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TREATMENT OF CORKS USED IN SOXHLET AND OTHER EXTRACT- TION APPARATUS.

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THE difficulties which arise from the porosity of cork and the solubility of certain constituents of cork when used in extraction apparatus may be overcome in the following manner: Gelatin is soaked in cold water for five or six hours, the unabsorbed water poured off, and the gelatin warmed gently until it is melted, when one quarter of the volume of glycerol and two volumes of water are added.

The corks, which have previously been softened and bored, are completely immersed in the glycerol-jelly solution contained in a covered beaker, and heated on a boiling water-bath for two hours. They are then removed, the whole of the surface wiped with a cloth, the corks dried in a warm place for a few hours, and then used in a Soxhlet extraction apparatus for one hour.

Corks treated in this manner may be safely exposed to the vapour of ether,

petroleum ether, benzene, carbon disulphide, and chloroform, but must not be used with solvents in the vapour of which water and glycerol are readily soluble.

The corks should be stored at the ordinary temperature away from any source of heat, as a warm, dry atmosphere causes them to shrink and harden.

Four corks, two of which were very porous, treated in the manner described, were used to connect the flask, Soxhlet extractor, and condenser, in a series of ether extractions. The jelly was then completely removed with hot water and the corks dried at the ordinary temperature, after which a further series of extractions was made. The extraction in all cases lasted for one hour.

The following results were obtained:

<i>Mgrms. of Ether-soluble Matter extracted.</i>			
	<i>Extraction.</i>	<i>Corks A and B (very porous).</i>	<i>Corks C and D.</i>
After treatment with glycerol jelly	{ 1	5	1
	{ 2	0	0
	{ 3	0	0
	{ 4	0	0
After removal of glycerol jelly ..	{ 5	13	7
	{ 6	10	3
	{ 7	7	9
	{ 8	7	6
	{ 9	8	5
	{ 10	6	3

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