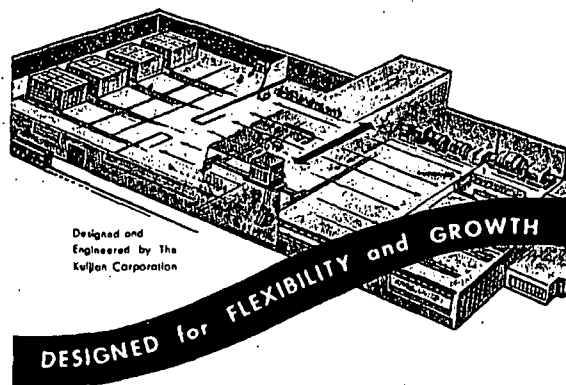




Designed and  
Engineered by The  
Kuljian Corporation

DESIGNED for FLEXIBILITY and GROWTH

## GENERAL ELECTRIC SERVICE SHOP AND WAREHOUSE

The new General Electric Service Shop and Warehouse in Philadelphia is a striking example of a building properly designed to permit flexibility of operation and future growth.

- One-floor design featuring a high, central bay to which the various departments have direct access, plus large and small overhead cranes with transfer tracks that expedite easy cross-shop movement of heavy apparatus—all this and more adds up to three flexible acres under a single roof.
- The Kuljian Corporation offers technical knowledge and experience—whether your problem deals with general industrial design, power generation, utilization or construction.
- A phone call or letter will bring a Kuljian engineer to your desk promptly for preliminary consultation without obligation.



**The Kuljian Corporation**  
ENGINEERS • CONSTRUCTORS  
1200 North Broad Street, Philadelphia 21, Pa.  
MEXICO CITY • CARACAS • MADRID • ROME • ATHENS • TOKYO • CALCUTTA

## More POWER NEWS

Philadelphia Electric Co. will spend \$3,900,000 to expand and accelerate its range smoke abatement program over the next five years. This will swell the company's expenditures for air pollution control to a total of \$7,400,000 since started nearly twenty years ago.

A big new hydroelectric development to be built by Quebec Hydro-Electric Commission on the Bersimis River has an initial capacity of 500,000 hp. The \$100,000,000 project is scheduled for operation. The concrete dam 200 ft high will form a reservoir of 9,000,000 cu ft capacity. A 7.5-mile tunnel will carry water to the power house, where turbines will operate under an 870-ft head. This plant is being designed for a final capacity of 1,000,000 hp.

Part of the power will serve the Peninsula where Noranda Mines plan to develop huge copper deposits. Four marine cables will be laid under the Lawrence River from west of Baie Comeau on the north shore to Les Bordes on the south shore. The cables will be 15 in. long and at the deepest point will be 10 ft below the river's surface.

A submarine cable linking the Kingdom of France is now under construction to let the hydro power south of the Alps feed England in the winter. The cable will be 15 in. long and at the deepest point will be 10 ft below the river's surface.

Philadelphia Electric Co. has found the answer to a problem which has troubled many utilities in recent years. That problem is the acquisition and maintenance of complete up-to-date maps to use in company planning and construction. To meet this need, Philadelphia Electric Co. has the entire four-county Philadelphia suburban area is being remapped by its own specifications, which were drawn up by its engineers, in consultation with specialists in the utility mapping field.

The project was done in two stages. First an aerial survey was made. Then base maps were made from the photo-aerials reproduced on plastic sheets. From plastic drawings, reproductions were made photo-graphically at scales varying from 100 feet to an inch, to 3,000 feet to an inch. The aerial survey and photo-aerials were made by Aero Service Corporation, Philadelphia.

In the heart of the natural gas area of Texas, the Aluminum Co. of America is building a \$100 million plant to produce aluminum with power generated by a gas turbine. Texas Power and Light Co. furnishes the power, processing about 100 tons of lignite a day. It will produce 100 tons of char and 2300 barrels of oil. The char will be pulverized and used under the boilers, burning like gas.

MESSAGE TO AMERICAN INDUSTRY • ONE OF A SERIES

# PROSPERITY IN THE USA: How Wealthy Are We?

Again, how prosperous are the people of the United States?

This is the third of a series of messages devoted to this crucially important and much-debated question. The first two messages dealt with what has been happening to our national income, both in terms of its growth and how it is divided among individuals.

This third message deals with what has been happening to the resources—factories, farms, mines, and equipment of all kinds—out of which income is created. It deals with what economists call our wealth.

It is possible for a nation to enjoy apparent prosperity for a time by rapidly exhausting its resources. But to sustain prosperity over the long pull a nation must see that its wealth is not dissipated. Hence what is happening to our wealth now is a harbinger of what is going to happen to our prosperity later on.

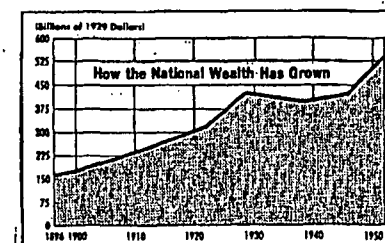
## How Wealth Is Measured

It is often asserted that the most vital element in a nation's wealth is its people. There is a lot in this idea. For example, the full value of a country's hospital and surgical equipment depends on its physicians and their skill in handling the equipment.

However, no one has ever devised a satisfactory way to put a value on human beings.

So people are omitted from calculations of national wealth. So, too, is military equipment. It is regarded as basically destructive and hence not a real addition to wealth. Otherwise, the wealth of a nation is calculated in terms of the dollar value of its physical resources.

The following chart shows the wealth of the U.S.A. at various intervals during the past 50 years. For the period through 1948 the figures come from a pioneering study by Raymond Goldsmith of the National Bureau of Economic Research, which is widely regarded as the foremost organization in its field. The figures since 1948 are estimated. To remove the effect of price changes, all of the wealth figures are calculated in 1929 prices.



From this chart one fact stands out clearly. It is that since 1929 our national wealth has not been increasing as steadily as it did during

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