POPULATION

Information Gold Mine

From the Census, Economists and Other Experts Will Dig Vital Information for Business and the Sciences

By EMILY C. DAVIS

WHAT is it good for? Meaning, the huge tidal wave of census questions now sweeping the United States, as enumerators descend first on business men, then on farmers and everybody, everywhere, to gather billions of facts and figures about the state of the nation.

Ask Dr. Vergil D. Reed, young-looking and enthusiastic assistant director of the Bureau of the Census, and dull-looking statistics come alive at the snap of his fingers. You can almost see them scurrying to work—for you.

One manufacturer that Dr. Reed knows of, cherishes figures showing the number of hogs by counties in the United States? Uninspiring? The manufacturer doesn't think so. He produces lye. He knows that farmers in a good many regions use old-fashioned lye to scrape off bristles when they scald hogs. They use lye, too, in making laundry soap from pork scraps and waste fat.

The more hogs eating their heads off on those farms, the more likely the market will be good right there for selling lye, he reasons. He maps sales campaigns with census figures and county maps spread around him.

Nothing dull about hog statistics to that business man, says Dr. Reed. And all over the country are people like that lye manufacturer, who have imagination and astuteness to make the census work for them.

The business census that began January 2, will take an inventory of affairs of 1,700,000 retail dealers, 180,000 wholesalers, 50,000 theaters and places of amusement, 50,000 hotels and tourist camps, and so on, 3,000,000 concerns in all. There has been no business census since 1935, except a sampling in 1938.

Business men themselves helped frame the questions, suggesting what to put in, and while returns, of course, are confidential, published tables of facts and figures will give many a business man valuable key knowledge of business conditions in his own, and competitive, lines. The man who makes tin cans, said Dr. Reed, picking a random example, is naturally interested in what the glass industry is doing.

The business census will show what war industries the United States is equipped for, and where the country is not prepared.

Even more eagerly awaited than the business census, is the housing census. Why? Because 1940 will mark the first time in United States history that the government has set out to learn exactly how its citizens are housed.

In 25,000,000 homes, in April, the enumerator will inquire: How many rooms in this house? Is it lighted by gas, by electricity? How is it heated? Does it have running water? How many residents? How old is the house? How is the mortgage, if any, held? Is there a radio? And more questions besides, but you get the idea. Millions of facts and figures about American homes—better and worse—will be garnered into the Census Bureau offices to be sorted, tabulated and announced.

"A gold mine" is what Dr. Reed predicts the housing census will be to this country. But like the "gold in them thar hills," many nuggets in the mountain-load of housing statistics will have to be dug out. Up to this year, there has been argument aplenty among experts over the state of American housing. When the first nation-wide and comprehensive data are tabled, there will be a field day for sociologists, health and welfare officials, city governments, not to mention building contractors, plumbers, bankers, furniture dealers, lumber mills—and you can add to that list almost indefinitely. All of them will start digging to extract nuggets of fact to aid their work. How much latent purchasing power, for instance, a given community has, may be better judged from the state of its housing. That is a solid gold fact, if any business man knows one.

What has happened to the Dust Bowl is to be revealed by the 1940 census. A man from the Dust *(Turn to page 187)*

SNOW PLANE FOR CENSUS TAKING

Census enumerators in the snowy high country of Colorado are reaching isolated communities in this motor-propelled, ski-mounted snow plane, capable of speeds of 120 miles an hour over ice and able to climb 45 degree slopes. It is the invention of Howard Davis and John Price of Durango, Colo. Mr. Price is shown (at left) with Joseph H. Woods, U. S. Census Supervisor at Durango.

MEDICINE

Head Injuries at Birth Not Cause of Cerebral Palsy

Abnormality Held Due to Factors Operating During Prenatal Period or Wasting Away of Parts of Brain

A NEW and optimistic picture of head injuries at birth was presented by Dr. M. Hines Roberts, Emory University School of Medicine, at the regional meeting of the American Academy of Pediatrics in Edgewater Park, Miss.

Differing from some authorities, Dr. Roberts does not believe that cerebral palsy and similar abnormalties are due to injury of the baby's head during birth. He thinks the cause of these conditions is an abnormality in prenatal development or a wasting away of certain parts of the brain before birth. X-ray pictures of the brains of such patients show tremendous wasting or diminution in size of large areas of the brain, he said. Cerebral palsies rarely occur in Negroes, which might be explained by the fact that this race seems to possess a peculiar immunity to certain common abnormalties of development. This seems to support the view that cerebral palsies are due to developmental abnormalties and not to birth injury.

If a baby with intracranial injury at birth survives four days, his chances are good, Dr. Roberts declared. In a large group of such babies followed for from two to 15 years after birth, Dr. Roberts found that three-fourths of them had developed perfectly normally. Relatively few of the other one-fourth had true cerebral palsies.

Science News Letter, March 23, 1940

Spastic Paralysis Operations

OPERATIONS in which nerves are cut, tendons lengthened or bones cut to help children with spastic paralysis were reported by Dr. Lawson Thornton, of Atlanta. This disabling condition, in which the child lacks normal control over his muscles, is, like cerebral palsy, believed by some to be a result of injury to the brain at birth.

Besides the surgical operations, Dr. Thornton stressed the importance of training the mind and will of these children to control the misbehaving muscles.

"The muscles are spastic," he explained, "either because there is an irritating stimulus in the brain, or that part of the brain that puts on the brakes or inhibits nerve stimulation is out of commission. This disturbance of muscle control must be counterbalanced by the will power, which means concentrated thought. Concentrated thought will in time become habit. Without help, a child would make little progress alone in developing along this line, but with careful training by a conscientious, painstaking teacher or parent, he can in time accomplish much."

Science News Letter, March 23, 1940

From Page 182

Bowl region, who was a census enumerator back in 1920, wrote to Dr. Reed the other day. He said there are exactly three families actively engaged in farming in two whole counties that he could name. When census figures are in, it may be possible to rate the success of new cropping and regrassing schemes and soil conservation practice in Dust Bowl areas where the drifting soil is being stubbornly tamed again.

Over seven million people in the United States run an independent farming business, and there is a vast lot of usable information to be had by asking them about it. Who is growing what, and where? Which crops are profitable? Where are they profitable? Census figures will indicate these points.

Take flax, said Dr. Reed. There is possibility of flax coming back as a fiber. Experimentally, it is being grown in several states, including Georgia and California; and possibly it rates as a commercial crop in California. How new crops such as this are coming along will be checked up, by the census of United States farms.

"We hear a good deal about diversified farming in the South," he continued. "The census will show where gains are being made—which regions of the South now have more milk cows, more poultry, varied crops. That will interest manufacturers who make poultry supplies, and farm tools, and other goods for which the new crops and stock—and increased income—suggest markets."

Part-time farming is an angle of American economy that Dr. Reed says is worth watching. He thinks the census may show a spread of part-time farming that is very significant.

"People started part-time farming as a depression stop-gap," he explained. "But once started, a good many suburban gardens have been kept up, and the suburban gardens ringing a city may prove to be one answer to America's question as to the future of agriculture. There has been a trend in recent years away from the farm, but part-time farming may reduce that trend."

Determined to get all possible facts about this country's food production, the Census Bureau has divided the United States into nine regions for agriculture fact-gathering. This, Dr. Reed explained, makes it possible to ask New England farmers about their own potatoes and cranberries and other products without bothering them to even look at questions on tung trees or oranges. Dividing the country nine ways, census takers plan to get specific information on such points as how Florida is doing with guavas, papayas, avocados; how the Southwest is doing with different kinds of cotton.

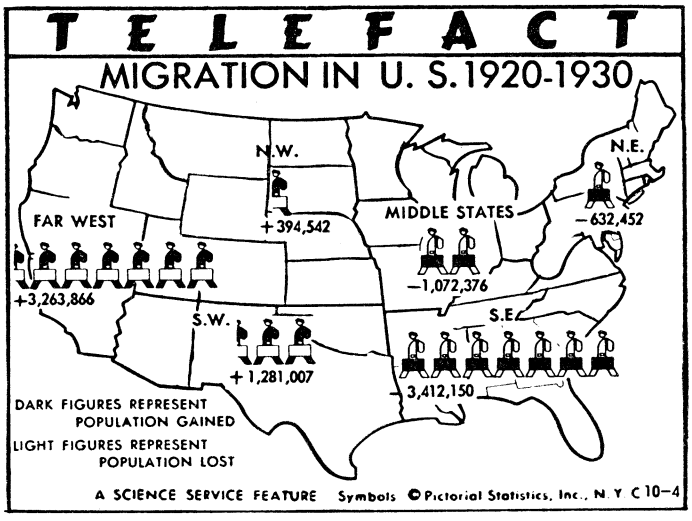
Health, as well as wealth, hinges on the census.

"Vital statistics," Dr. Reed puts it, "are like the reconnaissance wing of an army, pointing where to strike."

The tuberculosis curve, for example, has been down since 1900. Statistics have shown where the disease was most prevalent, and that helps in fighting it.

It is the cities and states, of course, that report births and deaths and causes of death to the Census Bureau. This reporting goes on regularly. But birth and disease and death trends are most significant when told in terms of rates—so many to the thousand or hundred thousand of the people. And that is where the 1940 census comes in. The new census will give the vital statisticians up-to-date figures showing, not merely the entire number of the population, but the numbers of people of different ages, in different states, in counties, and cities.

Life expectancy tables, figured from birth rates and trends, are the basis of life insurance. These figures are important, says Dr. Reed, to sixty-four million policy holders of life insurance and annuities.



Censuses have served wars, from the days when Moses counted "all that are able to go forth to war in Israel." Peaceful though the United States is, and wants to be, it is conscious of defense these days, and wants to know its man power. The census of 1940 will provide army and navy with information regarding men in different age groups; also the regions where specialized workers are grouped. The army would have liked specific information from the population census—names and addresses of types of workers and specialists valuable in military service. But the Census Bureau clings to its policy of assuring anonymity to the public. Your census return is confidential, and even the War Department may not consult it. Only statistics are released.

Science News Letter, March 23, 1940

PUBLIC HEALTH

More Sickness Among Children Than Most Other Age Groups

THE COMPLACENCY Americans are apt to feel over the health of the nation's children, based on low child mortality rates, is dealt a severe blow by figures on child sickness which the U. S. Public Health Service has just released. (*Public Health Reports,* Jan. 26.)

Children under 10 years of age get sick oftener than any other group in the population than the aged, it is shown by these figures, compiled by Miss Dorothy F. Holland, one of the federal health service statisticians.

The figures refer to frequency of illness lasting for one week or more as found in a survey of 500,000 children in 83 cities of varying sizes in 18 states during one year. The very highest frequency rate for disabling sickness among white children was found at the ages five to nine years. This rate was 305 per 1,000. For Negro children the highest disabling illness rate occurs in the ages under five years.

Acute communicable diseases of childhood and the respiratory diseases caused eight out of ten disabling illnesses among children under 15 years of age. Among these eight cases, five were acute communicable diseases of childhood and three were cases of acute respiratory diseases. Measles showed a higher frequency than any of the other childhood diseases, though the marked excess of measles shown in the survey reflects the unusually high incidence of measles during the survey year (1935). Mumps, whooping cough and chicken pox also were frequent causes of disabling illness. Among the respiratory diseases, tonsillitis, influenza, colds, pneumonia and bronchitis led in frequency.

Infantile paralysis caused 56% of all orthopedic impairments due to disease among children under 15 years.

Science News Letter, March 23, 1940

From Page 181

Specifically, fatty acids with long side-chains must be converted by oxygen to acids with short side-chains. If the flow of bile is stopped ferments from bacteria or from white blood cells may provide the oxygen for changing the long fatty acids into short ones with consequent formation of the stones.

Science News Letter, March 23, 1940

Danger in Benzedrine

FOR reviving those who have passed out after imbibing moderate amounts of alcohol, benzedrine is effective and relatively safe. But this wake-up drug may be dangerous when more than moderate amounts of alcohol have been taken.

This is the conclusion that may be drawn from experiments on rabbits reported in New Orleans to the Federation of American Societies for Experimental Biology by Dr. E. C. Reifenstein, Jr., of Syracuse (N. Y.) University.

Benzedrine (technically, amphetamine sulphate) has been known previously to be useful for sobering-up. It is used also in preparations for relieving stuffy noses. And recently it was reported useful for treating nervous patients and even problem children.

Dr. Reifenstein's rabbit experiments show that the drug has no restorative effect after lethal amounts of alcohol and even increases the toxicity of near lethal quantities of alcohol.

Alcohol, in rabbits at least, counteracts the effects of amphetamine, protect-