

Population Centers from 1790 to 1930

By ELMO SCOTT WATSON CENTLY the name of the town of Linton, Ind., appeared in the headlines of newspapers in every part of the country and the reason was not because it had been the scene of some sensational crime, some event of political significance, scientific discovery or other happening which for a brief moment throws the limelight on

some little municipality. The reason was that the United States bureau of the census, having completed the compilation of certain statistics obtained by the 1930 census, announced that the center of population of the United States is near Linton, Ind.

As a matter of fact, this center is located at Ind., which is 2.9 miles northeast of Linton, 31 miles southeast by south of Terre Haute and 83.6 miles northeast by north of Vincennes. But since it is nearest Linton, that town received whatever distinction there accrues to being known as "the center of population" and it became the successor to another Indiana town. Whitehall, in holding that honor. For after the census of 1920 the center of population was designated as a point 1.9 miles west of Whitehall in Owen county and in the ten years from 1920 to 1930 it moved westward 22.3 miles to the point near Linton.

Now what is this center of population and how is it computed? Probably most of us have rather vague ideas about that and the chances are that such ideas are erroneous as well. For the thing we have in mind when we say center of population is probably what the census experts call the median point.

If you draw a line dividing the population of the United States into equal parts north and south, and another line dividing it equally east and west, then the point of intersection is the median point. In every one of the four quarters there will be the same number of people.

But the center of population, as used by the census bureau, is that point that may be considered the center of human gravity of the United States. The census bureau pictures the United States as a rigid level plane, and on it our 123,000,000-odd people each one weighing the same, irrespective of age, sex and other distinctions.

Then the center of population would be the point at which the plane must pivot in order to balance perfectly. Literally then the center might be described as the decennial pivot of the American population playing seesaw.

Obviously this point has no definite relationship with the geographical center or the numerical center of the population-because the leverage given western sections of the country offsets the weights of larger populations of the eastern sections, on this hypothetical teeter-totter.

The westward advance of the center of population by 22.3 miles since 1920 is the smallest registered in any census except two. In 1900 the advance was only 14.4 miles, and in 1920 it was down to 9.8 miles.

On the other hand, the southward advance of 7.6 miles, recorded in 1930, is far above the average. Indeed, it is a trifle more than the net southward movement since 1790; that is to say, the excess of southward mileage over northward.

The westward advance is a reflection of the development of the nation-the tremendous strides made by agriculture in the states west of the Mississippi; the development of the great oil industries in Texas and Oklahoma and other parts of the West, and the steady growth of industry in general in those areas. All these are in the picture. Oil, cattle, wheat, manufacturing, moving pictures, have all had and still exert an important influence on the steady movement into the West.

A remarkable fact in the shifting of the center of population is the closeness with which throughout its westward path it has clung to the thirtyninth parallel of latitude. Since 1790 it has progressed almost in a straight line, reaching its furthest point north 23 miles east of Baltimore in 1790 and its furthest south point in 1930 in Greene county, Indiana. Yet the span was only 21.4 miles. The greatest movement west was during the decade immediately preceding

the Civil war, when the advance was 80.6 miles, while the least movement was in the decade from 1910 to 1920 when it was less than 10 miles. In the 140 years covered by the census records the advance has totaled 589 miles, an average of a little more than three miles annually, or about 111/2 miles a decade. That does not sound very big, but it means a lot in the development of the United States.

Reference was made previously to the high southward advance and the reason for the southward pull of the last 10 years is chiefly California-south as well as west-and Florida-south as well as east. The increases in the populations of Texas and Oklahoma may appear also to have had some influence, but the increases in Pennsylvania and New York probably offset that growth

If it be asked whether the California-Florida increase in population was greater than the growth in Michigan and the North Atlantic states, the answer is the technical definition of center of population given above.

An increase of 100,000 persons in Los Angeles, more than 2,500 miles from the old center of population in Indiana, would counterbalance an increase of 500,000 in Detroit, only a couple of hundred miles away.

One of the most interesting results of each decennial census is the graphic picture which it paints of Uncle Sam's westward march across the continent. Here, in brief, is that picture over the period of 140 years from 1790, the date of the first census, to 1930, the date of the last one: From the 1790 position in Maryland the center moved in ten years almost directly west to a point about 18 miles west of Baltimore, and from 1800 it continued its westward swing, dipping slightly to the south to a point in Virginia 40 miles northwest by west of Washington., In this decade it shifted 40 miles, the movement being due principally to the annexation of the territory of Louisiana.

In the next ten years, 1810 to 1820, it reached a point about 16 miles east of Moorfield in what is now the state of West Virginia. Here again there was a slight southward movement, which was due mainly to the increasing population of Georgia, Alabama and Mississippi. From 1820 to 1830 the movement continued west and south to a point aout 19 miles west-southwest of Moorfield, this being the most decided movement to the south in any decade. The reason was the annexation of Florida and increasing settlements in the southwest, notably Alabama, Louisiana, Mississippi and Arkansas.

From 1830 to 1840 the center continued west, but slightly changed its course to the north, reaching a point 16 miles south of Clarksburg. W. Va. During this decade population had increased rapidly in the prairie states and in the southern parts of Michigan and Wisconsin.

From 1840 to 1850 it moved west and slightly south again, reaching a point about 23 miles southeast of Parkersburg, W. Va., the change of direction to the south being largely due to the annexation of Texas.

From 1850 to 1860 it moved west and slightly north, reaching a point 20 miles south by east of Chillicothe, Ohio, while from 1860 to 1870 it moved west and sharply north, reaching a point about 48 miles east by north of Cincinnati. This northward movement was due in part to the waste and destruction in the south consequently upon the Civil war, and in part to the fact that the census of 1870 was defective in its enumeration of the Southern people, especially of the newly enfranchised negro population.

In 1880 the center of population had returned south to nearly the latitude occupied in 1860, being in Kentucky, just south of the Ohio river, eight miles west by south of Cincinnati; but in 1890, owing to the great increase of population in the cities of the northwest, in the state of Washington, and also L. New England, the center moved north to a point 20 miles east of Colum-

During the decade from 1890 to 1900 it moved west to a point six miles southeast of Columbus, Ind., the great increase in the population of Indian Territory, Oklahoma, and Texas being largely offset by an increase in the population of the North Atlantic states.

In 1910 it was at the point where the parallel of latitude of 39 degrees 10 minutes 12 seconds N. intersects the meridian of longitude 86 degrees 32 minutes 20 seconds W., and for the first time in its history was located in a city-Bloomington, Ind. From 1900 to 1910 it moved .7 of a mile north and 38.9 miles west, the westward movement being nearly three times as great as from 1890 to 1900, but less than the westward movement for all previous decades, except between 1800 and 1810.

In the decade 1910 to 1920 it moved only 9.8 miles-the smallest movement it has ever shown, being only about one-fourth of the movement from 1900 to 1910. The center has been in Indiana for 40 years now and it is probable that It will still be in the possession of the Hoosiers In 1940, for the historic "banks of the Wabash." the eastern boundary of Indiana, are still 25 miles away and the center is not likely to go more than 25 miles westward in the next 10

But if Indiana has a hold on one "center" which it eventually will have to relinquish, there is one state which has another "center" that it will never lose. That state is Kansas and it has permanent possession of the "geographical center of continental United States." For the United States Coast and Geodetic survey has determined that this center is located at Ogden on the Fort Riley reservation in Smith county, Kan., It is at a point which is 1,100 feet above sea level and is located in latitude 39 degrees, 50 minutes : longitude 98 degrees, 35 minutes, and a monument has been erected there to mark the spot.

How this geographical center was determined is described by officials of the survey as follows: "For a land area bounded by a true circle the center of the circle is the geographic center also; for an area bounded by a square or a rectangle the intersection of the diagonals is the true center; but for an irregular area the center is not so easily found. One method of finding it, a method sufficiently exact for all practical purposes, is to mount a map on the area on a plece of stiff paper or cardboard and then cut this paper or cardboard to the exact outline. The point at which this figure will exactly balance on a pencil or pfn point, if left free to move, indicates the location of the geographic center." It was by this method that the survey not only found the geographical center of the United States as a whole but also that of each

Kansas also has permanent possession of another center which is of even more importance than its geographic center for it has aptly been called the "hub of the United States." Out in a cow pasture on the Meade ranch in Osborne county, Kansas, is a three-foot cube of concrete in which is set a metal plate on which a point is engraved. And this is the "dominant point," the "primary station," the "geodetic capital of America" the "king pin" of all United States map-making and surveying and from it is calculated the latitude and longitude of a sixth of the world's land surface, since both Canada and Mexico have adopted this point and its sup-

porting system as the "North American Datum." It was established by the United States Coast and Geodetic survey in 1901 as the initial station for the vast network of surveys that was to be spread not only over the United States but over the entire continent. It was designated as the "primary station" after the coast and geodetic survey had employed intricate mathematical calculations in extending its "triangulation network" across the country and had shifted the rigid network of its measurements about very slight distances until the errors in longitude and latitude of all the various stations were brought to the least possible quantity. When the network was "pegged down," the "mother station" was established on the Meade ranch in north central Kansas,

"It would seem from a historic and scientific standpoint," says R. S. Patton, acting director of the coast and geodetic survey, "that the Meade ranch triangulation station is worthy of a monument at least as conspicuous and artistic as the zero milestone in Washington which marks the beginning of the Lincoln highway." (@ by Western Newspaper Union.)



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MICROPHONICS

Jessica Dragonette, NBC's songbird, returned from a short holiday in Bermuda with a new definition of a zebra. She says she overheard a native describe the black and white striped animals as "sports' model mules."

Anne S. Sutherland, the NBC dramatic actress who plays Ma Betts in "Moonshine and Honeysuckle," as a sideline operates a tea room in New York's Greenwich Village. For years Miss Sutherland played in Broadway productions under the management of Charles Frohman and David Belasco.

Principals in the new WABC-Colum-

bia comic sketch of the prize ring. "Joe Palooka," could come to blows in what might be termed the battle of the century. Four of them have worked out inside the ropes. There's Ted Bergman, 200-pound Palooka of the act, who once in his varied life managed a New York gymnasium. . . . And heavyweight Ham Fisher, cartoonist-creator of the comic strip on which the act is based, who sparred in school, hobnobs with all the fighters and still works out with them. . . . Ted Husing, ring-side commentator at Palooka bouts, who took it on the chin while in the work .- Boston Transcript.

army. . . . Harry von Zell, program announcer, once an amateur lightweight boxer of the Pacific coast. That accounts for all but 130-pound Frank Readick, who plays the part of Knobby Walsh, Palooka's classy manager. He'll toss in the

Each member of the cast of "The Goldbergs" is Jewish. Mrs. Gertrude Berg, the originator and author of the sketches, plays Mrs. Goldberg. James R. Waters, the father, is an alumnus of "Able's Irish Rose." Rosie Silber and Alfred Kohn play the children.

Wilfred Glenn is always called Bill. He says his father named him Bill because he came on the first of the month. He was born in California, which makes him one of the sun-kissed singers.

"I see that whiskers are again in vogue in England," remarked Ray Knight, the radio comedian. "Personally. I prefer my mutton chops on the inside of my face."

Magic of a Name

Teacher-Now, James, you may give me the definition of exercise. Jimmy-Exercise is work what a fellow like to do because it isn't

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