21 April 1932.

Professor L. H. Hugben,
London School of Economics,
Houghton Street,
Aldwych,
W.C. 2.

Dear Hugben:

Here is the Lauterbach paper in which I make amende honorable to Galton's twin theory. The point which I expect you will find most interesting is that on specialisation of resemblance. (pp. 576-8).

The correlation between sibs in sex-linked factors is more interesting than I expected. For the homogametic sex, one has a table

<table>
<thead>
<tr>
<th></th>
<th>D</th>
<th>H</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>$\frac{1}{2} \alpha^2 (2 \alpha + q)$</td>
<td>$\frac{1}{2} \alpha^2 q$</td>
<td>$\frac{1}{2} \alpha q^2$</td>
</tr>
<tr>
<td>H</td>
<td>$\frac{1}{2} \alpha^2 q$</td>
<td>$\frac{3}{4} \alpha q (\alpha + q)$</td>
<td>$\frac{1}{2} \alpha q^3$</td>
</tr>
<tr>
<td>R</td>
<td>$\frac{1}{2} \alpha q^2$</td>
<td>$\frac{1}{2} \alpha q^3$</td>
<td>$\frac{1}{2} q^2 (\alpha + 2q)$</td>
</tr>
</tbody>
</table>

which, if I have done it right gives $\frac{4}{3} \beta^2 + \frac{4}{9} \delta^2$, i.e. a correlation between .7 and .8.

This is the only case of any interest, the others are not, I think, distinguishable from the autosomal
case, though of course there are no dominance derivatives in the heterogametic sex.

Yours sincerely,