## CANADIAN

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## Blisters.—Their Cause and Prevention.

PERHAPS there is no one trouble or annoyance in the chemical manipulations of our art which has brought out more discussion and queries of late than blisters in prints. It has not only been a source of perplexity, but one involving expense and loss. In many instances a whole "bath of prints," two or three hundred, being thus destroyed at a time by this supposed (mysterious?) chemical phenomenon. It is noticeable that blisters appear in their worst form on spongy, porous paper, that which is doubly albumenized. I am satisfied that they are caused by the gases produced from the excessive and reckless use of acid and alkali. This carbonic acid gas is, or can be made, capable of considerable motive power, and when reduced to carboleum, that is, by warming or heating, its expansive force is said to be equal to fifty or sixty atmospheres. This gas would most naturally, after impregnating the paper, cause the albumen to separate from the paper in form of blisters, more especially if the prints lay in quite a volume of water with the picture or albumen side up. The double albumen, which is thick and compact, would not allow (comparatively speaking,) any escape of the gas; and as a consequence water will in a greater or less degree enter the blisters, permeating through the paper. During the past year I have not given myself any uneasiness about blisters, for I neither have them on my paper nor my hands; and the following method can be followed successfully on every brand of paper in the market.