

etc., must be made of brass or some equivalent non-sparking material.

All electrical wiring, fixtures, and switches for lights or motors must conform strictly with the Underwriters' specifications and all switch boxes, fuse boxes, etc., should be located outside the building.

Special attention should be given to the sewer system, particularly where the water coming from the water separator is carried away. The sewer serving the extraction building must be trapped in a suitable way several times before reaching the main line of the sewer. In other words, the extraction building must not only have no uncontrolled communication with other buildings above the ground, but under the ground, also.

A necessary precaution is to survey always the water coming from the solvent-water separator because, should the separator not be properly primed, gasoline would go into the sewer.

A good precaution is to avoid U-bendings in pipes handling gasoline from the condenser as there is always a chance of a collection of water at the bottom of the U-bend, caused by condensation, which in severe cold weather might freeze and cause an unexpected and highly dangerous pressure in the distillation system.

If a U-bend is necessary for a liquid seal, as used in reflux lines, it is a good thing to put a drain in the lower part of the "U" and regularly drain the water which eventually will collect there.

If a few drops coming from a leaking valve or flange or junction is dangerous, a large amount of solvent spilled on the floor is far more so. The quick evaporation of solvent in the latter case causes a large amount of vapors which could travel outside the building and be carried by a draft of air in contact with some flame even several hundred feet away.

I do not suggest the use of sand or sawdust in a case of that kind. The only safe thing to do is to make those solvent vapors innocuous by mixing them with some unflammable vapors. The use of Carbon Tetra-Chloride is very good in such instances. For that purpose a large number of pint bottles of Carbon Tetra-Chloride should be conveniently placed around, inside and outside the extraction building, to be thrown on the floor where a gallon or more of solvent has been spilled.

When the factory is shut down for cleaning or other purposes, the whole system must be inspected and before resumption of operations it should again be thoroughly checked. The superintendent should be present at least during the first four hours after resumption of operations. It would be a good idea, also, to have some extra men available at that time to take quick action in case something should go wrong during that dangerous period.

In spite of suggestions of several safety commissions, I do not advise the placing of solvent storage tanks underground. Any accidental leaking of tanks so located could not be easily detected and only after a great amount of solvent were lost and a large area of ground soaked would it be possible to take action. The danger of underground seepage of solvent is obvious because of the length of time such solvent will stay in the ground. I suggest the storage tank be placed above the ground, located over a concrete pit twice the capacity of the tank and capable of catching and holding any solvent which might leak out. The tank should be provided with a four inch safety valve so that in case any leaking solvent collected in the pit caught fire, the pressure generated in the tank would escape through the valve.

The possibility of accidents is

considerably lessened with the development of continuous extraction systems. In batch operation the extractors must periodically be opened and closed at the beginning and the end of each extraction. The number of workers and helpers is greater and the handling of the material is more complex. On the contrary, in continuous extraction systems all material is handled in closed containers. There is no need to often open or close valves to admit or withdraw or change the direction of the flow of the solvent in the extractors. Everything is regulated and synchronized according to set conditions.

There is no need for anything more than surveillance in order to be sure that everything is running as it should. In addition to that the possibility of installing automatic controls everywhere reduces the chance of danger which comes from the human element.

NOTE

The authors of the article entitled "A Non-Fatty Oil from Jojoba Seed" published in the November issue, wish to call attention to a previous examination of this oil by R. A. Greene and E. O. Foster (see *Botanical Gazette*, Vol. 94, No. 4 (1933)) in which they showed that it was a liquid wax.

ERRATA

"A Non-Fatty Oil from Jojoba Seed," by R. S. McKinney and G. S. Jamieson, *OIL & SOAP* 13, 289 (1936).

It is regretted that the proof-reader changed "e" into "a" in the words "eicosenoic," "discosenoic," "eicosenol" and "discosenol" throughout this paper in cases which refer to the unsaturated compounds.

SPRING MEETING

President E. C. Ainslie is beginning the task of arranging the program for the Spring Meeting of the Society. Anyone wishing to present a paper before this meeting should get in touch with Mr. Ains-

lie at P. O. Box 1724, Atlanta, Ga.

The probable dates of the meeting are May 13 and 14, and the meeting is to be held at Dallas, Texas.

Efforts are being made to obtain speakers of special prominence and

the meeting promises to be an interesting one. We urge those who have papers to present to notify Mr. Ainslie as soon as possible since it is desirable to get the final program arranged at the earliest possible date.