FUGENICS

## Birth Control Effects Negative, Dr. Osborn Tells Eugenists

Better Stocks Should Aim at Four-Children Families; Population Problems Not Solvable by Present Methods

**B**IRTH SELECTION, not birth control, is the great and pressing need of the human race today. The ablest and most intelligent people, who are today limiting their families to less than enough children to replace their numbers, are the very ones who should be encouraged and enabled to have at least four children per couple. Birth control should play only a subsidiary role in eugenics, for it is a negative rather than a positive factor. At present its social effects are distinctly bad, and even in the unlikely event that all classes were persuaded to practise it equally its effects could be no better than merely neutral.

This, in condensed summary, is the central theme of the "keynote" address of the Third International Congress of Eugenics, written by Dr. Henry Fairfield Osborn, president of the American Museum of Natural History, and honorary vice-president of the Congress.

## Saw Need for Selection

As the truth of evolution was impressed upon Charles Darwin by things he saw during a voyage around the world, so the need for population control by the selection and encouragement of its fittest elements was impressed upon Dr. Osborn as a result of a world voyage which he recently completed.

Everywhere, he said, he saw evidences of overpopulation, overproduction and unemployment—harbors full of empty ships in the South Seas as well as in the ports of Europe, and men standing idle in the marketplace all the day long. As he analyzed the situation, it resolved itself into six "overs": over-destruction of natural resources, over-mechanization of industry, over-construction of means of transport, over-production of commodities, over-confidence in future demand and supply, and over-population, with the consequent permanent unemployment of the least fitted.

However, although he differed with some other scientists whose views he quoted, in regarding overpopulation as existing to a serious degree, even in the United States, Dr. Osborn refused to recognize birth control as a sovereign remedy.

"Birth control, primarily designed to prevent the overpopulation of the unfittest or dysgenic, may prove to be a two-edged sword eliminating alike the fittest and the unfittest," he said. . . . "I have in mind the French, among whom birth control has been practiced in the upper classes for centuries, with disastrous racial results. My doubts about the present propaganda and purpose of the birth control movement are that they are so largely negative and death-dealing rather than positive and birth-encouraging."

Dr. Osborn could not even admit the claims of birth control advocates to a humanitarian consideration for the sufferings of women in childbirth. On this subject he said, in part: "The attempt to relieve womankind of what may be termed the prehistoric and historic burden of the female of the species naturally enlists the sympathy both of the individualists of our time, who are ready to support any measure to give women greater freedom of profession and of action, as well as of the sentimentalists, who do not realize that women's share in the hard struggle for the existence of the race is a very essential element in the advance of womankind.'

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PHOTOGRAPHY-ENGINEERING

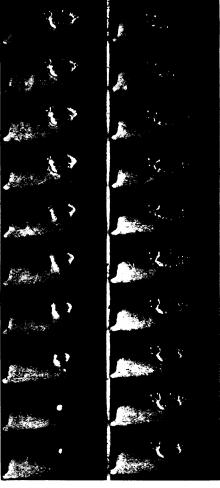
## Stroboscopic Camera Takes One Picture Per Flash

THE RECENT development of very fast film for popular cameras has made unnesessary the usual admonition to "hold still" that amateur photographers gave their smiling subjects just before snapping the picture. But it is still essential for the photographer to keep his camera still, unless he is practicing stroboscopic photography.

The stroboscope, a rapidly filickering light, has been used by engineers to examine moving chains, rotating machinery and other apparatus going

through uniform motion too fast for the eye to follow. An electrically controlled light flashing 1775 times a minute makes a generator turning at 1800 revolutions per minute appear to be doing only 25 revolutions per minute. At exactly 1800 flashes per minute the machine is "standing still" for the observer, so effective is the optical illusion. Each light flash lasts for such a fractionally short time—only one hundred-thousandth of a second—and during that time the fast-turning machinery moves through so little distance that it appears to be stationary to the eye. It also appears stationary to the camera.

Thus the subject has been made "to pose" as many as 480 times a secound. The problem of getting a new film ready for each "sitting," which appears difficult at first thought, has solved itself. For flickering light which stills a generator turning at 1800 rotations per minute can easily catch a strip of film



480 PICTURES A SECOND

This is the rate at which the falling milk drop shown above was photographed with light from a stroboscope. Follow the views from lower left to top and then from lower right to top.