

solubility) of the same is necessary, and, indeed, it must be such that the disinfectant, because of its solution affinities, is given up with the greatest ease from an aqueous solution to the lipoid medium (the bacteria cells). It will therefore be understood that on the one hand, the acid salt, which is lipoid-soluble to a considerable extent, and which is produced together with the alkali by the hydrolysis of the saturated fatty acid salts, which acid salt is soluble with comparative difficulty in the aqueous medium, can easily go over to the bacteria cells, and that on the other hand also, the neutral salts of the unsaturated fatty acids which are easily soluble in water, will develop an activity if by being salted out of their aqueous solutions by electrolytes they now receive an increased solution affinity for lipoids. Again briefly summarized, *the disinfecting power of aqueous soap solutions is therefore dependent upon the relationship existing at the time between the alkali salts of the saturated and unsaturated fatty acids and upon the purity of the soap itself*, in that the action of the saturated soaps runs parallel to the relative amount of hydrolyzed fatty acid (or acid salt), but the action of the unsaturated soaps is essentially determined only by the salting-out power of electrolytes present at the same time. The combined alkali or alkali in excess which is present in soap solutions is, moreover, aside from its not very great disinfecting power, still of significance in that, on the one hand, owing to the kind of alkali, differences occur in the lipoid solubility of the acid salts of the saturated acids, on the other hand, owing to the kind and amount of alkali, changes occur in the physical properties of the soap solution itself (suppression of hydrolysis, influence on the micro-structure of the colloidal soap particles).

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ABSTRACT FROM ANOTHER JOURNAL

Government Publications.—One of the most valuable Government publications to the oil industry which has appeared recently is *Trade Information Bulletin* No. 322 of The Department of Commerce. This is entitled *The Vegetable Oil Industry of France* and has been prepared by Chester L. Jones, American Commercial Attaché at Paris and Wesley Frost our Consul at Marseille. It is not therefore a mere compilation of data culled from trade papers and miscellaneous sources, but a first-hand report of present-day conditions in the oil trade of France. The pamphlet of 21 pages, contains a general discussion of the Oil Supplies, Foreign Trade and Raw Materials of the French Oil Industry, an enumeration of the manufacturing centers and brief descriptions of the condition in which the oil-bearing seeds and nuts reach the French oil mills followed by tabulations of the imports and exports showing source and destination. One might wish that those portions of the report which cover the methods of pressing and refining the various oils had been made a little more complete but this has been so well handled in the earlier bulletins by Thompson that perhaps it is unnecessary, unless French practice has materially changed during the past ten years.

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