

STUDIES ON THE FIRING OF TEA.—IV

RESEARCH

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FURTHER EXPERIMENTS WITH TEAS FIRED AT 160°F.

The second article (1) in this series gives the results of firing at different temperatures. It was found that although firing at 160°F. resulted in good quality teas, the quality showed signs of deterioration on no fewer than 18 occasions out of 32 when the

These results shown in Table I although not really significant indicate that the best firing time is between 24 and 33 minutes.

2. *Final Firing.*—The deterioration of teas fired at 160°F. is rapid when the moisture content is allowed to rise to 6-7 per cent. This is shown by the figures in

TABLE I

Time of Firing	Comparative valuations based on Standard (Differences in cents)	
	Fresh teas	Teas stored for two months
24	Standard	Standard
33	+0.6	-0.2
42	-0.8	-0.5

low fired teas were stored for two months. Various ways of overcoming this difficulty have been investigated.

1. *Time of Firing.*—Various times of firing ranging from 24 minutes to 42 minutes were compared, the moisture content being reduced to 3 to 4 per cent in each case.

Table II where figures showing the arrestment of deterioration by final firing are also displayed.

A second treatment with hot air however results in loss of quality which is most marked in teas requiring final firing owing to gain in moisture content.

These points are shown in Table III the time of firing and by final firing for and indicate failure to bring about improve- 15 minutes at 160°F. have not proved ment of keeping quality without detriment successful. to the teas.

SUMMARY

Attempts to improve the keeping quality of teas fired at 160°F. by varying

REFERENCE

1. *Tea Quarterly*. 1940, XIII, p. 156.

TABLE II

Sample	Comparative valuations based on Standard (Differences in cents)	
	Fresh teas	Teas stored for two months
1. Tea stored at 4% moisture	Standard	
2. Above allowed to rise to 6-7% moisture	-2	-2
1. Tea at 6-7%	Standard	
2. 6-7% reduced to 4% moisture by final firing	+1	+1

TABLE III

Sample	Comparative valuations based on Standard (Differences in cents)	
	Fresh teas	Teas stored for two months
1. Teas fired at 160°F. and stored at 4%	Standard	
2. Teas as in 1 final fired at 160°F. for 15 minutes, <i>i.e.</i> , practically, a second firing	-1.4	-0.4*
3. Teas as in 1 final fired after moisture content had risen to 6-7% as a result of storage in bins	-1.0	-1.5

* This value is not really significant. Since however the object is to improve keeping quality compared to the standard anything below +1 indicates failure.