

PSYCHOLOGY

Psychological Tests Refit Unemployed For Better Jobs

Several Cities Begin Experimental Assays of Human Material to Find Kinds of Work Men Are Best Fitted For

NO ONE would think of operating a mine unless the ore being excavated were assayed frequently and carefully. At the present time our civilization is being conducted without evaluations of its human raw material.

Millions of men are idle through an economic clogging of the wheels of industry. This is a severe indictment of the world we live in. Millions of people are discouraged through their inability to find work. Enforced idleness causes them to lose confidence in themselves.

At such times as this assaying of human abilities is sorely needed. In addition to that essential minimum of food and shelter which a stable civilization must afford its human units, there should be given each individual the opportunity of discovering how he can serve the world most effectively.

On an experimental scale at Minneapolis, St. Paul, Duluth, Philadelphia and Rochester, unemployed persons are being tested and evaluated by psychological methods in order that they may resume most effectively their productive places in the producing world.

When American armies were entering the World War psychologists went into uniform and applied the famous Army "Alpha" and "Beta" tests to help place soldiers in the most effective places. The man with the outstanding military bearing was not always the best commander and the doughboy of high intelligence might be wasted digging ditches.

So in this economic emergency, psychologists can perform an even greater service. It is also more difficult. Flags do not wave, bands do not play, crowds are more likely to growl than cheer. It is easier to find people for jobs than jobs for people.

One part of the task is to discover the kinds of abilities that are necessary for various kinds of jobs. Tests for general intelligence, special abilities, personality and other human attributes, given to successful workers, allow the psychologists to write specifications for various kinds of workers.

The person out of a job is put through an assaying process, not as a

piece of human clay, but as a human being. Psychological tests reveal his abilities and shortcomings. How he spends his money and his time is discussed. His physical health is evaluated by a medical examination and his mental health is considered when that is necessary. The staff of experts considers each person individually and works out a recommended plan for his future endeavor. Sometimes he is advised to change his occupation, often he needs intensive re-training. The unemployed person emerges from the assay with hope and greater prospects.

Assaying human beings costs money and money is not easy to find. The cost is about \$15 per person when it is done wholesale. But individual diagnosis and training for all the unemployed would undoubtedly be a paying addition to the mechanisms that will need to be put into operation to assure everyone of the opportunity to work and live in this era of too much material goods and too few jobs.

Science News Letter, July 23, 1932

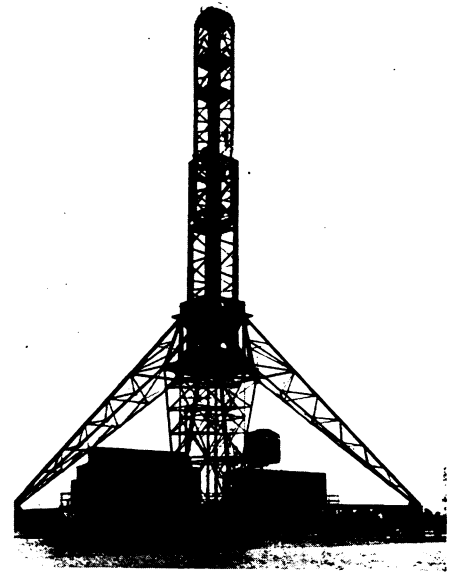
ENGINEERING

"Dumb Design" Slows Coming Of Truly Modern Automobile

LIGHTER automobiles that provide more luxurious, safe and economical transportation would be built if automobile designers just took a few lessons from aircraft engineers.

W. B. Stout, veteran automotive engineer and designer, had a chance to tell how the automobile of tomorrow should be built. And he used it at the recent annual meeting of the Society of Automotive Engineers when he spoke as aircraft engineering vice-president.

Automobile designers, he argued, must shake off the heavy weight of "dumb design" and build cars that are in line with up-to-date knowledge and improved practices. Design cars like



TELESCOPIC MAST

A new experimental mooring mast for airships is nearing completion at Lakehurst, N. J. A novel feature of this giant "hitching post" is that it is telescopic. When extended to its full height it is 160 feet tall—as tall as a fifteen-story office building. The airship is moored to the mast when it is thus extended. Then the mast, ship and all, is drawn down so that it will slide easily into the hangar on specially provided tracks. There is no need, with this mast, for the ship to come very close to the ground; it can be moored at a height which minimizes danger to the ship, ground crews, and spectators. The mast as shown in the photograph lacks the cap which will finish the top.

airplanes and save weight, make them ride and control better. Lack of forethought robs the auto owner of half of the luxury he should get from a given wheelbase, Mr. Stout argues. Only a quarter of the ground space covered by a car is delivered to autoists in usable space.

Here are Mr. Stout's specifications for automobiles as they should be:

Interior—More space, luxury, comfort than in present cars. Power—Multi-cylinder, high-speed, soundless, vibrationless engine at all city speeds. About 20 pounds per horse-power for complete car, loaded. Engine, 50 to 100 horsepower. Complete Weight—Less

than 1000 pounds. Steering—Effortless. Control—Centrifugal clutch, working with throttle and no other connections. Acceleration—0 to 60 miles per hour in 8 seconds. Economy—30 miles per gallon. Body—Streamlined, fixed windows and enclosed wheels. Comfort—Forced ventilation, with cooling system for summer touring. Tires—26x10 or the equivalent. Price—Around \$2,000 on small production. Mr. Stout foresees that a new type of sales organization and factual advertising appeal would be needed to market the car.

Science News Letter, July 23, 1932

CHEMISTRY

Vitamins Lurk in Spinach Be it Dark, Pale or Curly

YOU can have your spinach pale or dark, smooth or curly, and still get your share of vitamins A, B and C, it appears from studies reported by Hilda Black Kifer and Hazel E. Munser of the U. S. Bureau of Home Economics in the Journal of Agricultural research.

These investigators studied three varieties of spinach, Virginia Savoy, Princess Juliana and Viroflay, each of which has a different kind of leaf, one being dark green, one pale green, and one bluish-green, and each having different degrees of curliness of leaf. All three had the same amount of vitamins A and B and nearly the same amount of vitamin C, judging from feeding tests on a small number of white rats.

Science News Letter, July 23, 1932

PHYSIOLOGY

People Taller When Prone Than When Standing Erect

YOU ARE not so tall when you stand up as when you lie down. The amount you gain in length by stretching out on your back varies with height and sex, but it may be as much as an inch in some cases. This simple method of adding at least a fraction of a cubit to your stature was observed by Dr. Carroll E. Palmer in the course of an investigation at the School of Hygiene and Public Health, Johns Hopkins University, Baltimore, for the purpose of finding a basis of comparison between the height tables of infants, which are of course based on prone measurements, and those of older children.

ARCHAEOLOGY

Old Greek Cosmetics Made By Modern Lead Paint Process

Princeton Scientist Makes First Find of Face Powder Of the Kind that Causes Painter's Colic, Sometimes Death

GRECIAN damsels of 400 B. C. had white face powder, but instead of being relatively harmless talc it was made of poisonous lead by a process now used in manufacturing white paint.

This has been established by a chemical analysis of the first white cosmetics ever recorded, found in a woman's grave in Corinth cemetery by Dr. T. Leslie Shear of the Department of Art and Archaeology of Princeton University.

The face powder was found in a small terra cotta toilet box which lay in the sarcophagus with a silver coin and other personal effects by Dr. Shear. Brought back to Princeton by Dr. Shear, the cosmetics were recently analyzed by Prof. William Foster of the Princeton University Department of Chemistry and found to be cubes of carbonate of lead. Grecian manufacturers, the analysis showed, had produced the product by basic methods similar to those today employed in the manufacture of white lead, a paint pigment.

The ancient processes of manufactur-

ing the face powder which was known to the Greeks as "psimythion" and to the Romans as "cerussa" are described in classical works. Pliny, celebrated Latin author, described the production.

"It is made from very fine shavings of lead," Pliny wrote, "placed over a vessel filled with the strongest vinegars by which means the lead shavings become dissolved. That which falls into the vinegar is pounded and sifted after which it is mixed with vinegar and then pounded into tablets and dried in the sun of summer.

"There is another method of producing it. Lead is thrown into jars filled with vinegar. The jars are kept closed for ten days and a sort of mold on the surface is scraped off. The lead is put into vinegar until the whole has been consumed. The part scraped off is then pounded and sifted and put in shallow vessels. It is washed with fresh water until all cloudy impurities have disappeared and then dried and made into tablets.

"This is the mildest of all preparations of lead used by females to whiten their complexion," the Latin commentator concluded, "but it is, however, like scum of silver, a deadly poison."

White lead is produced today commercially in essentially the same manner by the so-called Dutch process in which perforated sheets of lead are exposed to the action of acetic acid vapors, moisture and carbon dioxide.

An old Grecian poem warns against the use of cosmetic saying "never by use of psimythion can you make a Helen out of Hecuba."

Dr. Shear has returned to Princeton from Greece where, as field director of the excavations of the ancient market place at Athens, he spent the past season associated with the American School of Classical Studies.

Use of lead, an accumulative poison, as a face decoration continued until relatively recent times and there are records of beautified women eventually dying of painter's colic, a form of lead poisoning.

Science News Letter, July 23, 1932

Science News Letter, July 23, 1932