

fendant's injectors do not receive air from whatever direction it may come, but only from some particular directions. This is a secondary patent, being an improvement upon the lantern of No. 104,723, which furnished nothing but unheated external air to the flame, the improvement consisting in placing injectors or protectors at the open upper ends of one or two tubes. I do not, therefore, give the patent the defendant's narrow construction, which is that it is limited to the particular form of protectors or injectors which are described. The defendants' protectors are one of a variety of equivalent forms which could be adopted without departing from the principle of the invention or the claim of the patent.

Let there be a decree for an injunction against an infringement of the first claim of No. 104,318, and the second claim of No. 151,703, and for an accounting, and for a dismissal of so much of the bill as relates to the Crihfield patent, and to reissues Nos. 8,611 and 8,598.

ATLANTIC GIANT POWDER Co. v. HULINGS.

SAME v. BARR and others.

SAME v. HOWE and others.

(Circuit Court, W. D. Pennsylvania. July 28, 1884.)

1. PATENTS FOR INVENTIONS—CONSTRUCTION OF PATENT.

Letters patent No. 50,617, granted October 24, 1865, to Alfred Nobel, do not cover a capsule or percussion cap as a means of exploding nitro-glycerine.

2. SAME—REISSUE.

After a reissue of said patent, which in terms embraced a capsule or percussion cap as a means of exploding nitro-glycerine, a disclaimer of so much of the specification as described that method was filed. *Held* that, although the reissue, after being thus amended, might still bear an interpretation which would include the use of a capsule or percussion cap, yet such construction ought not to prevail in the face of the express disclaimer.

3. SAME—DISCLAIMER.

A construction of a patent amended by a disclaimer which would render the disclaimer altogether nugatory, must be essentially wrong, and cannot be accepted.

In Equity.

D. F. Patterson and Bakewell & Kerr, for complainant.

James C. Boyce, for respondent.

ACHESON, J. On the twenty-fourth day of October, 1865, Alfred Nobel obtained letters patent No. 50,617, relating to the use of nitro-glycerine as a substitute for gunpowder. On April 13, 1869, the patent was reissued in several divisions, one of which, No. 3,377, was for an improved mode of exploding the liquid. After two other surrenders and reissues, on March 17, 1874, reissue 5,798 was obtained for improvement in methods of exploding nitro-glycerine. On

June 14, 1881, a disclaimer was filed, by which certain portions of this last reissue were disclaimed and stricken out. The present suits are upon reissue No. 5,798, as modified by the said disclaimer. The plaintiff charges the several defendants with the infringement of the second claim of the reissue, which, in its present form, is as follows:

"2. The mode of utilizing nitro-glycerine as an explosive by effecting an impulse of explosion by the detonation of an explosive substance communicated to the mass under such condition as to produce an instantaneous explosion of the whole mass, substantially as described."

From one of the disclaimed paragraphs of the specification we learn that by the term "impulse of explosion" is meant "motion produced to effect the explosion by suddenly communicated force." The specification declares that "there are many ways of obtaining this impulse of explosion;" and, as it stood before the disclaimer, it particularized six different methods for accomplishing the result, the fourth thereof being in the following words:

"4. Still another method is by means of a capsule, (more commonly termed in military art a percussion cap,) which, being exploded in any convenient manner gives, by its detonation, the requisite impulse to explode the charge of nitro-glycerine."

This paragraph, however, was embraced in the disclaimer of June 14, 1881, and was thereby stricken out bodily. Now, the only mode of exploding nitro-glycerine practiced by the defendants was by means of a percussion cap. Their use of the material was in oil wells, and their method this, viz.: The charge was put in a tin shell, within the body of which, and in contact with the nitro-glycerine, was placed a percussion cap, which was exploded by dropping a weight, the explosion of the cap causing the explosion of the nitro-glycerine. The plaintiff, however, earnestly contends that such use of a percussion cap, notwithstanding the said disclaimer, is covered by the amended patent. The plaintiff's position, in effect, is that the construction of the claims is to be the same whether the discarded paragraph just quoted is in or out of the specification. Stress is laid upon the assigned reason for making the disclaimer found in the following clause thereof, viz.:

"That your petitioner is advised and believes that there is described and claimed, in said reissue, matter which the said Nobel or his assigns had no legal or just right to describe or claim, because the same was not described in said original patent."

This shows, it is said, that the act of disclaimer was not because Nobel was not in fact the inventor of the method in question of exploding nitro-glycerine, but because it was not described in the original patent. And then it is affirmed that the mode of exploding nitro-glycerine by means of a capsule or percussion cap is within the specification and claims as they stand after striking out the portions disclaimed, and, furthermore, that it is within the scope of the specification and claim of the original patent. Upon these assumed prem-

ises, and invoking the principle that the construction of a patent after disclaimer is to be the same as if the disclaimed matter had never been included in the description or the claims of the specification, (*Dunbar v. Myers*, 94 U. S. 194,) the plaintiff urges the conclusion that the explosion of nitro-glycerine by means of a percussion cap, as practiced by the defendants, infringed the amended patent.

To test the soundness of this reasoning, it will be necessary, in the first place, to resort to the original patent, granted to Alfred Nobel on the twenty-fourth of October, 1865. In the specification of that patent Nobel defines his invention in these words:

"My invention consists in the use, as a substitute for gunpowder, of nitro-glycerine, or its equivalent, substantially in the manner described hereinafter, so that the said liquid, which, when exposed, cannot be wholly decomposed and exploded, shall, by confinement, be subjected to heat and pressure, by which its total and immediate decomposition and explosion is effected."

He proceeds to explain that while, upon the application of flame, gunpowder or gun-cotton, whether under pressure or unconfined, is instantaneously decomposed in the whole mass, only that portion of nitro-glycerine when unconfined is decomposed which is directly acted on by the heat or flame. He then states that he has found that when nitro-glycerine is confined and a portion of the same is heated to decomposition, the gases evolved are at such an intense heat and subject the material to such an excessive pressure that the whole mass is decomposed almost simultaneously. He enumerates and particularly describes four different methods of exploding the material when confined, and concludes with the following claim:

"I claim as my invention, and desire to secure by letters patent, the use of nitro-glycerine, or its equivalent, substantially in the manner and for the purpose described."

This patent was before the supreme court in *Powder Co. v. Powder Works*, 98 U. S. 126, a case which, it is true, did not involve reissue No. 5,798, but in which the court was called upon to determine the scope of the original patent. And it was there declared that notwithstanding the claim in technical form might appear to be for the use generally of nitro-glycerine as an exploding agent, yet that upon a proper construction it was limited to the methods or processes of exploding the substance described in the specification. *Id.* 134, 135.

Do, then, these described methods or processes, singly or combined, embrace a capsule or percussion cap as a means of exploding nitro-glycerine? Most clearly the second, third, and fourth methods do not, for they, respectively, provide for the explosion of the material by an electric spark or current, by inserting in the liquid a thin case containing lime and water, or any substances which in combining evolve heat, or by a fuse. If a capsule or percussion cap is covered at all, it must be by the method first stated, *viz.*:

"*Firstly.* By exploding a quantity of gunpowder, or other substance, in contact with the liquid, (the powder being confined in a water-proof tube or

case,) the heated gases evolved from the powder, being distributed throughout the mass of the liquid, raise the temperature of the latter sufficiently to decompose the same. When powder is used for this purpose, the case containing it may be immersed in the liquid, the powder being ignited by means of a fuse, or by an electric spark. If desirable, however, the liquid may be placed in a tube, and inserted in a mass of powder, which is then ignited in any suitable manner."

Now, it is very certain that neither here, nor in any part of the specification, is there any express mention of a capsule or percussion cap; nor is anything said concerning, or the faintest allusion made to, an explosion to be effected by suddenly communicated force, or by an impulse of explosion by the detonation of an explosive substance. On the contrary, the one idea pervading the entire specification—and, as we have seen, entering into Nobel's definition of his invention—is the total and immediate decomposition and explosion of nitro-glycerine, when in a condition of confinement, by subjecting it to heat and pressure. By the plaintiff's own confession, contained in the quotation already given from the disclaimer, explosion by means of a capsule was not described in the original patent. Equally clear is it that it is altogether outside of the principle of that patent, which is explosion of nitro-glycerine, in a condition of confinement, effected by heat and pressure; whereas the capsule operates, not by heat and pressure, or by the flame produced, but by its detonation, which gives the requisite impulse to explode the substance. Thus it is seen that the very foundation of the plaintiff's argument fails.

Beyond all manner of doubt, the purpose of the reissue here was to enlarge the scope of the original specification and claim. The whole above-quoted paragraph, respecting a capsule or percussion cap, was new both in letter and in substance. But that paragraph has been solemnly disclaimed and expunged. What then? Did this disclaimer mean nothing? Was it an act at once unnecessary and vain? Surely it was both, upon the plaintiff's theory. The ingenious argument which has been made to show that the amended specification of the reissue, although not naming a capsule or percussion cap, is susceptible of a construction covering such use thereof as a means of exploding nitro-glycerine as the defendants have made, is not convincing. But were it ever so clear that the specification, as it now stands, would bear such interpretation, ought it to prevail in the face of the express disclaimer? I have no hesitation in saying that a construction which would thus render the disclaimer altogether nugatory must be essentially wrong and cannot be accepted.

But if the amended reissue covers a percussion cap, the plaintiff, it seems to me, encounters an insuperable difficulty in another quarter. The case would then be one of an invalid reissue by means of the unlawful expansion of the claim and scope of the patent, within the ruling in *Miller v. Brass Co.* 104 U. S. 350, and *James v. Campbell*, Id. 356. It is true that in Nobel's original memorandum, relat-

ing to his invention, on file in the patent-office, he mentions a capsule as a means for effecting the explosion of nitro-glycerine. But he deliberately omitted it from his specification as ultimately framed, and such omission must be held to be either an abandonment of its use to the public, or an irrevocable declaration that as a means of exploding nitro-glycerine it was not his invention.

Let decrees be drawn in these several cases dismissing the bills, with costs.

DEIS v. DOLL.¹

(Circuit Court, N. D. Ohio. September, 1884.)

PATENTS—EGG-BEATERS.

Patent No. 254,540, granted to Charles Deis for an improved egg and sugar beater, consisting of a box or receptacle containing a revolving shaft, on which "are set a number of projecting whips or beaters of wire, either in bunches or singly, and in rows or alternately," held that, in view of the state of the art at the time the patent was granted, it must be limited to the combination described, embracing the particular form of beater shown in the specifications and drawings; and that it is not infringed by a beater in all respects like Deis', except that, instead of wire whips, it has, on the revolving shaft, rigid cast-iron projections arranged in four or more parallel rows, these radial arms being so arranged in each row as to be intermediate with those of the other, and the arms on each row connected at their outer ends by longitudinal stiffening rods; said beater being manufactured by defendant under patent No. 266,679, granted to him.

In Equity.

Charles F. Morgan, for complainant.

M. D. Leggett and John Crowell, for defendant.

MATTHEWS, Justice. This is a bill in equity to restrain the alleged infringement by the defendant of letters patent No. 254,540, granted to the complainant, March 7, 1882, for certain improvements in egg and sugar beaters, and for an account.

"This invention," the specification declares, "is intended for the use of bakeries, where large quantities of eggs and sugar and flour are beaten for cake-making, etc., the object being to supply a cheap and simple machine that will do the work in a much shorter time than by hand-beating, as generally practiced; and the invention consists in the employment of an open box or receptacle, with a rounded bottom, and having hollow (tin) or double side walls, to contain hot water therein, to aid the beating by warming the egg mass in the box, so that it works quicker, and combined with a revolving shaft having a series of projecting whips or dashers thereon, which is operated by gear-wheels and a crank outside the end of said box, all substantially as hereinafter fully explained."

Having reference to the drawings, there is a description of the box,

¹ Reported by J. C. Harper, Esq., of the Cincinnati bar.