

view of the very thorough examination of these patents by the experts, it does not seem useful to go into an extended analysis of each one of these patents, showing the respects in which they differ from the patent in suit.

In the third amendment to the defendants' answer it is claimed that this machine was in public use for more than two years prior to the date of the Taylor invention, and that the invention was sold by the inventor. In support of this allegation they offer the testimony of three witnesses,—Estep, Harkenstein, and Arthurs. A careful examination of their testimony fails to support these allegations. The charge of public use is based upon a trial in 1887, which was simply an experiment, and was in no sense such use of the machine as disclosed the principles involved to the public.

To recapitulate, then, claim 1 of the patent claims a hole, and that a bumper closes it yieldingly. Claim 2 specifically locates the hole, and how it is formed, and that the plunger is guided through it, closing it, with the means for exerting a continuous yielding pressure. Claim 3 differs from claim 1 in specifying that a weight furnished the continuous yielding pressure. The hole is simply recited as leading through the die to the matrix cavity, without specifying its size or length, and broadly includes any plunger, without reference to its length or shape. Applying, then, the principle that each claim should be given a function, if it can be fairly done by a liberal construction, I find all these claims to be valid, and to constitute the invention described, and that the defendants have infringed the same.

A decree may be prepared accordingly.

THRALL v. POOLE et al.

(Circuit Court, N. D. Illinois. April 12, 1898.)

1. PATENTS—LIMITATION OF CLAIMS—EQUIVALENTS.

The word "metal," used with reference to one of the elements of a combination claimed in a patent, does not necessarily prevent the patent from covering other equivalent materials, such as celluloid, hard rubber, wood, or other hard, but nonmetallic, substance; and this is true, notwithstanding the word "metal" was inserted by amendment during the progress of proceedings in the patent office.

2. SAME—RAILWAY TICKETS.

Letters patent No. 342,941, issued to William A. Thrall, June 1, 1886, for an improvement in railway tickets, *held* to be valid and infringed.

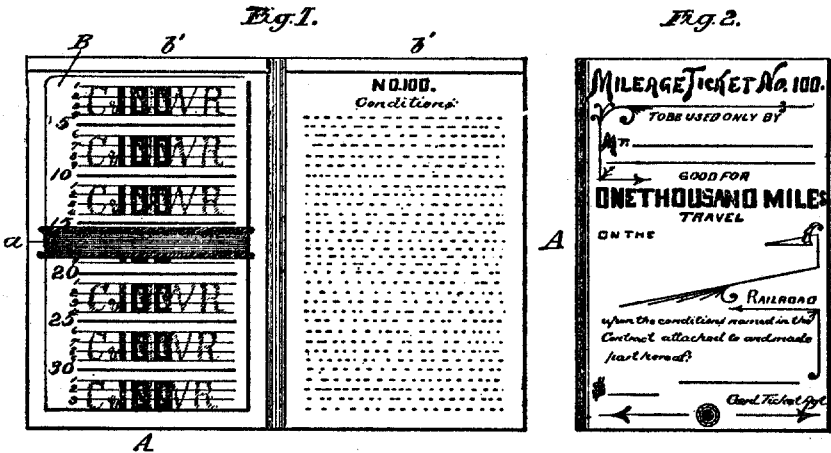
Final hearing on bill in equity for infringement of letters patent of the United States No. 342,941, issued June 1, 1886, to William A. Thrall, for an improvement in railway tickets, the claims of the patent being as follows:

"(1) A railway ticket, B, consisting of a continuous strip or ribbon divided into a series of consecutive numbered parallel spaces, and arranged in alternate folds within a flexible folding cover, A, provided with a metal straightedge, substantially as shown and described.

"(2) The combination of the railway mileage ticket, B, consisting of a single strip or ribbon divided into a series of consecutive numbered parallel spaces, flexible folding cover, A, provided with a metal straightedge, b', and

rubber band, a, for loosely retaining said ticket in a folded position, substantially as shown and described.

"(3) The flexible folding ticket cover, A, provided with a metal straightedge, b', and rubber band, a, substantially as shown and described."



In the patent office several amendments were made in the application on which the patent was issued, the most material of which was the insertion in each claim of the word "flexible" before "folding cover," and the word "metal" before "straightedge," these words being inserted in the last amendment prior to the allowance of the application. The first of these amendments was not material on the question of infringement; but the defendant contended that the second had the effect of limiting the patent to a mileage ticket having a "metal" straightedge, so that it could not be infringed by a mileage ticket having a celluloid straightedge. So far as regards construction of the patent, this was the principal point in the case.

Munday, Evarts & Adcock, for complainant.

Banning & Banning and Carter & Graves, for defendants.

SHOWALTER, Circuit Judge (after stating the facts). Defendants' counsel do not seem to me to seriously contest the validity of the patent in suit. They insist that the patentee has so far limited his monopoly by the words of his claims that their client does not infringe.

By striking out the word "metal" and the word "flexible," the claims appear as presented by the patentee in the patent office. The examiner cited three patents as against the claims in form as so presented, dwelling especially on the patent to Arnold. Each of the references showed a metal straightedge, against which the ticket strip was to be torn or severed, but in each the case inclosing the ticket was a rigid case. The patent office did not insist that the word "metal" should be inserted before the word "straightedge." In avoiding the references, and in making more specific the description of the invention, the attorney for the patentee inserted the word "flexible," so that the "folding cover, A," of the first claim, and the "folding cover, A,"

of the second claim, became the "flexible folding cover, A," and "the folding ticket cover, A," of the third claim, became "the flexible folding ticket cover, A." This change of phraseology was necessary to meet the references, and to distinguish the invention. But in the same connection, and as part of the same amendment, the "straightedge" of each claim was amended to "metal straightedge." When the word "flexible" was thus used, indicating a cover of leather, or paper board, or some such material, it became necessary, in order to show distinctly the invention described in the specification, to emphasize the fact that the straightedge must be not a straightedge formed merely by the soft yielding material of which the flexible cover was to be made, but a straightedge of hard and sharply-defined material, against which the ticket could be accurately severed. When read in the light of the specification and of what took place in the patent office, the word "metal," as used in the claims, becomes descriptive of the qualities of that straightedge which would answer the function of that factor in the claim as contrasted with the soft material of the cover. Straightedges of hard and compact material, for the severance of paper on a line, were common in the art. They were not necessarily of metal, but they must necessarily have had the qualities of metal for the purpose mentioned.

If there had been any reference by the patent office showing the device of this patent, but with a straightedge of celluloid, for instance, these claims would not have been allowed. The edge of the flexible cover itself could be thought of as a straightedge. It would serve, for instance, to steady a pencil in drawing a straight line. It would indicate irregularities or variations from a true plane in an apparently flat surface, etc. But the straightedge which constitutes the factor in these claims is one against which the ticket slip could be torn in a straight line, and at a desired or designated subdivision. This is the function of the straightedge as it figures in the invention of the patent. When the word "flexible" was expressed as indicating, in connection with the specification, the quality of the cover, then some qualifying word became necessary to indicate a straightedge upon which the ticket could be severed. The word "metal" was inserted evidently for this purpose.

The statute requires the patentee to "particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery." Rev. St. U. S. § 4888. The invention here claimed was not any one factor or the factors as unrelated to each other, but the combination specified. With respect to any one factor, the qualities necessarily claimed are those which obviously enabled that factor to combine with the other factors. The patentee says in his specifications:

"To enable the desired portion of said strip to be readily detached without danger of tearing the same irregularly, and thus injuring the ticket, I so construct said cover that the top may form a straightedge. This is accomplished by riveting or otherwise attaching flexible strips of metal, b, b', Figs. 1 and 3, to the top of said cover, or by placing flexible metallic sheets between the folds of the material forming the outside of said cover, as shown in Fig. 5, in which b' represents the metallic sheet, while a' indicates the covering glued or otherwise attached thereto."

It was no part of any "invention" of this patentee that the straightedge should be of metal rather than celluloid, or any other material well known at the time as suitable for the severance of the ticket. The "invention," as such, is not divisible so that a metal straightedge, as distinguishable from a celluloid straightedge, could be an essential factor in one form, as distinguished from other possible forms. I cannot hold here that this patentee, by the use of the word "metal," has intentionally parted one portion of his invention from the remainder, thus monopolizing the one portion and giving the remainder to the public. Section 350, Walk. Pat., contains the following statement:

"The doctrine of equivalents may be invoked by any patentee, whether he claimed equivalents in his claim, or described any in his specification, or omitted to do either or both of those things. But where the patentee states in his specification that a particular part of his invention is to be constructed of a particular material, and states or implies that he does not contemplate any other material as being suitable for the purpose, it is not certain that any other material will be treated by a court as an equivalent of the one recommended in the patent. Combination patents would generally be valueless, in the absence of a right to equivalents; for few combinations now exist, or can hereafter be made, which do not contain at least one element, an efficient substitute for which could readily be suggested by any person skilled in a particular art."

This patentee did not state, nor does his specification imply, that the straightedge "to enable the desired portion of said strip to be readily detached without danger of tearing the same irregularly, and thus injuring the ticket," could not be of celluloid, or of hard rubber, or of wood, or of some other hard, but nonmetallic, substance. In view of the text quoted from Walker, and of such cases as *Reece Button-Hole Mach. Co. v. Globe Button-Hole Mach. Co.*, 10 C. C. A. 194, 61 Fed. 958, wherein the opinion was by Judge Putnam in the court of appeals of the First circuit, it would be a mistake, as it seems to me, to hold that the doctrine of equivalents is not here applicable. I think the injunction should go as prayed in the bill, and it is so ordered.

CARNEGIE STEEL CO. v. CAMBRIA IRON CO.

(Circuit Court, W. D. Pennsylvania. September 5, 1898.)

1. PATENTS—USE OF DIRECT PROCESS IN MAKING BESSEMER STEEL—THE JONES MIXER.

The Jones process patent, No. 404,414, as to its second claim, for a process "of mixing molten metal to secure uniformity of the same in its constituent parts preparatory to further treatment," which is carried into practical use in the manufacture of Bessemer steel by the direct process by placing and maintaining between the blast furnaces and the Bessemer converters a receptacle or mixer, into which the ununiform products of the different furnace charges are poured and allowed to mix, the converters being charged from such receptacle, which is so constructed and operated that a sufficient quantity or pool of the molten metal always remains therein to dominate the resulting mixture when new charges are added, is novel, and involves invention, and was not anticipated by prior patents or publications, English or American, nor by any process in prior use in the art.

2. SAME—INVENTION—PRESUMPTION FROM ISSUANCE OF PATENT.

The issuance of a patent is prima facie evidence that the patentee was the first inventor of what he described and claimed.