

AERATED BREAD.

A New Invention ; from the *Sanitary Record*, July 24. 1875.

That our present state of bread-making is in an unsatisfactory state is a fact which we think few people will be disposed to deny. The unpleasant circumstances which occasionally come to light through the medium of the police courts, as our columns have shown on more than one occasion, leave an unfavourable impression on the public mind. The incidents of the dough being *mixed by manual labour in a close underground cell, by perspiring men in a semi state of nudity*, are not comfortable to contemplate. From time to time the remains of insect life may be discovered in bread which has been purchased even in first class localities.

These circumstances all point to the necessity which exists for abolishing *in toto* the primitive and objectional method of making bread by hand labour, whilst there is that inevitable danger of the "baker's plague," roby bread, being caused by the constant use of the old-fashioned wooden troughs.

Besides these evils there is also another important reason why the present reason for manufacturing the "staff of life" should be changed, and that is the loss of nitrogenous and nutritious qualities through fermentation. It is by no means improbable that 10 per cent. of the flesh-forming constituents of flour may be lost by being converted into carbonic acid.

When we look at an ordinary piece of bread we see that the vesiculation varies from the minutest size to that of more than an inch in diameter. The very large vesicles being caused by a copious evolution of carbonic acid through sundry patches of flour. If this process were carried out long enough, there would be very little food value left in the bread. A worse result than this happens occasionally when lactic and other acids are caused by false fermentation from the use of putrescent or highly impure yeast, the effect of using the ordinary baker's yeast being to give rise to a species of fermentation of which at present very little is known. One thing however, is very certain, that some of these ferment growths resemble in a marked manner the ferments found in certain diseases of the blood. Whether, however, the one has ever conduced to produce the other is more than can be positively affirmed, but there is at least a probability that the one may be the result of the other.

Various methods of vesiculation have from time to time been attempted to obviate these dangers, such as the mixture of