

SOLVENT losses were reduced more than half of the amount for the former solvent operation. There are several factors that contribute to this substantial saving in solvent. First, the elimination of the continuous horizontal centrifuge cut the air load through the vent system to a minimum. The second factor was the increase in the length of filter cycles. By pre-pressing, the length of filter cycles has increased from six to ten times. Every time a filter is evacuated, opened, and cleaned, some solvent is lost. The third factor that has effected a solvent saving is the lighter load imposed upon the distillation and solvent recovery capacity.

There are a number of factors that have entered into the over-all reduction in the processing costs by using the present combination process. The saving in steam is very pronounced. With direct solvent extraction, at a rate of 200 tons of cottonseed a day, it was necessary to pump as much as 60 g.p.m. of solvent into the extractor. This means that all of that solvent must be heated from an average temperature of 80°F. to its boiling point and then vaporized. These solvent vapors must also be condensed with water. By pre-expelling at the same mill rate however only 20 gallons per minute of solvent to the extractor have been used. This has cut the steam and water consumption to about one-third of the former amount. The amount of sparge steam used in the stripping column has been cut to less than half of that needed with straight extraction. The steam to the steam jet ejector on the dryer condenser is turned completely off most of the time since the use of the centrifuge has been discontinued. Under the present costs of steam and electrical power in our location this saving in steam more than offsets the additional power needed for the pre-expellers. We have experienced a saving of 20 h.p. in our cooling water pumps, 35 h.p. in the elimination of the centrifuge, and 10 h.p. in the pumping of solvent and miscella. At the present mill rate, with the operation of two pre-expellers, we have added about 280 h.p. from which can be subtracted the 65 h.p. saving in the solvent plant.

It has been possible to rearrange the manpower formerly used for solvent extraction in such a way as to operate the equipment without the hiring of additional labor. At the same time capacity of the plant was increased. The pre-expellers have not been in operation long enough to have any definite figures as to the maintenance cost of these machines. Since the pressure reached in the barrels is relatively low, it is not thought that the maintenance will be a large item.

Summarizing, Delta Products Company has, by installing the Anderson Exsolex Process with Pre-Expellers ahead of its present 200 ton per day solvent extraction plant for cottonseed, reduced its residual oil to 0.3%, reduced its solvent losses to less than half, eliminated the need for a horizontal continuous centrifuge for clarifying miscella, cut its steam and water consumption to a third, and has produced a better quality oil and meal.

N. HUNT MOORE
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Fine Wire

A new method of making fine wire less than one-tenth the thickness of human hair was revealed today by Howard T. Francis, supervisor of electrochemistry research at Armour Research Foundation of Illinois Institute of Technology, Chicago. In cooperation with the Naval Ordnance Laboratory, Foundation scientists have produced 0.00015 inch diameter wire in the laboratory. In the new method, Dr. Francis explains, wire passes through a chemical bath in which an electric current is flowing. The process polishes away the wire's surface. "The wire becomes an electrode in an electropolishing bath and is dissolved away to the desired size," he said.

Wire is normally made by drawing metal through successively smaller holes until a desired diameter is reached. The new electrochemical method of making extremely fine wire amounts to eating away of surface metal rather than a mechanical drawing operation.

The new 1950 Handy Soap Buying Guide for industry has just been published by the Colgate-Palmolive-Peet Company.

Board Recommends Increase in Dues

A mailing on March 30, 1950 has put the recommendation of the Governing Board of the American Oil Chemists' Society for an increase in dues in the hands of the membership, together with a proxy. Proxies will be received by the secretary until three days prior to the opening of the business meeting on May 2. If the proposal is approved, the change will become effective with payment of 1951 dues. The statement sent to members as follows:

Increasing expenses and how to meet them is one of the disagreeable facts of life, but one that we must all face at one time or another. The American Oil Chemists' Society is fortunate in that all through the years of rising costs we have been able to maintain a balanced budget. However during the past year the Society has operated at a loss slightly in excess of \$2,000. Obviously this situation cannot continue indefinitely.

Several months ago President V. C. Mehlenbacher appointed a committee with C. E. Morris of Armour and Company as chairman to investigate the Society's financial situation. After considerable study this committee is recommending several sound economy measures. Nevertheless we are faced with the inescapable fact that we must augment our income if we are to press forward and maintain the services to which Society members are accustomed. Therefore the committee is recommending and the Governing Board has approved an increase in dues as follows:

Class of Membership	Current Dues	Proposed Increase
Active.....	\$ 6	\$ 8
Individual Associate.....	6	8
Corporation.....	10	15

A change in by-laws is required to make these proposed changes in dues effective and the constitution requires that the measure be submitted to the members of the Society for a proxy vote. The changes in by-laws required by the proposal will modify Article III of the present by-laws to read as follows:

ARTICLE III

Dues

Section 1. Active Members. Active members shall pay in advance, each year, on January 1, to the executive secretary of the Society the sum of eight dollars (\$8) annual dues, which shall include a year's subscription to the Journal of The American Oil Chemists' Society.

Section 2. Active-Referee Members. Active-Referee members shall pay in advance, each year, on January 1, to the executive secretary of the Society the sum of eight dollars (\$8) annual dues, which shall include a year's subscription to the Journal of The American Oil Chemists' Society.

Active-Referee members shall in addition to the annual active membership dues pay five dollars (\$5) for the annual certification of the Referee Examination Board. This fee shall accompany application for certification at such time as the Referee Board shall determine.

Section 3. Individual Associate Members. Individual associate members shall pay in advance, each year, on January 1, to the executive secretary of the Society the sum of eight dollars (\$8) annual dues, which shall include a year's subscription to the Journal of The American Oil Chemists' Society.

Section 4. Corporation or Firm Associate Members. Corporation or firm associate members shall pay in advance, each year, on January 1, to the executive secretary of the Society the sum of fifteen dollars (\$15) annual dues, which shall include a year's subscription to the Journal of The American Oil Chemists' Society.

A proxy form is enclosed which you are strongly urged to mark to indicate your vote, sign, and return promptly in the envelope provided.

This is a most serious matter and deserves your careful and immediate attention. It is significant that we are one of the last of the technical societies to have to consider a change in dues.

H. L. ROSCHEN, Secretary.

The January Industrial Bulletin of Arthur D. Little inc. contains an article on the fertilizer industry entitled "Back to the Land."