

KIRK AND ANOTHER V. ELKINS MANUF'G &
GAS CO.¹

Circuit Court, E. D. Pennsylvania. February 13, 1884.

PATENT FOR INVENTION—INFRINGEMENT.

Patent No. 201,536, for improvement in bronze alloys, not infringed by defendant's metal or alloy, known as "Ajax Metal," in which copper, tin, and arsenic occur in proportions different from the proportions specified in complainant's patent.

Hearing on Bill, Answer, and Proofs.

This was a bill to restrain an infringement of patent No. 201,536, dated March 19, 1878, for improvement in bronze alloys, issued to Edward C. Kirk.

H. T. Fenton, for complainants.

John G. Johnson, for respondents.

MCKENNAN, J. The compound described and claimed in the patent consists of copper, tin and arsenic, in the proportion of 75 to 90 parts of copper, 10 to 25 parts of tin, and one-fifth of 1 per cent, to 10 per cent, of arsenic to be added to the copper and tin when the latter are at the melting point in the crucible. The patentee was not the first to produce an alloy of copper and tin. The specification shows that castings of these metallic constituents were made before the date of the patent; and, indeed, the patent of Randall, for a metal alloy of copper, tin, and arsenic, is expressly referred to. The patentable novelty of the described alloy consists, then, in the proportions in which the copper and tin are compounded and in the addition thereto, in the process of melting, of the prescribed quantity of arsenic, for the purpose of deoxidizing the metallic oxides always found in ordinary alloys of copper and tin. The only evidence of infringement is furnished by analyses of borings from several samples

of Ajax metal manufactured by the respondents. These show it to be composed of copper, tin, zinc, lead, and arsenic; copper within the range of proportion stated in the patent, tin and arsenic generally below the minimum proportion stated in the patent, and lead and zinc in varying proportions, as high as 8 per cent. What differential effect upon the character and properties of the compound results from the reduced proportions of tin and arsenic and the addition of lead and zinc we are uninformed by the evidence; but it is clear that so far as the constituents of the two compounds are concerned they are not the same. But the respondents deny that they have added arsenic to the other metallic components of their alloy, and allege that whatever portion of arsenic it may be found to contain was only in combination with the copper, which they used in its natural state. This is fully sustained by the testimony of their superintendent, who was alone cognizant of the ingredients of their compound. He says he desired to get rid of all the arsenic he possibly could and hence that no arsenic was artificially introduced; that he used only the copper of commerce, which always contains more or less arsenic; and that he began the use of this in the manufacture of Ajax metal in 1874, and has continued to use it since without material change in proportions.

Considering, therefore, that the alloys manufactured by the complainants and the respondents, respectively, are not constituency the same, and that the respondents have not used arsenic except as it may have been found in combination with commercial copper, and that their use of this began in 1874, we cannot adjudge them to be infringers, and the bill must therefore be dismissed, with costs.

¹ Reported by Albert B. Guilbert, Esq., of the Philadelphia bar.

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