The form of the general transformation can be simplified by applying a transformation on $\xi_2$, $\xi_8$, and the cogredient transformation on $\gamma_3$, $\gamma_6$, and similarly a transformation on $\xi_4$, $\xi_5$ and one on $\gamma_4$, $\gamma_8$.

7. The argument of Burnside, l. c., §6, page 553, is faulty. It does not show that $v = \mu$, but does prove that $v$ is a multiple of $\mu$. In view of the work of Frobenius and that of Molien, the theorem in question is true.

The University of Chicago, May 12, 1902.

ERRORS IN LEGENDRE'S TABLES OF LINEAR DIVISORS.

BY DR. D. N. LEHMER.

Some years ago an error in Legendre's Tables of Linear Forms came to my notice. Another was found recently by members of my class, and as this error was left without correction in the later editions I determined to make a careful computation of the whole set. I was surprised to find the list of errors so long. The importance of these tables for many investigations makes it desirable that all these corrections be noted. I have also compared results with the tables in Tschebyshef's Theorie der Congruenzen, Berlin, 1889. Most of the errors in Legendre's work have been carried over uncorrected into these tables.

I. Under the form $f - 29u^2$ the form $116x + 3$ should read $116x + 7$. This error was corrected in the fourth edition (1900), which is a copy of the edition of 1830.

II. Under the form $f - 38u^2$ the form $152x + 129$ should read $152x + 131$. Not corrected in the fourth edition nor in Tschebyshef.

III. Under the form $f - 43u^2$ the form $172x + 147$ should read $172x + 137$. Not corrected in the fourth edition nor in Tschebyshef.

IV. Under $f - 51u^2$ there are two forms $204x + 13$. The second of these should read $204x + 31$. This error is in the fourth edition but not in the first (1797).

V. Under $f - 61u^2$ there are so many errors that I will give the correct list: $244x + 1$, $3$, $5$, $9$, $13$, $15$, $19$, $25$, $27$, $39$, $41$, $45$, $47$, $49$, $57$, $65$, $73$, $75$, $77$, $81$, $83$, $95$, $97$, $103$, $107$, $109$, $113$, $117$, $119$, $121$, $123$, $125$, $127$, $131$, $135$, $137$, $141$, $147$, $149$, $161$, $163$, $167$, $169$, $171$, $179$, $187$, $195$, $197$, $199$, $203$, $205$, $217$, $219$, $225$, $229$, $231$, $235$, $239$, $241$, $243$. The
numerous errors in this list appear in the first and fourth editions, but are corrected in Tshebyshef.

VI. Under \( t^2 - 62u^2 \) the form 248x + 103 should read 248x + 107. Not corrected in the fourth edition nor in Tshebyshef.

VII. Under \( t^2 - 73u^2 \) the form 292x + 99 should read 292x + 69. This error does not occur in the first edition.

VIII. Under \( t^2 - 77u^2 \) there are two forms 308x + 53. The second of the two should be replaced by 308x + 137. There are also two forms 308x + 255. The second should be replaced by 308x + 171. These errors appear in the first and fourth editions, but are corrected in Tshebyshef.

IX. Under \( t^2 + 61u^2 \) the form 244x + 215 is omitted in the fourth edition and also in Tshebyshef. This error is not in the first edition.

X. Under the form \( t^2 + 77u^2 \) there are a number of errors. In the first edition the incorrect forms 308x + 89, 308x + 149 and 308x + 257 appear, and the form 308x + 113 is repeated. In the fourth edition the corrections 308x + 61, 308x + 101, 308x + 153, 308x + 297 and 308x + 119 are made. These corrections are right except the last two which should read 308x + 237 and 308x + 159. Tshebyshef is equally unfortunate in his correction of this list. He brings in the incorrect forms 308x + 119 and 308x + 143, and omits the correct form 308x + 287. His list thus contains one too many forms.

XI. Under the form \( t^2 + 101u^2 \) the forms 404x + 305, 404x + 313, 404x + 321 and 404x + 329 should be replaced by the forms 404x + 309, 404x + 317, 404x + 325 and 404x + 333. These errors are in all the tables.

XII. Under the form \( t^2 + 91u^2 \) the form 182x + 7 should read 182x + 115. Occurs in all the tables.

XIII. Under the form \( t^2 + 74u^2 \) the form 296x + 299 is used instead of the equivalent simpler form 296x + 3. This error is noted in the list of errata in the first edition and does not appear elsewhere.

Berkeley, California,
April, 1902.