## CROSSLEY v. DUGGAN.

(Circuit Court, D. New Jersey. January 16, 1896.)

PATENTS-APPARATUS FOR MOLDING EARTHENWARE.

The Crossley patent, No. 474,496, for improvements in apparatus for molding earthenware, consisting in mechanism whereby a double compression upon the clay within the mold is effected by the simultaneous opposite movements of two dies, is void as to all its claims, because Crossley was not the sole originator, and because the production of the device, in fact, involved no invention.

This was a suit in equity by Joseph Crossley against Frederick Duggan for alleged infringement of a patent relating to apparatus for molding earthenware.

Francis C. Lowthorp, for complainant. James Buchanan, for defendant.

ACHESON, Circuit Judge. The plaintiff sues for the alleged infringement of letters patent No. 474,496, for improvements in apparatus for molding earthenware, issued to him on May 10, 1892. The specification sets forth that the invention "relates more especially to that class of molding apparatus which is used for compressing and fashioning earthenware, more particularly those articles in which are formed lateral perforations, depressions, or ornate configurations, such, for example, as the porcelain supporting parts of electrical structures," which class of apparatus, it is stated, as theretofore constructed, was defective, in that "the pressure exerted by their dies or platens upon the plastic mass within the molds was insufficient to compact or condense the mass uniformly and equally throughout." Infringement of the first, second, and fourth claims of the patent is These claims are as follows: (1) In apparatus for molding ceramics, a mold, dies or platens, and mechanism for operating the same in opposite ends of the mold, in combination with lateral forming devices projected through the wall of the mold between the upper and lower dies. (2) In apparatus for molding ceramics, a mold, a die or platen within and forming the bottom of the mold, horizontal apertures in the wall of the mold and above said die, and a vertically reciprocating die or platen above said mold, in combination with lateral forming devices supported in the horizontal apertures, means for operating the dies or platens towards each other synchronously, and means for projecting and retracting the lateral forming devices. (4) In apparatus for molding ceramics, a mold, a vertically movable bar, a die or platen supported by said bar, and a die or platen for the lower end of the mold, in combination with vertical slide rods, connections between said rods and the latter die, and devices constructed to operate upon the slide rods only as the bar is moved downward.

Manifestly, these are broad claims. Not one of them is confined to the particular mechanism described in the specification. Can these claims be sustained? In pursuing the inquiry, two defenses only will be considered, namely: (1) That the patentee was not the original and first inventor of the improvement in question; (2)

that the improvement did not involve invention.

As bearing upon each of these defenses, the prior state of the ceramic art, as it had been practiced in the city of Trenton, N. J., where the parties to this suit resided, will first be noticed. the evidence it appears that, for a number of years before the date of the plaintiff's alleged invention, it was common in the potteries at Trenton to mold various articles—for example, door knobs—out of pulverous clay, by the use of an upper die and a lower die, working within a mold, and moving simultaneously towards each other; the upper die being moved downwardly by a screw press, and the lower die being moved upwardly by means of a treadle so pivoted as to afford a leverage, and worked by foot pressure under the full weight of the operator. There is positive evidence to show, and it is, I think, clearly established, that during this operation a double compression upon the clay within the mold is effected by the simultaneous opposite movements of the two dies, although, when the final maximum pressure is exerted, the lower die rests upon its Furthermore, it is proved that in the year 1882, at least eight years prior to the date of the alleged invention, the plaintiff made for and delivered to the Greenwood Pottery Company, of Trenton, a die having a mold and lateral forming devices entering the mold, through openings in its walls, and arranged to be projected into and retracted from the mold. This die was ordered from the plaintiff by Mr. Tams, the president of the Greenwood Pottery Company, to fill an order for insulators. Immediately after its delivery, the company successsfully used that die in connection with a screw press and a treadle operated in the manner already explained, and thus made the insulators to fill the above mentioned order.

Now, the defendant, Frederick A. Duggan, was formerly superintendent of the works of the Trenton China Company, and Albert T. Bell was secretary of the company. The plaintiff, Mr. Crossley, had been employed by this company to make dies, and, when any die of a new shape was needed, usually a consultation with respect to it took place between Crossley and the officers of the company be-In the fall of 1890 this company was filling an fore it was made. order for a new piece,—a fuse-rosette,—and some difficulty was experienced in getting the part of the clay below the transverse pin The difficulty arose from lack as hard as the part above the pin. of sufficient pressure below. Bell and Duggan, after consultation between themselves, sent for Crossley, and the three together discussed the matter. Bell testifies that in this conversation it was suggested that there ought to be some way of pressing the clay up from the bottom,—a suggestion which Duggan had already made to him.—and that after some talk he (Bell) made and exhibited to Crosslev and Duggan a rough sketch, showing a press so organized that the downward motion of the upper die, by means of suitable levers, would impart an upward motion to the lower die, thus exerting pressure at the same time from above and below; and that, upon Crossley's stating that he could make such a press, an order for the same was given to him, and that shortly thereafter he delivered such a press to the company. In all essential particulars, Duggan corroborates Bell. Crossley denies that Bell made such a sketch or suggested such a press, and testifies that the press was his own invention. It appears that Bell was experienced in the operations of the works of the company, and was a man of skill. He is an entirely disinterested witness. His integrity is not impeached. It is difficult to see how he could be mistaken as to the main fact. After a patient study of all the proofs bearing upon the subject, it is my conviction that Mr. Bell has testified truly as to the origin of

the improvement here in question.

But if I am wrong in this conclusion, was the improvement pat-We have seen what had already been accomplished in the potteries at Trenton in molding ceramics. Had the patent office been informed as to this, it is inconceivable that the patent in suit would have been allowed. Undoubtedly, by the appliances in prior use there, double compression had been exerted upon the clay within the mold by the simultaneous movements of the two opposing dies, acting in combination with lateral forming devices projecting through the wall of the mold between the upper and lower dies. The remaining problem was simply to increase the pressure upon the lower die, so as to equalize the pressure from above and below. Now, compound presses, wherein upper and lower platens are connected by mechanism, and are so operated that they move simultaneously towards each other with equal force, were old. patent exhibits demonstrate. Indeed, it is not necessary to go outside of the general art to which the improvement here in question relates, for instances of such double-acting presses. One instance out of several disclosed by this record may be cited. The patent No. 239,611, dated April 5, 1881, to Kennedy, shows a double compression press for making brick out of moist, but nearly dry, pulverous clay. The apparatus contains a mold, upper and lower plungers, and connecting and operating mechanism whereby the plungers are caused to move simultaneously towards each other, and to exert simultaneous equal pressure upon the clay within the mold. Was it, then, a patentable improvement to apply to the molding of ceramics a double compression press? In view of the antecedent state of the art, I am constrained to answer negatively. Manufacturing Co. v. Cary, 147 U. S. 623, 13 Sup. Ct. 472.

It will be perceived that, under the first and second claims of the patent in suit, the employment of any double compression press, however constructed and operated, would constitute infringement, and that the fourth claim covers all connections of whatever kind between the vertical slide rods and the lower die, and any devices operating upon said rods only as the bar is moved downward. Having regard to what had been done already in this art, it seems to me to be impossible to sustain claims so far-reaching. I have only to add that, in my judgment, it did not involve invention to apply to a single compression screw press mechanism connecting the upper

and lower dies, and thus securing a simultaneous movement of the dies towards each other with equal pressure.

Let a decree be drawn dismissing the bill of complaint, with costs.

## CALDWELL et al. v. POWELL.

(Circuit Court, E. D. Pennsylvania. December 20, 1895.)

## No. 13.

1. PLEADING IN PATENT SUITS—DEMURRER FOR WANT OF NOVELTY.

The question as to the patentable novelty of a design covered by a patent sued on may be raised by demurrer to the bill; but the demurrer should not be sustained unless the invalidity of the patent be plain, and the common knowledge relied on to defeat it be matters of which the court may properly take judicial notice.

2. Design Patents—Invention.

There is no patentable novelty or invention in producing a college badge by placing different shades of color in divided stripes upon a guidon floating from a staff.

SAME—BADGES.
 The Van Roden design patent, No. 20,748, for a badge, is void for want of novelty and invention.

This was a suit in equity by James Albert Caldwell and others, doing business as Caldwell & Co., against Charles S. Powell, for alleged infringement of a patent covering a design for a badge.

Lewin W. Barringer and John P. Croasdale, for complainants. Edwin Gaw Flanigan and Harding & Harding, for defendant.

DALLAS, Circuit Judge. The bill is demurred to on the ground that the letters patent which it sets forth, and upon which its prayer for relief is founded, "are, and always have been, void for want of patentable novelty." My examination of the authorities satisfies me that it is competent for the defendant to raise the question thus indicated by the method he has adopted; but, as I am also of opinion that no case of this character should be disposed of upon such a demurrer, unless the invalidity of the patent be plain, and the common knowledge relied upon to defeat it be of matters of which the court may properly take judicial notice, I deem it proper to briefly state the grounds upon which my conclusion in this instance has been reached.

The patent in suit (No. 20,748) was issued to George C. Van Roden, assignor, etc., upon May 19, 1891, for a design for a badge. The drawing represents the "design" thus:

