should act otherwise by requiring sureties to be brought from a great distance, at great inconvenience and expense, to merely sign a bail bond in the presence of the judge. From what has been said, it is manifest that the clerk of the district court did not admit the accused to bail as counsel have erroneously assumed. The district judge discharged each important judicial function in connection with taking bail. He decided that the offense was bailable, and fixed the amount of the bond. He also ordered the clerk to approve the bond when it should be signed by two sureties. This order addressed to the clerk was tantamount to an approval in advance of a bond signed by two sureties whom the clerk might accept as sufficient. We are not prepared to admit that the action taken by the district judge in the matter of thus approving the bond was even irregular; but, conceding that it was irregular, such action was induced by the request of the accused that the bond might be so executed, so as to secure his more immediate release; and, as we have heretofore held, and still think, it was competent for the accused and his sureties to waive the irregularity, and they should be adjudged to have done so.

In conclusion, it is proper to add that we have examined the additional cases cited by counsel in support of the proposition that the bail bond now in suit is null and void, for the reason that it was signed in the presence of the clerk, and not in the presence of the judge. With reference thereto it may be said that the cases cited are generally cases where a person who was wholly unauthorized to take bail for the particular offense assumed to do so on his own motion, and to discharge each judicial function connected therewith, or they are cases where the bail was taken contrary to the provisions of some express statute, which fact was held to render the obligation void. Com. v. Otis, 16 Mass. 198; Chinn v. Com., 5 J. J. Marsh. 29: Dickenson v. State. 20 Neb. 72, 29 N. W. 184: Clink v. Circuit Judge, 58 Mich. 242, 25 N. W. 175; Butler v. Foster, 14 Ala. 323. We think, upon an examination of the cases, that none of the citations in question are in necessary conflict with the views which we have expressed, and the principles upon which we have predicated our decision. The petition for a rehearing is accordingly denied.

McEWAN BROS. CO. v. WHITE.

(Circuit Court, D. Connecticut. October 22, 1894.)

No. 752.

PATENTS-ANTICIPATION-PAPER BOARD.

The McEwan patent, No. 492,927,—claiming, as a new article of manufacture, a superior paper board, formed from printed newspapers ground to a pulp, and having the particles of printers' ink minutely subdivided and uniformly distributed, so as to impart an even tint to the board,—was not anticipated by previous processes, in which the ink was utilized as part of the coloring matter by the use of an alkali which saponified the oil in the ink, after which the saponified matter was washed out; it appearing that such process required additional expense, and also weakened the fiber of the board.

This was a suit in equity by the McEwan Bros. Company against George L. White for infringement of a patent.

Briesen & Knauth, for complainant. Geo. E. Terry, for defendant.

TOWNSEND, District Judge. This is a suit upon letters patent No. 492,927, granted March 7, 1893, to Robert B. McEwan, Jessie L. McEwan, and Richard W. McEwan, for an improvement in paper board. The object of the alleged invention was to obtain a superior quality of paper board at a reduced cost. The specification states that this is accomplished by such processes as subdivide and preserve the permanent particles of printers' ink in newspaper stock, so that they may be blended with the fibers of the paper without impairing the strength of the fibers by bleaching out the ink. The claim is as follows:

"As a new article of manufacture, a paper board formed from printed newspaper, or the like, ground to a pulp, and having the permanent particles of the printers' ink minutely subdivided and uniformly distributed throughout the body of the board, whereby a smooth and even tint is imparted to the board."

Infringement is not denied. The only evidence in the case is that of one witness for the complainant. The defendant claims that certain admissions made by him show that the patent is void for want of novelty. It appears that prior to the alleged invention paper board had been made from newspaper stock, in which the ink was utilized as part of the coloring matter. The process by which this was accomplished included the use of an alkali which saponified the oil in the ink, and the saponified matter was then washed out. It is admitted that this process involved additional expense. is not denied that the fiber of the finished product was weakened thereby. It would seem that this was one of the "more or less expensive attempts to bleach out the ink" referred to in the patent in suit, the objectionable results of which the patentee sought to obviate in his product. The patented product consists of paper stock ground to a pulp, and permanent particles of printers' ink so minutely and uniformly distributed throughout as to produce The product relied upon as an anticipation is a paper pulp tinted by the coloring matter originally forming one of the constituents of the printers' ink. In the former there is mechanical disintegration; in the latter, chemical solution. out other evidence that such product did not involve inventive skill, with the allegations of the patentee that it was stronger in fiber and superior in quality, and the admission that it was produced at less expense, I think the complainant is entitled to the benefit of the presumption in favor of the validity of the patent. Let a decree be entered for an injunction and an accounting.

BOWERS V. VON SCHMIDT.

(Circuit Court, N. D. California. July 23, 1894.)

No. 10.244.

1. PATENTS-EXTENT OF CLAIMS—PIONEER INVENTION — DEEDGING MACHINES.

The Bowers patents, No. 318,859, for dredging machine, and No. 355,251, for hydraulic dredging apparatus, are valid, and cover inventions of a pioneer character, and the claims are entitled to a broad construction.

2. Same—Center of Oscillation.

Two forms of centers of oscillation are described in the Bowers patents, viz. one consisting of a turntable rotating in a circular well in combination with two spuds or vertical anchors passing through apertures in the turntable; the other consisting of a single spud when the turntable is made stationary. The claims which specify, as one of the elements, "a center of oscillation," include and cover both forms, and are not limited to the first form, and Bowers was not anticipated in the latter form by Angell or the defendant.

8. Same—Functional Claims.

The element designated in the Bowers claims as "a rotary excavator with inward delivery" is not functional in form, but means a rotary excavator of such construction as will produce an inward delivery.

4. Same—Rotary Excavator with Inward Delivery.

Two forms of rotary excavators with inward delivery are described in the Bowers patents,—one containing an inner chamber or shield, within the cutter head, having an opening in the top for admission of the spoils; the other with said inner chamber or shield cut away until only enough remains to support the excavator and shaft. The claims containing the element, "a rotary excavator with inward delivery," include and cover both forms, and are not limited to the first form.

Where an applicant for a patent is the original and first inventor of a form of device, but his original specification does not sufficiently describe it, so as to entitle it to be claimed therein, it is competent for him to amend his specification so as to include it, at any time prior to issuance of his patent, even though such amendment be made in reference to another patent, applied for and issued prior to the issuance of the applicant's patent, but subsequent to his invention.

6. Same—Anticipation—Early Models and Drawings.

An apparent anticipation may be avoided by a complainant by proving priority of invention over the alleged anticipation, and models or drawings, if sufficiently plain to enable those skilled in the art to understand them, are competent proof of such priority.

7. Same—Infringement.

The excavator shown in the Von Schmidt patents, Nos. 277,177, 300,333, and 306,368, though differing in the mode of mounting and in the shape of the cutting blades, is essentially the same, and operates in substantially the same way, producing the same result, as the Bowers excavator.

8. Same—Subsequent Patent.

A subsequent device may be an infringement of a prior patent notwithstanding the fact that such subsequent device is in itself an invention, and patented.

9. Same—Aggregation and Combination.

A combination, to be patentable, must produce a different force or effect or result, in the combined forces or processes, from that given by their separate parts. There must be a new result by their union. If not so, it is only an aggregation of separate elements. The Bowers claims bear the test of all the definitions. They are true combinations, and not aggregations.