

EX PARTE ADAMS.

Case No. 38a,
[3 App. Comr. Pat. 410.]

Circuit Court, District of Columbia.

Dec. 20, 1860.

PATENTS FOR INVENTIONS—PATENTABILITY—HYDROMETERS.

[On appeal from the refusal of the commissioner of patents to grant a patent for an hydrometer consisting of a metal stem, in combination with a vulcanized rubber or gutta percha bulb, it was shown that hydrometers made wholly of metal or wholly of rubber were well known, but that in the former the bulb was necessarily made so thin that a blow or fall would indent it, and destroy the utility of the instrument, while in the latter the stem could not be graduated with the necessary accuracy and minuteness, owing to its color and substance. It was further shown that appellant's device was free from each of these defects, and also that it was less subject to corrosion by acids than the metal hydrometers. *Held*, that this device is a new and useful invention, and therefore patentable.]

Appeal [by James Adams] from the decision of the commissioner of patents refusing to grant him letters patent for his improvement in hydrometers. [Reversed.]

MORSELL, Circuit Judge. He states his claim thus: "What I claim as my invention and desire to secure by letters patent is the construction of a hydrometer or other instrument for ascertaining the specific gravity of liquids substantially as herein described by combining with its bulb and lower part made of hard vulcanized India rubber, gutta-percha or any other analogous substances, a graduated upper-stem made of metal." The specification states the nature of the invention to be one which consists in the construction of a hydrometer or other instrument for ascertaining the specific gravity of liquids with its bulb and lower part of hard vulcanized India-rubber, gutta-percha or analogous substances, and its stem of silver or other metal, by which construction, the instrument is made to possess advantages over one made wholly of metal, or one made wholly of India-rubber or gutta-percha, inasmuch as the bulb is less liable to have its form changed by being carelessly laid or thrown down or let fall, than the metal bulb, and the stem is capable of finer and more accurate graduation and less liable to be bent than the India-rubber or gutta-percha stem. On the 8th of October, 1860. the commissioner adopted for his decision the report of the examiners, dated the 6th of the same month, which is in substance as follows: "It is admitted upon all sides that hydrometers have been made entire of metal and gutta-percha; indeed they have been made of glass and of ivory or bone. This applicant has made one part of metal and part of gutta-percha. the stem upon which the scale is placed being of silver, or other metal, and the bulb of gutta-percha; in other words, he takes a metal hydrometer, and in place of its bulb substitutes one made of gutta-percha. By doing this his bulb effects nothing more than has been done by the gutta-percha bulb when connected with a gutta-percha stem, and his metal stem effects nothing more than has been done when a metal stem has been connected with a metal-

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bulb. Viewed then in this light there is no invention involved in this application. Suppose an application should be made for a gutta-percha stem and a metal bulb—shall a patent be granted for that? This application is but the converse of that, so to speak; we do not think that this interchange of material clothes the application with anything which can be regarded as patentable. We must therefore recommend its final rejection, which was accordingly done by the commissioner.”

From this decision as before stated, Adams appealed, and filed three reasons of appeal.

The first is: Because every requisite of the statute was complied with, and all these conditions, to entitle him to claim his right to a patent.

Second. Because commissioner fails to show or even assert that the invention (the combination claimed) is not sufficiently useful and important as required, &c.; whereas it appears fully, clearly, and incontestably from the specification and the evidence in the case that the applicant by his combination of an India-rubber bulb with a metal stem, produces a better and more perfect instrument than is attainable by making it all of India-rubber or all metal and that such varied elements have never before been combined in a hydrometer.

Third. In asserting that the applicant’s invention is a mere interchange of material, devoid of new or improved results, and while failing to show that a hydrometer ever before had been made combining an India-rubber bulb with a metal stem to be the converse of the former, inasmuch as the first named combination obviates defeats which the last named would possess in a larger degree than is incidental even to hydrometers as heretofore made of one and the same material.

The commissioner’s report in reply to the foregoing reasons is as follows: The claim of the appellant was to the combination of a metallic graduated stem with a bulb of gutta-percha vulcanized rubber or any other analogous substance for a hydrometer or other instrument for ascertaining the specific gravity of liquids. This the office regarded as but a double use of a familiar combination. The metallic stem is necessary for extremely nice graduation and is perfectly familiar when united to a metallic bulb, but such could not be used under all circumstances with economy, as with acids, for example, nor could the combined one claimed be safely relied on under the same circumstances. It is familiar also to make the whole instrument of

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the rubber, but in this the stem is not susceptible of the nice graduation. The commissioner says: "I am still * * * of opinion that the applicant has effected no patentable invention in taking a familiar stem and a familiar bulb and uniting them in one hydrometer. He has effected no new result thereby, nor any improvement in the instrument. Like the metallic pen and rubber handle with which I write, his instrument constitutes but another example of a combination of metal and rubber that, in the absence of any new result, constitutes but a double use. These are the only remarks I desire to submit in addition to those of the office decision of the 8th of October last."

Accompanying the foregoing proceedings were sundry testimonials of practical mechanics, consisting of a mathematical instrument maker having charge of the United States hydrometers, a member of the analytical and consulting chemists, two other mathematical instrument makers, an ex state inspector of domestic liquors, New York, and of other respectable skillful mechanics. The instrument is spoken of as an important novelty that will be a valuable acquisition to distillers, inasmuch as it combines the advantages of both the rubber and silver hydrometers without their defects. This feature all intelligent inspectors of distilled spirits will soon discover. And as an essential improvement, these, together with the decision, reasons of appeal. report of the commissioner, and all the original papers and vouchers according to previous notice given of the time and place of hearing, were duly laid before me by the commissioner. The appellant appeared by his attorney, and filed his written argument and submitted the case.

The present is a claim presented for a combination of parts of two well known machines or instruments by which the defects existing in each of said machines are entirely avoided, and by which a more useful and perfect instrument is made. The office rejected it upon the ground of a double use of a familiar combination. The two referred to are one entirely of silver, the other wholly of the rubber; none is shown like the present one, with a metal stem and a rubber bulb. In point of form then the proposed change must be admitted to be new. Is it substantial and useful? If it is, then there is invention; otherwise not. In order to understand its nature it will be stated that it is essential to the perfection of the hydrometer that when left to float freely in the liquid, and for the displacement of a bulk of that liquid which shall be just equal in weight to the entire instrument and rendered accurately, it must stand perfectly vertical. The defects alleged to exist in the instruments alluded to in the report are as to the entire metal instrument. Its bulb, in order to be of the proper weight and to avoid too much expense, must be made very thin. Therefore, a fall, a slight blow, or other accident will cause an indentation that will destroy its accuracy; the effect thus produced would destroy the essential requisite just before stated. Besides, as stated by the commissioner in his report relating to the metal instrument, it is admitted that "such bulb could not be used under all cir-cumstances with economy, as

with acids, for example." If he could have been satisfied that the combined one could, it is probable this opinion would have been different.

As to the other, the hard rubber. Its color renders it difficult to distinguish the marks indicated upon its graduated scale. If painted white, when employed even for testing the strength of alcoholic liquid, the incisions which have been painted white soon become filled with substances of another color, and when used as a saccharometer there will be evident additional causes which will obscure the white color, and render the whole so nearly of one hue as to prevent the degrees upon the scale from being easily read. Besides, the degrees cannot be marked in white with the same nice accuracy with which they are cut upon the stem, whereas in a silver instrument the marking of the scale can not only be made with the greatest accuracy, but use will render them even more legible. With respect to this also the commissioner admits that, where the whole instrument is of hard rubber, "the stem is not susceptible of the nice graduation." This must therefore be admitted to be important. Again, the hard rubber instrument when immersed in hot liquids, the stem is liable to spring or bend, which, of course, would render the instrument defective; and, again, hard rubber, being a non-conductor, is liable to be materially affected by electric influences.

It is contended that the great desideratum to obtain an instrument which will unite the advantages of each of those before mentioned, and avoid the objections to both, has been effected by the appellant's improved instrument.

In forming my opinion in this case, I have been desirous duly to appreciate the argument which has led the commissioner to the conclusion to which he has been brought. After allowing it all the strength it can claim, drawn from the source which I suppose it has been I feel bound to yield to the preponderating weight of a practical knowledge from skilful mechanics and others who have tried the instruments, and from persons accustomed to the use of instruments of that kind, and who speak of this instrument in the most decisive and strong language as accomplishing the purpose and end claimed for the improvement by the appellant, and under such circumstances, I think the case referred to by the office does not apply.

There is therefore error in the decision of

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the commissioner, and the same is hereby reversed and annulled, and it is ordered and directed that patent issue as prayed.