an oil are apparent. An oil which will not deteriorate in 4-6 months results. The usual weekly "cleanup," which may amount to 2% of the output, is eliminated. This clean-up always entails losses, selling meal as foots or recovering deteriorated oil. But the main advantages of filtration are found in the reduction of refining loss and improvement of color in the refined oil. Observed work has shown that a properly filtered oil shows a decrease in refining loss of at least 2% and in red color of 1.0 R. This figure is one somewhat below average.

## **Recapitulation of Profits**

A summary of the costs and savings due to filtration, under two different conditions, are tabulated below.

Case 1. Crude at 8c. 4 Press Mill. 24,000 lbs. Oil Daily. Refining loss improved 2%, means 1% increase in price on prime oil. Color improved 1.0 Red means  $\frac{1}{2}$ % increase in price on prime oil. Daily increase in value of oil = (24,000 x 0.08) x 0.015 = \$28.80.

Cost of filtration can be summed up as follows:

1. Daily investment charge at 8% for 200 days =

 $\frac{\$2,000 \times 0.08}{200} = \$0.80$ 

2. Daily depreciation charge,

of 10% for 200 days =  $\frac{$2,000 \times 0.10}{----} = $1.00$ 

| 3. Daily power charge $\ldots =$ \$0.18 |
|---|
| 4. Daily maintenance and                |
| supplies, cloth, paper = $1.03$         |
| 5. Direct Labor—6 hours                 |
| at 50c 3.00                             |
| 6. Filter Aid—60 lbs. at                |
| $4.3c \cdot \ldots = 2.58$              |
| Total filtration cost \$8.59            |
| Net Daily Profit =                      |
| 28.80 - 88.59 = 20.21                   |
| Case 2. Crude at 8c. 4 Press            |
| Mill 24,000 lbs. Off Oil Daily.         |
| An Off Oil improvement of 2% in         |
| loss on refining means 2% increase      |

loss on refining means 2% increase in price. Color improved 1.0 Red means  $\frac{1}{2}$ % increase in price. Daily increase in value of oil =

Daily increase in value of on =(24.000  $\times$  0.08)  $\times$  0.025 = \$48.00 The cost of filtration is as under Case 1.

So net daily profit == \$48.00 -- \$8.59 == \$39.41.

## **Chevreul Prize Contest Extended**

All Papers Published in OIL & FAT INDUS-TRIES Prior to April, 1928, Eligible for Prizes

The Chevreul Prizes were offered by the American Oil Chemists' Society and Oil and Fat Industries for the three best original articles published in Oil & Fat Industries during the season 1926-1927.

At the Memphis meeting of the governing committee of the American Oil Chemists' Society, it was the consensus of the members that the prize awards should be extended to include for consideration all articles published up to and including the April, 1928, issue of OIL AND FAT INDUSTRIES, and the Award Committee has so ordered.

The entry of contributions of members of the American Oil Chemists' Society and of all others is earnestly desired and solicited for consideration for the Chevreul Prizes.