

# Congress Considers Jobless and Aged

*Sociology*

## Legislative Program Deals With Social Problems

OLD persons with no money in the bank and men with frayed shirts and cracked shoes are now bothering Congress. For employment and indigent old age continue to be two important sociological problems before Congress, with indications that steps may be taken before long looking towards solutions, insofar as legislation can solve such questions.

Three bills have been introduced by Senator Robert F. Wagner, Democrat, of New York, which together constitute a program of legislation dealing with the unemployment problem, and which Senator Wagner states are in accordance with recommendations made by the committee on education and labor after an extensive investigation of the subject.

One of these bills would provide for the advance planning in detail of all public projects, including river and harbor works, flood control, public buildings and Federal highways, "so that work on any one or all of these may be accelerated in periods of de-

pression without the necessity of delay for the preparation of plans." There would be available \$150,000,000 annually for such public work, though this amount would not necessarily be used every year.

The second of these bills would scrap the present U. S. employment service, and would create instead a bureau which would coordinate the employment services of the various states and municipalities, and which would act as director in any national functioning of the employment exchanges.

The third bill would greatly expand the statistical work of the Bureau of Labor Statistics. Manufacturing, mining, quarrying, crude petroleum production, building construction, agriculture, lumbering, transportation, and communication labor statistics would be gathered and interpreted in great detail. Retail and wholesale trade labor statistics would also be included in such work.

Senator Wagner's legislative pro-

gram for dealing with the subject of unemployment follows closely upon the heels of a prediction recently made by speakers before the annual conventions of the American Economic Association and the American Statistical Society in Washington, to the effect that unemployment would be the greatest problem in the United States within the next ten years, due to the development of efficient machinery.

France seems to be the only European nation which is not already suffering deeply from this problem, but her ability to keep clear of this particular difficulty has not yet been adequately analyzed.

Germany is said to have 2,000,000 idle workers and Great Britain's minimum has been put at 1,200,000.

In the forthcoming census a larger study of unemployment in this country will be made than ever before in history.

One who is not working when questioned by the census taker will be asked: 1. Do you usually work at a gainful occupation? 2. Do you have a job of any kind? 3. Why were or are you not at work on the last working day on which you would be normally at work? 4. Do you lose a day's pay by not being at work? 5. How many days did you work last week? 6. How many days are there in your full time week?

If the person has no job of any kind, he will be asked: 1. Are you able to work? 2. Are you looking for work? 3. How many weeks have you been out of a job? 4. Why are you out of a job? Census takers are being carefully instructed that they are not to make any entries on the employment schedule for those who have retired, for those seeking their first jobs, or for married women who are keeping house and who are not now seriously trying to get jobs.

While the subject of old-age pensions is not as far advanced in the consciousness of Congress at present as that of unemployment, bills have been introduced which would allow the Federal government to cooperate on a fifty-fifty basis with individual states in encouraging legislation along this line, and they have been discussed.

## Pipe for Gaging Speed of Light

*Physics*

REFLECTING a beam of light back and forth on a ten-mile journey through a mile of iron pipe from which the air has been exhausted, in order to measure light's speed, seems to be feasible, preliminary experiments just completed at the Mt. Wilson Observatory have shown. The method was proposed by Dr. A. A. Michelson, famed physicist of the University of Chicago, who will go to Pasadena next spring for the final experiment.

Previous measurements by Dr. Michelson of the speed of light were made near Pasadena, California, by reflecting the light to a distant mountain peak and back, but uncertainties were introduced by the lack of knowledge of the condition of the air over the entire path. By using an evacuated pipe for the light path this difficulty is overcome.

In order to see whether a satisfactory image could be obtained, 1,100 feet of the pipe were laid, and preliminary tests made by F. G. Pease and E. C. Nichols, both of the Observatory staff. The light came from a narrow slit, and was made into a parallel beam by a concave mirror.

Thence the light passed to the other end of the pipe, where a flat mirror reflected it back. At the first end another flat mirror sent the light down the pipe again, and so it went back and forth, traveling, all told, about a mile. Finally, it reached a second concave mirror, which was intended to form an image of the slit.

When the pipe contained air at the same pressure as in the atmosphere, no image could be obtained. But when the air pumps were started and the air exhausted to about one-eighth of normal pressure, an image appeared. When a vacuum of about a thirtieth of ordinary pressure, or half a pound to the square inch, was reached, a clear and sharp image of the slit was seen. This shows that the method is practicable, and the rest of the mile of pipe, which is made of corrugated iron, with soldered joints, will be laid.

Prof. Michelson is now convalescing from an attack of pneumonia and will shortly go to Jamaica for a few months. He plans to go to Pasadena about the first of May, when the pipe will be finished and the final experiment can then be carried out.

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