

The idea seemed to be a good one. At least it was new, and might prove valuable, and probably the mechanism which Gillet devised to effectuate it was patentable. That idea seemed to be to make the rods free, both in their lateral and up and down movement, by leaving them entirely free at the upper ends, and free within a certain space at the lower ends, depending wholly on the teeth of the combs to keep the rods apart and in place, and to clean out and keep open the space between the rods, so that the kernels of corn as they came from the cob would readily drop through the screen, leaving the husks and cobs to be carried away. By this arrangement, as specified in the patent, the screen was kept clean by means of the combs, and the looseness of the rods at both ends allowed them to be movable under the action of the moving screens, thus shaking the corn through the screen, and enabling the operator to dispense with the vibratory or shaking motion of the shoe which had before been used in some of the machines, thus increasing the speed, capacity, and durability of the machine. This was the improvement which Gillet effected, but his assignees, the complainants, in their manufacture of machines, seem to have abandoned the idea of having the rods constituting the screen loose at both ends, as designed in the patent, and are making them fast and immovable at their lower ends, precisely as defendant is doing in its manufacture. Why they have so departed from the patent under which they profess to be manufacturing does not appear. They no doubt had a right to change their manufacture, but it is not so easy to change the patent. If their patent was like their manufactured machines, one of which has been brought into court as an exhibit by the defendant, it is quite evident that the defendant's machine, being substantially like it, would involve an infringement, except for the fact that several of the patents so introduced in evidence, and which were long prior to complainants', present the same thing. The only way in which the complainants' patent can be differentiated from the prior art is by the device for leaving both ends of the wires constituting the screen loose in the manner substantially as stated in the specifications of the patent. The complainants' expert admits—as he must—that the Gillet patent in each of the three claims sued upon requires the lower ends of the wires to be hinged, and they are so shown in the patent and drawings, but he thinks that the defendant's method of attaching the wires by running them through a solid iron, and riveting them down on the under side, making the wires at one end wholly immovable, is the equivalent of the device in the patent which leaves them loose by stringing them upon an iron rod or pintle which allows free lateral movement at the lower end, and something of a vertical one as well; and the circuit court seems to have adopted that view. This, we think, was error. The only possible way the complainants' patent can be sustained is by confining it to the particular improvement and structure set out in the patent. By giving it a construction which would cover the defendant's machine it is brought within the scope of several old patents, which have long ago expired, and the inventions covered by them become public property. The court below, in its opinion, says a piece of leather, or a piece of tough flexible wood, or even metal, may serve to some extent the purposes and function of a hinge. This is, no doubt,

true. The complainants are not confined to any particular form of hinge. Anything that is an equivalent of a hinge, which is properly defined to be a device for joining two pieces in such a manner that one may turn upon the other, might be used. As shown in the patent, the rods are hinged by having eyes formed on their ends, which are strung upon the cross-rod or pintle. The rods of the screens of the defendant's device are rigidly fastened at their lower ends in a rigid cross-bar of iron. In the complainants' patent the teeth of the combs which inclose the wires are depended upon wholly to space the wires, and to keep them in place laterally. Were it not for these, the ten or more wires constituting the screen might be huddled all together in one bunch, while in the defendant's machine they are spaced and kept in proper position by the rigid fastening. We think the one is not the mechanical equivalent of the other. It is quite probable that the complainants found out, after commencing the manufacture of their machines, that making the rods fast and wholly immovable at their lower ends, and depending upon the looseness at their upper ends and the spring and resiliency of the metal for the shaking movement of the rods, was quite sufficient in practice, and constituted the preferable construction. But in altering their device in that way they abandoned the conception of the patent, and conformed their machines substantially to designs which prevailed before the Gillet patent was issued.

The Packer patent, issued in 1878, is for a corn sheller, and shows a screen of rods for the sifting of the corn, like the complainants', except that the lower ends of the rods are made fast by passing through or into a wooden cross-piece. The upper ends are bent over, much like complainants', but, instead of being left loose, are made to rest loosely in holes made in a cross-piece of wood in such a manner as to allow the wire to tip and vibrate to and fro laterally between the teeth of the combs, giving quite as much motion as in the complainants' machine. In operating the specimens of machines shown in exhibits, the Packer exhibit shows even more capacity for movement in the wires than in complainants' machine. This effect seems to be brought about by giving a little more lateral space between the wires and teeth of the combs between which the wires are placed, and by the device, before mentioned, of resting the upper ends of the wires which show a circular bend downward of approximately eight inches loosely in a cross-piece of wood in such a manner as to allow the straight portion of the wires constituting the screen to vibrate freely in a lateral direction between the teeth of the comb, the ends of the wires inserted in the wood acting as a pivot on which the wires turn.

The Woodbury patent, issued to Daniel Woodbury in 1849, is for a grain thresher, but the evidence shows that it could be used, and was used, both for small grain and corn, by regulating the distance between the wires of the screen to accommodate itself to straw or to cobs and husks. The change was merely mechanical, as the complainants' expert admits, and required no invention, but only common sense, to effect it. This patent also shows a device for cleaning the grain, much like the complainants' in all material respects, except that in the defendant's machine and in the Packer patent the wires of the screen are

made fast at the lower ends. This patent is properly described and distinguished from the complainants' and defendant's devices by defendant's expert, as follows:

"Letters patent of the United States, No. 6,235, issued March 27, 1849, to Daniel Woodbury, for improvement in grain separators, shows and describes, together with certain other elements, the separating device which is substantially exemplified in 'Defendant's Exhibit Model of Separator of Woodbury Patent,' and which in its principle of construction and operation is strictly analogous to the separating device of the complainant's patent in suit, with the single exception that the rods which make up the screen of the separator are not hinged at their lower end, or free to move laterally at their lower end, as are the rods of the screen of the patent in suit. Referring to the drawing of the Woodbury patent, the separator shown therein comprises a number of inclined parallel rods, *d*, fastened at their lower ends to a cross-piece, *d*<sup>1</sup>, and resting upon a series of comb-like cross-pieces fastened transversely upon an endless web or elevator, *b*, mounted on rollers, *s*, *s*. The cross-pieces upon the web are provided with teeth which project upward between the rods, *d*, and are adapted by their movement to carry the straw longitudinally upward upon the rods, and discharge it from their upper ends, the grain in the meantime being dropped downward between the rods, and carried to the shoe of a fanning mill, to be cleaned. This Woodbury separator embodies a series of comb-shaped rake-bars supported and moved upon an endless carrier, and a rack made up of a series of parallel bars resting upon the comb-shaped rakes, and fastened at their lower ends to a cross-piece set in the frame of the machine, the rods being described as of wood or metal, and so elastic as to spring gently to accommodate themselves to the action of the elevator, and their length being such that they project beyond the upper end of the web, in order that the teeth of the combs may not carry coarse material down around the upper end of the rack."

This patent seems to contain all the elements of the complainants' device except the one thing of hinging the wires of the sieve or screen at the lower ends to effectuate a greater degree of looseness. It is old, and was common property when the Gillet patent was issued. If this and the Packer patent do not clearly anticipate the complainants' device, it is only because the wires are not left loose at the lower ends by means of hinges allowing a free lateral movement between the teeth. The defendant's machine, so far as any difference except that which is merely mechanical is concerned, is precisely like the Woodbury patent. We think, also, it is substantially like the Packer patent, as in that patent the wires are left practically loose at the upper ends. If the defendant's machine infringes the Gillet patent, it follows that the Gillet patent was anticipated by the Packer and Woodbury and other patents in evidence; but we think there is no infringement.

It is further urged that dispensing with the shaking shoe used in some of the prior patents for more efficiently cleaning the corn, differentiates this from the former patents. But, as that was an independent device, constituting an additional attachment, which might be used or not, we think its omission an unimportant variation, which would not constitute invention, nor affect the character of the invention in question. The decree is reversed, and the cause remanded, with directions to the court below to dismiss the bill.

## KENNEY v. BENT.

(Circuit Court, D. Massachusetts. December 8, 1898.)

No. 739.

## PATENTS—DEVICE FOR HOLDING WOVEN-WIRE FABRICS.

Patent numbered 549,370, for a device for holding woven-wire fabrics, discloses no patentable invention, and is void.

This is a suit in equity by Alphonso E. Kenney against George W. Bent for infringement of a patent.

Edward S. Beach, for complainant.

Odin B. Roberts, for defendant.

ALDRICH, District Judge. This patent is numbered 549,370, and covers a device for holding woven-wire fabric, in its use of supporting the mattress, by securing the wire fabric upon the end rails of iron bedsteads or metallic mattress frames. It strikes me, if the plaintiff's device were otherwise patentable, that it might fairly enough be said that its essential features were anticipated by prior uses and prior patents; but I prefer to place the decision of this case upon other grounds. I do not think what the patentee did amounts to invention, within the fair meaning of the patent law. It was a mechanical conception and appliance, pure and simple. There are some ideas of combinations expressed in the claims and specifications, but, according to the general effect of the plaintiff's argument and evidence, and especially of that of his expert, Mr. Spencer, the supposed invention does not consist in combining a flattened strip with a tubular frame, nor alone in the flat securing strip, but, in effect, that it resides in applying the fabric around a strip with a flattened under side, which is again applied to a tubular-shaped end rail in a manner which in use creates a peculiar pinch. The simple processes of drawing strands of wire or rope in an overlap so as to create a grip or bite or pinch upon itself when tension or pressure is applied, are very old, and have been understood and practiced by all races since wire and rope were in practical use. Drawing or winding it over some other substance so as to get a greater pinch is also old. It does not seem to me that the patentee, by doubling his wire over a flattened metallic strip with a flattened under surface and a rounded upper surface, and by screwing the strip to the rail of an iron bedstead, thereby securing and holding the woven-wire fabric, has entitled himself to the reward which would follow a monopoly of the manufacture and sale of bedsteads containing appliances involving the idea of a pinch or bite. While meritorious inventions, however simple, should be fairly and fully protected, we should exercise great care not to hamper the freedom of manufacture and trade by adopting simple mechanical improvements in structure as involving patentable invention. Bill dismissed, with costs.