Stern, Curt Technique for obtaining large numbers of unfertilized females. Following a request by the editors of DIS a description is furnished of a genetic method published in 1929.

Zeitschr. Abstgsl. 51: 315-316. A stock of the following constitution is maintained (Pasadena, Cold Spring Harbor, Rochester and other laboratories): $2^2$ B XY' Y'/y Y''. The males thus possess the long arm of the Y-chromosome (Y') attached to the X-chromosome and a Y-fragment (Y'') consisting of the short Y-arm plus part of the long arm. Y' carries the factor (or complex) K1, Y'' carries K2, both of which have to be present to permit male fertility. The females have attached X-chromosomes and the Y'' fragment. The stock keeps constant without selection.

1) In order to obtain unfertilized females with attached X-chromosomes virgin y Y'' females of the stock are mated to males from any normal stock. The F1 females will be YY and the F1 males XY''. If the F-individuals of such a culture have been removed before the hatching of the F1, all males present will be XY'' and sterile. All F1 females, in spite of the presence of their brothers, will be unfertilized accordingly.

2) In order to obtain unfertilized females without attached X-chromosomes, XY/Y'' males from the original stock are mated to virgin females from a normal stock (in order to exclude the accidental use of XXY females it is advisable to take short bristled females from a bobbed stock). The F1 males being XY'' will be sterile and the F1 females (XXY') will be unfertilized again. The original stock should occasionally be tested for the occurrence of the very rare cross-overs in the XY' Y'' males which lead to the reconstruction of a normal Y-chromosome.

Test method: Mate in one bottle 1 female and 1 male from the stock and add females from a bobbed stock. Test the sons of the bobbed females for fertility. If sterile, continue the stock from the offspring of the test culture.