Fig. 2 shows the results of the baking-tests of these two samples compared with the sample of Velvet (P 290), already illustrated, and a standard sample. The White Tuscan and Victor samples were the best all-round samples of their varieties received in 1922; it is fairly obvious that they do not compare favourably with the sample of Velvet, which was in strength only a little above the average for that variety in 1922. As a matter of fact, this sample of Victor is not even such a good wheat as its protein content would suggest. On comparing it with loaf No. 5, Fig. 1 (loaf-volume 434 c.c.*), it will be seen that its loaf-volume (397 c.c.) is less, though it contains over 1 per cent. more protein. This is due to factors which are not discussed in the present article. Loaf No. 4 shows the poor texture of the bread produced from this weak flour. While speaking of Velvet it may be interesting to point out that another sample of Velvet with protein 14·88 per cent. gave a loaf-volume of 690 c.c.

Of some Tuapeka samples it was said in the preceding article that "Thew . . . contained a very good amount of protein (12·50 per cent.)," and that "Marquis . . . in certain American States fetches highest prices. . . . The milling-yield [of this particular sample] is good, and it still contains a good percentage of protein." These two flours were baked because they were considered representative of the very interesting wheats obtained from Dumbarton, near Roxburgh, and which were actually grown at the Moa Seed-farm. Fig. 3 fully bears out the foregoing statements.

Referring to Fig. 3, for purposes of comparison these samples were photographed alongside the best samples of some other varieties received. Nos. 2 and 4 are obviously much better samples than 3 and 5, and there is no doubt which is of the most value to the miller, the baker, and the consumer.

One interesting point about this series (Fig. 3) is that Marquis, with a smaller protein content than Thew, yet produced a loaf of larger volume. Here is one of the exceptions to the rule that protein content is a measure of strength. At the same time there is never any doubt as to these two wheats producing flour of very good quality, even if one is an exception to the general rule. In this baking-test is perhaps the key to the statement quoted above that "Marquis fetches highest prices."

At the time when analytical figures only were available it was stated that "one of the outstanding samples milled in 1922 was the sample of Burbank's Super grown at Flaxton, Eyre County. Its protein content was as high as 14·44 per cent." The loaf baked from this flour is No. 3, Fig. 4. It will at once be seen that the baking-tests since carried out have quite confirmed the analytical results obtained some months ago. This sample of Burbank's Super produced a loaf of excellent volume. Alongside it (No. 2) is the poorest sample of wheat received in 1922, containing only 7·69 per cent. protein; this is illustrated, of course, only for purposes of comparison and of general interest, and is obviously not representative of its variety. No. 4 is the best sample of White Tuscan received at this Laboratory in 1922, and the loaf on the extreme right is the good sample of Velvet previously referred to. There is not much doubt about Burbank's Super being one of "the outstanding samples milled in 1922."

* c.c. = cubic centimetre ($\frac{1}{16}$ cubic inch approximately).