naked question of infringement cannot be raised by plea. Sharp v. Reissner, 9 Fed. 445; Korn v. Wiebusch, 33 Fed. 50. It is also equally true that where the infringement complained of has not been committed by the defendant, but by another person, this issue may be tendered by plea. Boston Woven Hose Co. v. Star Rubber Co., 40 Fed. 167; Linotype Co. v. Ridder, 65 Fed. 853.

Upon a proper construction of the plea, considered as a whole, and which agrees with what defendant's counsel says it means, and with what complainants' counsel declares would be a proper plea, I must deny the motion to strike the plea from the files. Motion denied.

HEATON PENINSULAR BUTTON-FASTENER CO. v. SCHLOCHT-MEYER.

(Circuit Court, S. D. Ohio, W. D. July 22, 1895.)

No. 4,775.

- 1. PLEADING IN PATENT CASES—PROFERT OF PATENT—DEMURRER TO BUL.

 A bill containing this language, "All of which will more fully appear by the said letters patent, or by a copy of the same duly certified from the records of the patent office, and in this court to be produced as your honors may direct," makes formal profert of the patent, so that it may be considered on demurrer to the bill.
- 2. Same—Infringement Suits—Judicial Notice of Prior Art. In determining the validity of a patent on demurrer to the bill, courts will take judicial notice of matters of common knowledge relating to the state of the art; but the judge must be careful to distinguish between his own special knowledge and what is strictly within the field of common knowledge, and the matter must be so plain as to leave no room for doubt.
- 3. Same—Description of Prior Art—Estoppel.

 The description in the specification of the existing state of the art bears upon the construction of the patent, and is a limitation of the grant. It forms the representations upon which the grant is obtained, and the patentee is estopped to say that such representations were incorrect.
- 4. Same—Button-Fastening Staples.

 The Vinton and the Prentice patents, Nos. 324,053 and 451,070, respectively, both for improvements in button-fastening staples, held void, on demurrer, for want of invention.

This was a bill by the Heaton Peninsular Button-Fastener Company against Schlochtmeyer, for infringement of two patents for improvements in button-fastening staples.

Jas. H. Lange, Odin B. Roberts, Gardner Perry, and S. L. Swartz, for complainant.

Taggart, Knappen & Denison, for respondent.

SAGE, District Judge. The bill is for an injunction and account against defendant as an infringer of two patents, owned by complainant, for button-fastening staples,—the first being No. 324,053, to John H. Vinton, August 11, 1885, and the second No. 451,070, to George W. Prentice, January 26, 1891.

The defendant demurs upon the grounds: First, that it is ap-

parent upon the face of the letters patent referred to, that the two inventions and improvements described and claimed therein cannot be used conjointly in the same structure; second, that the Vinton patent is invalid for the reason that the improvements described and claimed did not, in view of the state of the art within common knowledge, and of which the court will take judicial notice, constitute patentable invention; and, third, that the Prentice patent is invalid, for the same reason. The first ground of demurrer was abandoned upon the argument, and upon the averments of the bill was untenable. That a demurrer to a bill for infringement will be sustained in any case where it is apparent to the court that the alleged improvement does not involve patentable invention, although the bill alleges novelty and utility, is well-established. The demurrer admits only those facts which are well pleaded, and an allegation of fact in one part of the bill, which by inspection of the entire bill appears to be untrue, cannot be said to be well pleaded.

In Wollensak v. Reiher, 115 U. S. 96, 5 Sup. Ct. 1137, the supreme court held, upon inspection of the original and the reissued patent, and upon demurrer to the bill, that the original specification was not insufficient or defective, and that the sole object of the reissue was to enlarge the claim, and sustained the demurrer, notwithstanding the averment of the bill that the original patent was inoperative or invalid by reason of an insufficient or defective specification, which insufficiency or defect had arisen through inadvertence, accident, or mistake.

In Richards v. Elevator Co., decided by the supreme court of the United States, May 20, 1895, and reported in 71 O. G. 1456, 15 Sup. Ct. 831, Mr. Justice Brown, delivering the opinion of the court, said that:

"While patent cases are usually disposed of upon bill, answer, and proof, there is no objection, if the patent be manifestly invalid upon its face, to the point being raised on demurrer, and the case being determined upon the issue so formed."

The patent in that case was for a grain-transferring apparatus, and the claims were for combinations which the court held to be for a pure aggregation of old elements. It was not claimed that there was any novelty in any one of the elements of the combina-The court said that they were all perfectly well known, and, if not known in the combination described, were known in combinations so analogous that the court was at liberty to judge of itself whether there was any invention in using them in the exact combination claimed. In the language of the opinion, the justices of the court "did not feel compelled to shut their eyes" to certain wellknown facts in reference to the use of grain elevators in transferring grain from railway cars to vessels,—that this method involved the use of a railway track, entering a fixed or stationary building, an elevator apparatus, an elevator hopper scale for weighing the grain. and a discharge spout for discharging the grain into the vessel. plying to the patent these facts, and other facts referred to in the opinion, which were not averred in the bill but were generally known, the court held that the combination claimed was a pure ag-

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gregation, and affirmed the decree of the court below, dismissing the bill.

The patents sued upon in this case are for improvements in button-fastening staples, to be used in attaching buttons to shoes. The Vinton patent describes a staple made of wire. The claims are as follows:

(1) "As an article of manufacture, a button-fastening staple composed of wire, the legs of which are provided with V-shaped points broader than the diameter of the wire from which the staple is made, the cutting edges of both of said points being substantially at right angles to the length of the staple head, substantially as described."

(2) "A staple fastener for leather work, it having V-shaped points spread wider than the diameter of the wire, and set at one side of the center of the wire forming the legs above the point, to thus compel the staple to clinch uni-

formly in the desired direction, substantially as described."

The Prentice patent described a wire staple of similar general construction. The claim is as follows:

"A one-piece metallic button fastener, substantially uniform in size throughout, consisting, essentially, in an arc-shaped crown or top and two curvilinear side portions diverging from said crown or top, the whole forming a body portion, the curvilinear contour of the inner wall of which follows substantially the curvilinear contour of the outer wall thereof, or is parallel therewith, and an attaching portion consisting of two prongs or legs substantially parallel with each other and depending from the extremities of the body portion, the junction of the legs with the body portion forming corners or bearing shoulders to define said body portion, and to limit the penetration of the legs of the fastener into the material to which it is to be attached, substantially as described."

The bill makes profert of the letters patent in this language:

"All of which will more fully appear by the said letters patent, or by a copy of the same duly certified from the records of the patent office, and in this court to be produced as your honors may direct."

This is a formal profert, and is sufficient to make the letters part of the bill, so that they may be considered on demurrer. Dickerson v. Greene, 53 Fed. 247; Bogart v. Hinds, 25 Fed. 484. Courts, in determining the validity of a patent, will take judicial notice of matters of common knowledge relating to the state of the art. This proposition is supported by the decision of the court in Richards v. Elevator Co., cited above, where the court referred to facts not set forth in the record, but recognized because they were perfectly well known.

The rule suggested by Judge Blodgett in Manufacturing Co. v. Adkins, 36 Fed. 554, imposes a proper limitation, to wit, that the court must keep strictly within the field of common knowledge, and the judge must be careful to distinguish between his own special knowledge and what he considers to be the knowledge of others in the field or sphere where the device is used. "But when the judge before whom rights are claimed by virtue of a patent can say from his own observation and experience that the patented device is in principle and mode of operation only an old and well-known device in common use, he may act upon such knowledge. The case must, however, be so plain as to leave no room for doubt; otherwise, injustice may be done, and the right granted by the patent defeated, without a hearing upon the proof."

In Root v. Sontag, 47 Fed. 309, the patent was held invalid on denurrer, and the court said that, upon investigation of the question whether the patent was void upon its face by reason of want of novelty or patentable invention, the court might "take judicial notice of a thing within the common knowledge and use of the people throughout the country."

In Brown v. Piper, 91 U. S. 37, the supreme court took judicial notice of the ice-cream freezer in common use throughout the country, and, as illustrating the common knowledge on the subject of the art involved, referred to Ure's Dictionary of Arts, Watt's Dictionary of Chemistry, and the American Encyclopædia. That court, also, in Terhune v. Phillips, 99 U. S. 593, took judicial notice of the common use and knowledge of corner sockets for show cases; in Slawson v. Railroad Co., 197 U. S. 654, 2 Sup. Ct. 663, of reflectors for directing the rays of a lamp to any desired spot; in King v. Gallun, 109 U. S. 102, 3 Sup. Ct. 85, of the customary trade packages of plug tobacco; and in Phillips v. City of Detroit, 111 U. S. 606, 4 Sup. Ct. 580, of the method of constructing pavements by preparing a foundation, placing the blocks thereon, and filling the space between with sand.

In New York Belting & Packing Co. v. New Jersey Car Spring & Rubber Co., 30 Fed. 785, Judge Wallace held a patent for a design for rubber mats invalid upon demurrer to the bill, taking judicial notice of the fact that the design was old as applied to other fabrics, and holding that its application to rubber mats did not involve invention. On appeal the supreme court (137 U. S. 445, 11 Sup. Ct. 193), Justice Bradley pronouncing the opinion, sustained the decree so far as the first claim was concerned, "for the reason stated in the opinion," which he quoted, including the portion where the judge below took judicial notice of the fact that the design was old as applied to other fabrics; but Justice Bradley thought that, as to the other more limited claims, proof should have been heard.

In Buckingham v. Iron Co., 51 Fed. 236, Judge Blodgett held a patent void on demurrer to the bill because the court, from common

knowledge, took notice that the structure was old.

In Wall v. Leck, 61 Fed. 291, a demurrer to the bill was sustained, the court concluding, from an inspection of the specification, that the patent did not cover any patentable process. This decision was affirmed by the court of appeals (13 C. C. A. 630, 66 Fed. 552) in February, 1895, and it appears that the court resorted to a certified

copy of the patent, outside the bill, to ascertain its contents.

In Industries Co. v. Grace, 52 Fed. 124, Judge Putnam recognized that by making profert of the letters patent the specifications were made a part of the bill, and said that a bill in equity did not necessarily make all the statements of fact contained in a contract or letters patent or other instrument proper parts of its pleadings, either by referring to them, or by annexing them as an exhibit, or by making profert, or by reciting the tenor at length. Claims of the patent become a fundamental portion of the allegations of the bill so far as they are relied upon by the complainant. The judge added:

"So everything in the specifications which must be resorted to by the court in construing the claims might be considered as part of the complainant's pleadings. But all portions which merely set out the state of the art, like recitals of facts in contracts or other instruments, are more or less conclusive on the party who sets them up, yet in the eyes of the law explainable, and not absolutely presumed to have been so alleged as to become the subject of demurrer. * * It is true that, so far as the specification contains any representations which, if erroneous, may be presumed to have misled the patent office to the detriment of the public, the patentee may be estopped."

On the other hand, Judge Putnam said that a patent should not be forfeited because of inapt and somewhat inaccurate descriptions of the state of the art, or where, as in the case before him, the state of the art had been set out somewhat confusedly and with qualifica-All this must be taken in connection with prior cases, which were not criticised nor referred to by Judge Putnam, and from which evidently he did not intend to dissent, and in which the specifications were referred to for facts which had direct bearing upon the scope of the patent and the construction of its claims. patent is, as is well said by counsel for defendant in their brief, the title deed through which the complainant must derive all his rights. It is the grant of a monopoly, and, with rare exceptions, every statement of the prior state of the art therein contained bears upon the construction, and is a limitation of the grant. The description in the specification of the existing art, and of the applicant's improvements, form the representations upon which he obtains the grant. Having done so, he is estopped to say that his representations were If the recitals of the state of the art do not tend to limit, explain, or nullify the grant, they are of no possible pertinence, even if the same facts were fully proved allunde. If, on the other hand, they do have such tendency, the patentee is bound thereby, and the patent must be construed in the light of the facts so recited.

In the light of the decisions above cited, let us look to the patents The staple shown and described in the Vinton patent in this case. is made of wire, and is of a U-shaped form. It is expressly stated in the specification that the general outline or form is the same as in the early Ely patent, to which express reference is made, and which is therefore a part of the Vinton specification. Inspection of the Elv patent establishes the absolute identity of the Elyand Vinton staples. so far as general form and shape are concerned. Vinton's improvement consisted in making a V-shaped point, the apex of which is located at one side of the center line of the leg of the staple, and which is pressed, swaged, or flattened, and thus made broader than the diameter of the wire from which the staple is produced. That is the only possible novelty in the Vinton patent. The setting of the points at one side of the center line of the leg of the staple, and the making of the staple with slightly incurved legs, so that it will clinch in the desired direction, are fully shown in the Ely patent, and admitted to be old by the Vinton specification. Making the cutting edge of the staple points at right angles to the length of the staple head was a matter involving nothing more than ordinary mechanical skill.

Now, it is a matter of common knowledge that if a round wire is pointed, by being pressed or swaged or flattened upon two sides, the diameter of the point will be and must be greater than the diameter of the wire. The making of such broadened points upon nails and staples was a matter of common knowledge years before the date of Vinton's patent. The old cut nail was made in this form for the very purpose mentioned in the patent,—that the broad, flattened point might cut a slit in the wood through which the shank would enter, and thereby prevent splitting the wood. So it was with common nails and staples. With reference to the patentability of such an improvement the case of Double-Pointed Tack Co. v. Two Rivers Manuf'g Co., 109 U. S. 117, 3 Sup. Ct. 105, is cited, and is pertinent.

The Prentice patent is for a button fastener differing from the Vinton and Ely fasteners only in triffing particulars. Prentice took almost the exact form of the Vinton staple with the beveled ends, and made a slightly different angle between the body of the legs, so as to make the crown portion with a double reverse curve instead of a single curve. Prentice provided his staple with a sort of supplementary crown, leaving shoulders against which the legs might be clinched. The old paper staple, in common use long before Prentice's patent, had a flat top against which the legs clinched, the top and the legs lying parallel after the clinching operation was finished. If such a staple was required to hold the eye of a button, or any similar object, a portion of the crown must be raised so as not to bind against the paper or cloth or leather; and, the necessity being apparent, mechanical ingenuity was all that was involved in the requisite change of form.

The complainant's patents are invalid upon their face for want of invention. The demurrer will be sustained, and the bill dismissed, at the complainant's costs.

MATHESON v. CAMPBELL.

(Circuit Court, S. D. New York. July 27, 1895.)

- 1. PATENTS—ASSIGNMENT IN FOREIGN COUNTRY—How PROVED.

 An assignment made in a foreign country, and purporting to have been executed before the consul general of the United States, is sufficiently proved by his signature and the United States consulate general seal.
- 2. Same—Anticipation of Product Patent—Concealed Chemical Formula.

 The fact that an alleged anticipating chemical compound was commercially sold and used in this country prior to the date of the application does not invalidate the patent, when such compound was made in a foreign country by a secret process, not discoverable by inspection or analysis. Boyd v. Cherry, 50 Fed. 279, followed.
- 8. Same—Sufficiency of Specifications.

 A patent for producing a dye from coal-tar products should describe the process with such clearness and certainty that an ordinary manufacturer of aniline colors, having such ordinary knowledge as existed in this country at the date of the patent, would be enabled by its instructions to carry out the process successfully.
- 4. Same—Misuse of Chemical Terms.

 The use of "nitrate" of sodium for "nitrite" of sodium, in the specifications of a patent relating to the manufacture of a coloring compound from