

## BOOTLEG WHISKY AS A POISONER

THERE may have been "a serpent in the cup," as we were often informed, in the "good old days" before Prohibition, but if there was, there are half a dozen serpents in every up-to-date glass of bootleg whisky—and each is more poisonous than the old-time variety ever thought of being. "When you drink bootleg the chances are better than nine out of ten that you are drinking rank poison." This is not a statement issued either by Prohibitionists to discourage drinking, or by Anti-Prohibitionists to show what Prohibition has brought us to. It is the conclusion of a large newspaper service, which had its men in various parts of the country buy the "ordinary mine-run of bootleg liquor," and then had the samples analyzed to get "an idea of what a man's chances are of getting poisonous booze." Dudley A. Siddall, of the NEA Service, with headquarters at Cleveland, Ohio, is authority for the statement that "insofar as possible we endeavor to duplicate, in buying, the exact conditions that would surround, say, a traveling man who might patronize bootleggers during a trip around the country." Thirty-eight samples of bootleg were bought in this way in fifteen cities scattered throughout the nation. As for the results, we read:

Only two of the 38 samples proved to be whisky of pre-prohibition quality. One of these was purchased in Boston; the other in Washington.

Two more were synthetic gin—held passable. One of these samples was from Cleveland, the other from Los Angeles.

But bootleg consumers in Boston, Washington, Cleveland and Los Angeles need not jump to the conclusion that because these samples were passable, all bootleg vended in these cities is safe. For other samples bought in these places proved dangerous.

Of the remaining 34 samples, 15 were doctored and diluted whiskies or whiskies produced from an alcohol base and artificially colored and flavored; 17 were raw moonshine of varying degrees of rankness; one was poor beer, containing wild yeasts; and one was a distilled wine, of poor quality.

Samples were collected from these widely scattered cities: Dallas, Tex.; Memphis, Tenn.; Denver, Col.; Norfolk, Va.; Oklahoma City, Okla.; Birmingham, Ala.; Cleveland; Chicago; Seattle, Wash.; San Francisco; Los Angeles; New York; Providence, R. I.; Boston and Washington.

They were bought from a wide range of bootleg channels and analyzed without selection. They came from drug stores, bell boys, bootblacks, barbers, porters, milkmen, near-beer saloons and similar channels of the trade, with a few seized in official raids.

The samples were assembled in Washington, and analyzed by Government chemists in Government laboratories.

The analyses showed that when you buy bootleg you get nearly always a dangerous concoction of colored and disguised alcohol, or a raw distillate full of aldehydes and

intermediate between alcohols and acids. They are derived from the higher alcohols by the oxidation and removal of a certain hydrogen content and the addition of a very small amount of oxygen converts them into active acids.

"The effect of these aldehydes," says William V. Linder, Government chemist, "is to 'knock one out' much more quickly than would high-grade whisky.

"Their consumption over any considerable period undermines the general constitution to a point where it seems much more susceptible to many diseases.

"While not immediately poisonous, causing sudden blindness or death as does methyl or wood alcohol, their effect is definitely and cumulatively harmful."

The dangerous elements in moonshine and doctored whiskies, Linder explains, are due, for most part, to the unscientific distilling and blending. To quote:

"Moonshine," says Linder, "is produced for most part under the most unscientific and unsanitary conditions. The mash is fermented in barrels or tubs, usually in the open backwoods or in musty cellars. Under such conditions, the development of wild yeasts and unwholesome fermentations are common. Many moonshines show evidences of active putrefaction.

"In distilling, too, all the volatile elements come over. In commercial distilling, for the production of high-grade whiskies, it was the custom to discard what was known as the 'heads,' or first run, containing the high alcohols and the more volatile oils, and the 'tails' or the last run. Only the middle run was retained.

"The moonshiner, however, runs it all in—heads, tails and middles. The elements that the commercial distiller carefully eliminated, therefore, remain in moonshine.

"Moonshine, moreover, normally receives no aging. Hence it retains all the injurious qualities inhering to a raw distillate containing high alcohols, aldehydes and fusel oil, and also whatever additional poisons or injurious chemical elements may have accumulated through improper and unsanitary fermentation and unscientific distilling.

"All these elements, even including in one case signs of putrefaction, were present in the samples in this test."

Aldehydes, high alcohols and volatile oils in moonshine have a directly injurious effect on the circulatory, kidney and nervous systems, according to Reid Hunt, former chief of the Division of Pharmacology, Hygienic Laboratory, U. S. Public Health Service.

Also they result in "an increased liability to contract diseases or to contract them in especially severe form."

Among the ailments which these elements are generally recognized in the medical profession as aiding and abetting are.

Hardening of the arteries.

Cirrhosis of the liver.

A wide range of digestive disturbances.

The thirty-eight samples of bootleg collected and analyzed for the purposes of this test cost anywhere from seventy-five cents to \$6 a half-pint. Cleveland furnished the cheapest "poison," and Chicago, where the stuff averaged over \$20 a quart, set a record in expensive and dangerous drinking.