TABLE 2

Condensation of Table 1 Showing Total Losses and Utilizable Fish in Pounds and Percent, Based on Six Samples

	Available		Losses		
	Pounds	Percent	Pounds	Percent	Recommended percentage allowance
1. Weight of samples	1,247.27	100.00			
2. Broken and mixed fish			38.45	3.08	3.0
3. Whole, sound anchovies	1,208.82	96.92			
4. Cleaning loss			540.05	44.68	45.00
5. Weight of cut sections	668.77	55.32			
6. Packing loss			37.713	5.6	5.6
7. Weight of fish in cans	631.057	52.2			
8. Weight of fish in cans per ton whole sound anchovies	1,044.00	52.2			

TABLE 2

Condensation of Table 1 Showing Total Losses and Utilizable Fish in Pounds and Percent, Based on Six Samples

In Table 2 the results are condensed. The six sample values have been combined and the resulting percentages determined to give the average condition in the six plants.

Table 3 shows the pack resulting from these samples. Table 4 combines the sample values in order to give representative average figures for use with each size of container. Additional data on fill of container is presented later.

It appears from the above experiments that 48 to 55 percent of a load of whole, sound anchovies is utilizable in the can. The remaining percentage consisting of heads, tails, viscera and broken fish is necessarily discarded and is processed into fish meal and oil. On the basis of these tests one must conclude that there is a minimum of 956 pounds and an average of 1,044 pounds of edible meat in each ton of whole, sound anchovies received for processing.

This, however, is indicative of the potential rather than the actual yield. It indicates what percentage of the fish can be recovered in the can under prevailing cannery practice from a ton of whole, sound anchovies. While the procedure followed in these tests was based on plant rather than laboratory conditions, there are two sources of loss that have not been adequately considered which will lower the above yields.

One is the precentage admixture in occasional loads, in excess of the normal and nominal values obtained above. Discussion of this subject will be deferred until later. The second may be termed a conveyor loss. In the path of the fish through the plant from unloading to the filled and sealed cans, they travel from each operation in the process to the next in flumes or conveyors. In this journey there is an inevitable loss caused by mechanical damage to occasional fish or parts thereof, or by actual loss of whole fish or sections from the conveyors or tables. In the described tests the cut sections were taken from the cutting machines and carried directly to and placed upon the packing tables, thus eliminating any conveyor travel in this interval with its resulting loss. Allowance should therefore be made for this in fixing the amount of utilizable fish per ton.