their operation. The one operates upon cold iron, and the other, as stated in the specification, requires the aid of a furnace as an appendage. The one operates by means of a single power; the other by the aid of more than one power. Or, if this be not so, it behoves the defendants clearly to show the contrary, before the court can listen to a motion to set aside the verdict on the ground that the two machines are substantially alike in principle.

From the view which the court has taken of the other machines, and so far as we have found it possible to comprehend the numerous and complicated parts of which they are composed, more especially Garretson's and Bead's, we are of opinion, that the least exceptionable of them are open to the objections stated to Chandler's. The parts are different the powers are either different or they are differently applied, and the modes of operating are dissimilar. In some, perhaps in all, the cutting and heading are distinct operations. In two of them, the head of the nail is formed by concussion instead of pressure. In one of them, for want of the toggle joint or something equivalent to it, the principle of gravitation is resorted to, and the vices are opened by weights. As to Bodgers's machine, it need only be observed that the jury were left to decide as to the existence, the form, and principles

of it, upon the imperfect account given of it by Howard, the only witness. No model, and no particular specification, was given descriptive of the parts of that machine, their combination, and the mode of operating. It appears from the verdict, that the jury were left not satisfied with the evidence, either as to the existence of such a machine, or as to its resemblance to Perkins's. It would will become the court to say, that the jury decided this point improperly, even if the inclination of our minds had been different, which it certainly was not.

The next reason assigned for a new trial, is, that the damages given by the jury are excessive. I do not understand *ho objection to be to the amount, provided the plaintiff was entitled to any thing beyond nominal damages. The argument is, that Perkins's machine was acknowledged by himself to be worthless, and that it was in fact thrown away as a useless thing, and was so considered by those who knew any thing of it; consequently, his assignees sustained no damage by the use which the defendant made of it. Now the premises may all be admitted, and yet the argument terminate in what is called a non sequitur. Ore in the bowels of the earth would be of no value to the owner of the land, were it not that other persons can make it valuable by the employment of skill, labour, and money, to render it so. It is not the intrinsic value of the thing itself, but its capacity to be converted into something which may be useful, that gives it value. Admit, for the sake of the argument, that Perkins's machine, in the form in which it came from his hands, was so far inferior to the common nail machines then in use as to deprive it of all intrinsic value; still, if another person can super add to that invention something which will remove all its defects, and render it useful, it immediately becomes valuable, not on account of its own qualities, but because of its capacity to receive the improvement and with its aid to become useful. The original discovery, and the improvement became articles of traffic between the two discoverers, as soon as the improvement was made which it was their mutual interest to give value to. Is the defendant's improved machine valuable? This is admitted. But why is it so? Because he has availed himself of Perkins's original discovery on which to ingraft his own, and without which his

own would have been useless to himself and to the world. But how did he possess himself of Perkins's discovery? By an unlawful invasion of property to which Perkins was exclusively entitled. Had he, as he was bound to do, sought to acquire a title to this property by contract, is it to be believed that it would have been treated by the parties as of no value? It is obvious that it would not. This course of reasoning is intended to show, that when it was stated by the court to the jury that the charge of worthlessness against Perkins's machine came with a bad grace from the defendant, who was making so profitable a use of it, it was no answer to say that it is useful merely on account of the improvement which others had made to it; because, if it was useful in that respect, and without the original discovery the Improvement could not have been made, it followed that the original discovery was useful and valuable. But the fact is, that Perkins's machine was proved at the trial to possess intrinsic value on the single ground of a saving of labour. Whether the value so proved justified the jury in finding the damages which they did, is a question of which that body were the proper judges upon the evidence laid before them, and the court sees no reason to find fault with their decision.

The motion in arrest of judgment is grounded upon certain alleged defects in the declaration. The declaration states, that Jacob Perkins, having invented a new and useful improvement in the manner of manufacturing nails, &c. which had not been known or used before his application, &c. (and so averring a compliance with all the requisitions of the law previous to obtaining the patent, and stating the assignment of his right to Guppy and Armstrong granting to them the full and exclusive right and liberty of making, &c. the said improvement, &c.) then sets forth the assignment of Guppy and Armstrong to the plaintiffs; and the breach is, that the defendants, without the consent of the plaintiffs first had in writing, on a certain day and for a long time before and continually since, had used in numerous machines, the improvement aforesaid.

It is contended, that the et cetera in the description of the discovery renders the patent too vague, and that the material parts of the specification ought to have been set out in the declaration, so as to leave no doubt as to the particular discovery for which the patent was granted, and for the violation of which this suit is brought. It is further objected that the breach is too generally stated. It may be laid down as a general rule, that a declaration ought always to show a title in the plaintiff, and that with convenient certainty. It ought to state all matters that are of the essence of the action, without which the plaintiff fails to show a right in point of law to ask for the judgment of the court in his favour. If his title depends upon the performance of certain acts, he must affirm the performance of those acts. If enough is stated to show title in the plaintiff, and with sufficient certainty to enable the court to give judgment, but with less certainty than the case admitted of, and which for the purpose of notice to the adverse party or otherwise, ought to have been stated,

the defect is cured by the verdict The court will presume that all such omissions were supplied, and obscurities explained, at the trial, by the evidence given to the jury.

In this case, the plaintiffs' title is founded on a patent to Guppy and Armstrong, granting them an exclusive right to Perkins's invention of a new and useful improvement in the manner of manufacturing nails, &c. in the words of the declaration. The declaration contains all the necessary allegations to show that the patent was regularly granted, and the patent is designated by the terms which itself uses. It is true, that the specification is referred to in the patent as part thereof, but that is merely descriptive of the invention, and not of the patent. It is a matter of evidence to be used at the trial, and if a sight of it be necessary to the defence, the defendant may have it placed on the record by asking over of it The court are of opinion, that the patent is described with sufficient certainty even upon a demurrer, and that the breach, if it be too-general in not stating the number of machines used by the defendants, (a point not necessary to be decided,) is cured by the verdict, since it is fairly to be presumed that proof of the fact was given to the jury. Both rules therefore must be discharged.

[The trial of this case, and the charge to the jury by Washington, Circuit Justice, can be found in Case No. 5,718.]

¹ [Reported by Richard Peters, Jr., Esq.]