

By C. A. Nowak

Formation and Destruction of Foam in Beer

While a great deal has been written in regard to the various substances which condition foam in beer, and every practical brewer conducts his brewing operations accordingly, the equally, if not more, important conditions which may lead to a more or less complete destruction of foam, especially those incidental to the dispensation of the beverage, have been sadly neglected.

All of our efforts to embody in the product certain chemical transformation products of the proteids and carbohydrates which are known to result in the formation of a nice head of foam, are useless unless equally great care and precaution is used as regards the substances with which the beer is permitted to come into contact after it leaves the bottle. It is indeed an easy matter to show up a certain beer at disadvantage by pouring it into a glass which, while apparently clean and free from visible substances, may contain traces, and traces only, of fatty substances, soap or alkali.

Among these foam and life destroying factors the presence of small amounts of fat or soap in the container into which the beer is poured is most frequently the source of complaint, but is so deceptive that the conclusion is usually reached that the beer lacks life, which is then further attributed to improper carbonation or to a deficiency of certain foam forming constituents.

Where fat is present in a glass even though this be in a very minute quantity, this fat or oil will float upon the surface and thereby break the surface tension of the liquid. The observing workman who buys his beer by bulk knows how to put this physical phenomena to good advantage. By greasing the inside of the pitcher slightly he has learned by experience that, when filled in the saloon, the foam will not rise as rapidly, or even fail to rise at all, thus to a certain extent deceiving the man drawing the beer as to the true contents of the vessel. The truth of all this was brought home to the writer in a striking manner a few weeks ago. A beer of good taste and appearance, and with apparently enough life, when poured into the glass gave a loose head of foam which collapsed completely within less than a minute. The glass was then rinsed thoroughly with hot water, but this seemed to have no result. A master brewer who was present suggested that the beer had been over carbonated; the apparent behavior of the product indicating that such had been the case. Later the true cause was established. A glass thoroughly cleansed with a strong solution of alkali with subsequent rinsings with clean water so as to insure the removal of all traces of alkali was then used and the result was astonishing. The foam was now thick and permanent and was retained by the beer for a long time.

The moral is obvious. Not enough care can be exercised in cleansing the glasses which are to be used for serving beer. Milk glasses or other vessels which may have contained greasy substances should never be used unless they are given repeated treatment with a strong solution of alkali. Apparent cleanliness and chemical cleanliness are two entirely different things. Glasses used for serving beer must not only be apparently but chemically clean.

nota bene - This is why so much emphasis is made on keeping glassware "beer clean." Choose your dish washing detergent carefully.