



NEW COPPER PLATING METHOD—More efficient is this "periodic reverse" electroplating method which produces a smooth surface of copper. It was developed at the "luster laboratory" of the Westinghouse Electric Corporation, and practically eliminates the process of buffing and polishing.

PSYCHOLOGY

Drinking Girls Popular

Study of girls in a coeducational school indicates girls who drink are dated more than those who don't but there are more engagements among the non-drinkers.

► COLLEGE GIRLS who drink have more dates but fewer of them become engaged than non-drinkers.

A study made of 336 college girls in a coeducational institution showed this was an important difference between the two groups. The results were presented by Carol A. Hecht, Ruth J. Grine, and Sally E. Rothrock, under the direction of Dr. Jessie Bernard at the State College of Pennsylvania, in a report made to the QUARTERLY JOURNAL OF STUDIES ON ALCOHOL (Sept.).

They divided the women into five categories according to the frequency of drinking during the two-week period studied: women who never drank; infrequent drinkers, who had had nothing to drink within the last two weeks of the study; occasional drinkers who had drunk once in this period; near-regular drinkers who had had two drinks within this period; and regular drinkers.

This revealed that there were twice as many regular drinkers, a total of 90, as there were non-drinkers.

Other facts brought out by the study were:

The infrequent drinkers had begun to

drink in their 19th year while the regular drinkers started earlier, the average age being 17.

The girls who did little or no drinking attended church more often but the study was not conclusive on this point, the investigators stated.

Most of the young women who drank did so with the knowledge of their families.

Drinking and smoking among women have had similar trends, the investigators pointed out. They suggested that both were strongly supported by extensive advertising campaigns and upheld by motion picture models of behavior.

All these facts show a widespread change in middle-class standards, they said. The traditional tea party has given way to the cocktail party. This study, although limited, "represents a socially important group, namely college women," they said, adding "they come for the most part from middle-class homes and thus reflect middle-class standards."

They feel that this study of young women is significant because "their behavior probably indicates a trend of the immediate future."

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ENGINEERING

Better Coatings Studied In New "Luster Laboratory"

► BETTER, more lasting finishes for household appliances and other electrical products may come from a new "luster laboratory," now in operation at the Westinghouse Electric Corporation's East Pittsburgh Works.

Scientists in the new laboratory are working on problems of improving the finishes used to coat steel with gold, silver, nickel, copper and chromium. The last three are used on home appliances, while gold and silver have important applications in other electrical equipment.

Apparatus in the laboratory includes:

A surface analyzer which magnifies 40,000 times.

Gage to check the thickness of coatings which are as thin as one-fiftieth the width of a human hair.

Weighing device for objects half the weight of a common postage stamp.

Equipment to reproduce in the laboratory different types of climatic conditions to which finishes on electrical products might be exposed.

First achievement of the new study is a "periodic reverse" electroplating process which reduces the expensive job of buffing and polishing after the final coating, George Jernstedt, manager of Westinghouse electroplating operations, reported.

Science News Letter, October 2, 1948

INVENTION

Light Produced by Shaking In Newly Patented Lamp

► A FLUORESCENT LAMP that takes no electric current, but lights up when it is shaken, is the novelty on which U. S. patent 2,449,880 has been issued to James L. Cox of Ramsey, N. J. It is not intended to produce continuous illumination, but is considered better adapted to such purposes as signalling, use as an automobile tail-light, and special stage effects.

The lamp consists of a hollow glass vessel with the air exhausted and a low-pressure atmosphere of argon, neon or other inert gas sealed in. It contains also a small quantity of mercury and one of the luminescent pigments known as phosphors, such as are used now in the familiar fluorescent lamps.

This phosphor may either be mixed as a loose powder with the mercury, or spread on the inner wall of the lamp. In either case, it bursts into a glow when the mercury is agitated, and keeps on shining as long as the agitation continues.

Just what makes the light is not understood at present, the inventor admits. It is conjectured to be some kind of friction-electrical effect between the mercury and the phosphor.

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