Hulme in which he praised his work and his personality and requested that the brief outline of the man's life, as presented, be incorporated in the minutes of the Convention and a copy sent to his widow. The Convention carried out these desires.

The Auditing Committee reported that the Treasurer's books were in order, and the nominating committee announced the candidates, all of whom were elected, as noted elsewhere in this issue. The Resolution Committee presented its resolutions extending gratitude to numerous men throughout the country who had helped the Society during the year, all of which were accepted by the Convention.

Just before the final adjournment of the gatherng, Mr. Richardson noted that during the past year improvements had been made on Kries' test for the determination of rancidity, that Government chemists had been giving it more attention, and that investigating consumers were becoming interested in it. In view of these facts, Mr. Richardson moved that a committee be appointed to investigate the value of the Kries test as an index of the degree of rancidity of fats and oils. This motion was carried.

Report of the Du Bosq Colorimeter Committee

BY DAVID WESSON, CHAIRMAN

SOMETHING over a year ago Mr. Priest and the writer while dining together at the Cosmos Club in Washington, discussed the problem of color readings and color glasses. It was suggested that by using a standard color glass for prime oil, of 35 Y., 7.6 R., and varying the depth of oil we could avoid having the large number of unsatisfactory glasses as at present in use.

Some time later in Mr. Priest's Laboratory we tried several oils in a DuBosq instrument, and apparently it was possible to read colors of oils ranging from white to crude in terms of prime summer yellow. It seemed a beautiful idea to assume prime summer yellow of an established standard as one hundred, and read off the color of an oil matched against it in percentage by varying the lengths of column and measuring the same.

Thus a choice oil might show 80% color, white oil 15 to 20%, and off oil anywhere from say 105 to 500%, and a crude oil 1000% more or less.

Mr. Priest made a number of experiments in his laboratory and reported verbally that the difference in hue made matching very difficult.

We have the same trouble with Lovibond glasses so it was decided to give the instrument a trial.

Duplicate sets of twelve samples of oils giving a considerable range of color were sent to five laboratories with requests for Lovibond color readings. These were obtained from four laboratories.

Three laboratories were equipped with DuBosq instruments, and the results found by all are given in the following table:

COMPARATIVE LOVIBOND AND DuBOSQ RESULTS

Lab. No.		1		2		3		4	
		Y	R	Y	R	Y	R	Y	R
1	P. S. Y.	35	7.9	35	7.6	35	6.8	35	8.
2	Choice S. Y.	35	4.4	35	4.5	35	3.8	35	4.5
3	Same as No. 1	35	7.9	35	7.6	35	7.3	35	8.
4	Filtered Y. Oil	35	4.6	35	4.4	35	4.35	35	4.4
5	Off S. Y.	35	9.4	35	9.5	35	8.	35	9.5
6	Off S. Y.	35	18.4	35	32.3	35	18.	35	37.
7	Off S. Y.	35	38.	35	60.	35	52.60	35	50.
8	Crude	35	Too dark.						
9	Prime S. W.	20	2.6	20	2.2	20	2.15	20	2.6
10	Wesson Oil	16	1.6	14	1.4	15	1.30	18	1.8
11	Bleached & Deodorized Y. Oil	30	3.	35	3.5	35	3.	35	3.5
12	P. S. Y.	35	7.5	35	17.7	..	....	35	7.6

DuBOSQ RESULTS

Color Per Cent		Lab. No. 3	4
1	P. S. Y.	97.50	106.
2	Choice S. Y.	45.	67.3
3	Same as No. 1	84.2	111.
4	Filtered Y. Oil	38.5	40.6
5	Off S. Y.	135.	145.
6	Off S. Y.	182.	317.
7	Off S. Y.	245.	575.
8	Crude	656.	1470.
9	Prime S. W.	101.	100.
10	Wesson Oil	71.	87.
11	Bleached & Deodorized Y. Oil	123.	*168.
12	P. S. Y.	.....	100.

*Against P. S. Y. No. 387.

The results speak for themselves. The Lovibond readings show differences between different laboratories, which can, doubtless, be traced to differences in glasses and the eyes of the observers.

The differences in readings of the DuBosq instruments are partly inherent in the fundamental principles of the application of the instrument as well as in variations in color sensitiveness of the observers.

In using the DuBosq instrument for comparing two oils, we have the same old problem we have always been up against, viz., tint or hue and darkness due to light absorption.

The actual amount of color present in prime or choice yellow oils simply refined with alkali is comparatively easy to measure, but when the color has been modified by bleaching or deodorization and the oil is compared with an alkali refined oil we have different hues and different light absorption that make it very difficult to secure a match.

It was also found that it was possible to get different results by using different depths of liquids. For instance, using prime summer yellow as a standard, in a 20 mm. column, a filtered yellow oil showed 49.4% color, while with a 40 mm. column for the standard the same oil gave a value of 56%.

To test this matter still further a P. S. Y. reading 35 Y., 7.6 R. was taken as a standard using different columns to compare with a choice S. Y. reading 35 Y., 4.6 R. The results are given in the following table:

P. S. Y.	Choice S. Y.	Color Per Cent
10 m.	12.5 m.m.	80
20 m.	25.6 m.m.	78
30 m.	41.5 m.m.	72.5
40 m.	58.1 m.m.	70
50 m.	69.4 m.m.	70

It seemed quite evident from these results that the depth of column makes a marked difference. This is brought out in reading the differences between laboratories 3 and 4. Laboratory 3 used short columns and varied the depths of both columns to make a match. Laboratory 4 used fairly deep columns and varied the sample but did not vary the standard.

The results are the means of five readings.

Conclusion

1. The DuBosq Colorimeter is a beautiful instrument for measuring the relative amounts of the same coloring matter in two different liquids, providing the liquids are optically the same, and the coloring matter the same in both liquids.

2. Cotton Seed Oils contain several different coloring matters.

3. The effects of decomposition of the seed and the various conditions used in refining processes affect the light absorption of the oils, and the characteristics of the color.

4. These differences are made painfully apparent by the DuBosq instrument.

5. It seems quite apparent, considering the limitations of the human eye and the great differences of hue and brilliancy of different oils, that any system of numerically recording color differences must allow reasonable tolerances.

6. Although results to date appear discouraging, it is believed that by the aid of a modified DuBosq instrument a satisfactory practical method of oil colorimetry may yet be developed if carefully worked out.

When Pete's Wife Broke Her Leg

This young Texas cowboy had spent his life on the Western range. His were the instincts of the cattle man, his the experiences of one who rides behind the long horn through all the seasons. Cows were his life, and all he knew that was of any account was his knowledge of cows.

And then he got married. He brought home a wife from the neighboring county where he had gone to ride in a rodeo, and he exhibited his female pride with all the gusto of the male of the species. And they got along fine. Every one that saw them told of their devotion and their happiness. There was not a cloud on their horizon, it seemed, and the whole world smiled at them.

But one day the young bridegroom came rushing over to the ranch-house of his nearest neighbor, and there were tears streaming down his cheeks, sobs fairly bursting his breast, and he dropped onto the neighbor's porch manifesting every emotion that spelled distress in large letters. The shocked neighbor came running to him, raised his head, and inquired the trouble.

Pete sobbed. "It's the wife," he finally gulped out, "She fell down stairs this morning and broke her laig, and Oh! How I hated to shoot her!"—*Patchwork.*