

it will be tried at several bar-bound harbors along the north coast by vessels that usually suffer long and unprofitable detention.

THE "IMPOSSIBLE" IS OBSOLETE.

IN THESE times of scientific investigation and discovery and of progressive ingenuity in art, "the impossible" has become an obsolete term. Things in common use and with which every schoolboy is familiar, would have excited the scorn and incredulity of so-called scientists less than half a century ago, if they had even been hinted at as productions of a coming age.

We have often heard practical photographers scout the idea of photography in colors, when the probability of such an improvement has been broached. But we have believed for many years, and have so stated in these columns, that some method of fixing the hues and tints of natural objects would be discovered, so that a photograph would be all but "a speaking likeness."

It appears that something very nearly approaching this perfection in art has been arrived at. Frederick Ives, an American photographer of Philadelphia, who has made his mark in other lines in his profession, claims to have reached this point of excellence. He has been pondering on the discovery, made a few years ago, that the same effects of color may be obtained from widely different causes. Spectrum colors and primary color sensations are not the same, but corresponding effects may be produced from them. This is explained as follows:

"There are three primary color sensations—red, green and blue—and the varying combination of these produces all the infinite variety of color effects known to the eye. These color sensations, however, may be caused in a great variety of ways, for the primary spectrum colors consist of thousands of different primary rays, each of which has the capacity of exciting one or more of the three primary color sensations in definite degrees and proportions. Thus we have it that the effect of yellow, for instance, can be produced by a number of different combinations of these primary rays, and so with the other two colors. We may, perhaps, more clearly perceive this if we conceive of the optic nerves as delicate instruments, responsive to the touch of these bunches or groups of primary rays, as a piano is to the fingers. Varying combinations of these rays affect the nerves in different degrees of intensity, and so produce the corresponding effects of color, just as a bar of metal changes in color under varying degrees of heat."

Mr. Ives' process is to take three photographic negatives of the same object in such a manner that each represents in its light and shade the

degree to which the object excites a single primary color sensation. From these negatives, lantern slides positives are made, and the three images are projected from three separate lenses simultaneously upon a screen, so that they are exactly superimposed; one in red light, another in green light, and another in blue violet light. In this way the various lights select from the corresponding photographs the different colors and values, so that the image upon the screen corresponds almost exactly with the original.

The reproduction of original color effects in pigments, by adapting his methods to the common photographic "process work," is another of Mr. Ives' improvements. He has not succeeded yet, so far as we can learn, in discovering the chemical means by which the colors seen on the camera can be made permanent. But the *Boston Herald* thinks his results are of more practical value than would be the retention of the direct image, for this would afford no more than one picture of a given object, thus corresponding to the original daguerrotype; whereas, by the Ives process, an indefinite number of reproductions seems possible, just as with the original photograph.

The instantaneous production of pictures in simple light and shade, now so common, was once as "impossible" as photography in colors now appears to be to skeptics. But we may expect the Ives process to be improved upon and popularized, until the great desideratum in photography has been reached and this wonderful art is brought into general use. These are the days of the possible, and the "impossible" is a relic of the dark ages.

A WORD IN SEASON.

THE long talked of sugar enterprise is at last taking practicable shape and is no longer a mere project on paper. The necessary machinery is sent for, the buildings are to be erected, the beets will be raised, and the sugar will be made next fall without a doubt—if there are really two ifs, but the most important is if the subscribers to the capital stock of the company, and the promised subscribers, will come forward and plank down that proportion of the cash which is necessary to start the work and meet current expenses. The other is if nature does its usual work in bringing forth products from seed sown in good ground.

We mention this matter, that those capitalists and enterprising business men who wish to foster home industry may be stirred up to do what is absolutely necessary, and do it quickly. Money is wanted now. We have no doubt it will bring good returns. We believe in sugar. That is, we feel confident that it can be made at a profit in Utah. We think those who invest will be glad of their investment.

We have given some attention to this subject and have weighed the probabilities for and against sugar making in this Territory. If the concern is properly managed, it will almost certainly be grandly successful. Care has been taken in the organization of the company to have all things connected with it placed in competent hands, with close scrutiny from successful business men. The funds will be in care of unimpeachable persons. The company has been organized to succeed, and every precaution necessary has been taken to lead to the desired and intended result.

This will be a grand thing for Utah. It is one of the most important enterprises ever commenced in the Territory. The experience of many years in conducting various commercial and manufacturing interests will be brought to bear in this venture. And with a first class plant, skilled labor, competent management and constant oversight, its prospects are as near certain for triumph as any industry that has been established in these mountains.

Now, friends, come to the front and let the work be started with vigor and pushed to completion without lagging, and in a year you will see the fruits of your investment with the most profound satisfaction. Let us have sugar, home made, as good as the best and as cheap as the cheapest.

THE NEWS CONFIRMED.

THE Washington dispatch that appeared in the *Chicago Mail* was reproduced in these columns concerning an anti-"Mormon" lobby this winter at Washington. Of course the "Liberal" organ denies that anything of the kind is contemplated. This is a strong corroboration of the truth of the report. Besides it admits that probably some one will be sent in the interests of lead and silver.

We all know what that means. The Governor and ex-Governor were