Since one is inclined to admit these assumptions, our data can be of interest.

We have studied the translocation rate between the 2nd and 3rd chromosomes. The total of 915 pairs of treated 2nd and 3rd chromosomes was examined. 433 pairs were treated in spermatozoa containing the X-chromosome, and 482 pairs in spermatozoa containing the Y-chromosome. The percentage of translocations in the former was equal to 8.31%, while in the latter it made 8.29%. It is obvious that the translocation rate between the 2nd and 3rd chromosomes is equal in both cases.

Steinberg, Arthur G. The effect of inversions in the autosomes on crossing-over in the X-chromosome. The Cy inversion containing inversions in both arms of the second chromosome and the Payne inversion bearing inversions in both arms of the third chromosome were used. Counts were made on the ♂ offspring of ♀'s heterozygous for alternated xplc and either one or both of the inversions. - Autosomal inversions cause an increase in crossing over in the X chromosome. This increase is greatest in the left end of the chromosome and decreases toward the right end. The increase is due to a decrease in non crossover strands and an increase in double and triple crossover strands. The per cent of single crossover strands recovered remains statistically constant. - These results are similar to those obtained by Miss H. Redfield for the second and third chromosomes.

Stern, Curt and Dorothy Doan. Crossing-over in the male between X- and Y-chromosome. In experiments involving the theta duplication (Muller) which is attached to the fibre end of the chromosome, individuals were found suggesting loss or detachment of theta. A preliminary genetic and cytological analysis (Spring 1934) demonstrated the occurrence of crossing over in males between the X or theta and the Y-chromosome as the cause. The detached theta and the detached X-chromosome carry complimentary arms of the Y-chromosome attached to their fibre ends. - A further analysis is at present carried on by D. Doan.