VI. *Addition to Memoir on the Resultant of a System of two Equations.*

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THE elimination tables in the Memoir on the Resultant of a System of two Equations (Phil. Trans. 1857, pp. 703–715), relate to equations of the form $(a, b \ldots \text{X}x, y)^m = 0$, *without* numerical coefficients; but it is, I think, desirable to give the corresponding tables for equations in the form $(a, b, \ldots \text{X}x, y)^m = 0$ *with* numerical coefficients, which is the standard form in quantics. The transformation can of course be effected without difficulty, and the results are as here given. It is easy to see *à priori* that the sum of the numerical coefficients in each table ought to vanish; these sums do in fact vanish, and we have thus a verification as well of the tables of the present Addition as of the tables of the original memoir, by means whereof the present tables were calculated.

Table (2, 2).

Resultant of
$(a, b, c\text{X}x, y)^2$,
$(p, q, r\text{X}x, y)^2$.

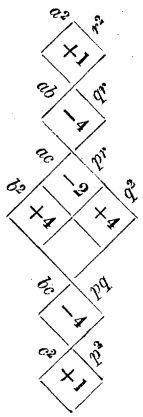


Table (3, 2).

Resultant of
$(a, b, c, d\text{X}x, y)^3$,
$(p, q, r\text{X}x, y)^2$.

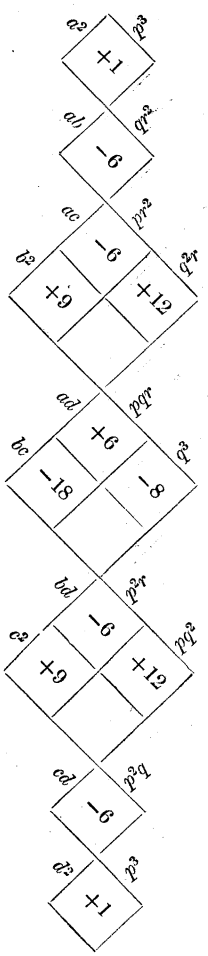


Table (4, 2).

Resultant of

$(a, b, c, d, e\mathcal{X}x, y)^4$,

$(p, q, r\mathcal{X}x, y)^2$.

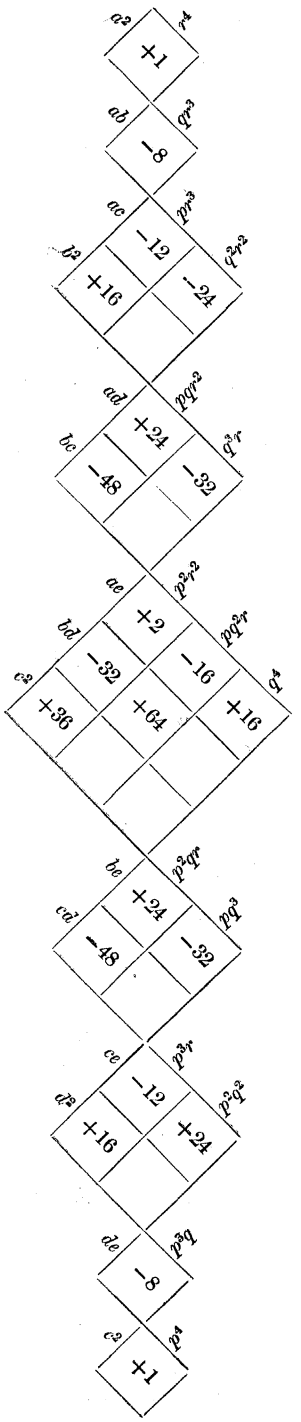
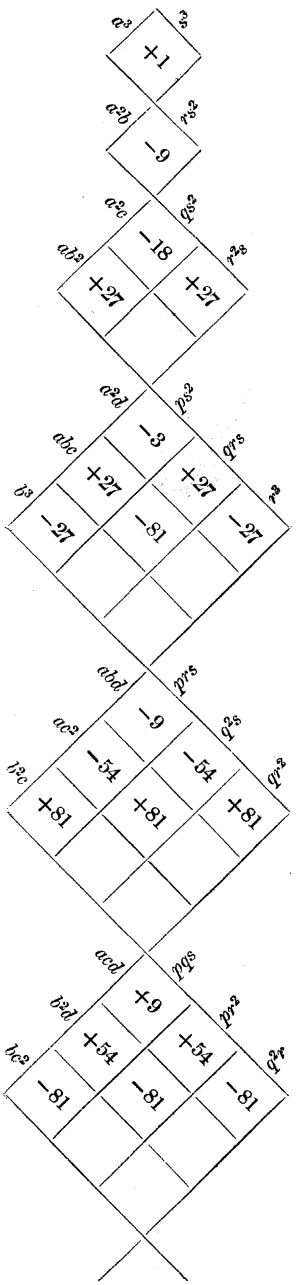


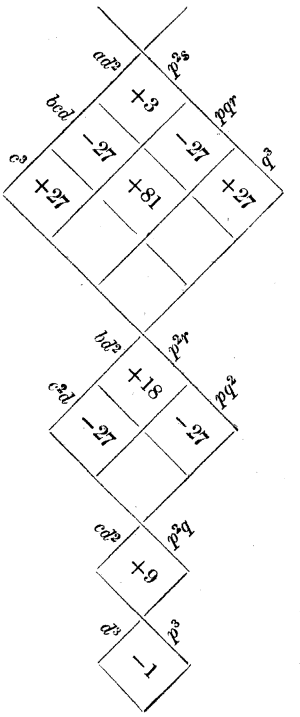
Table (3, 3)*.

Resultant of

$(a, b, c, d\mathcal{X}x, y)^3$

$(p, q, r, s\mathcal{X}x, y)^3$.





* N.B. In the corresponding table of the memoir, there is an error in the signs of the last two terms; they should be

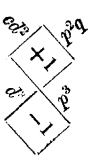


Table (4, 3).

Resultant of

$(a, b, c, d, e)(x, y)^4$,

$(p, q, r, s)(x, y)^3$.

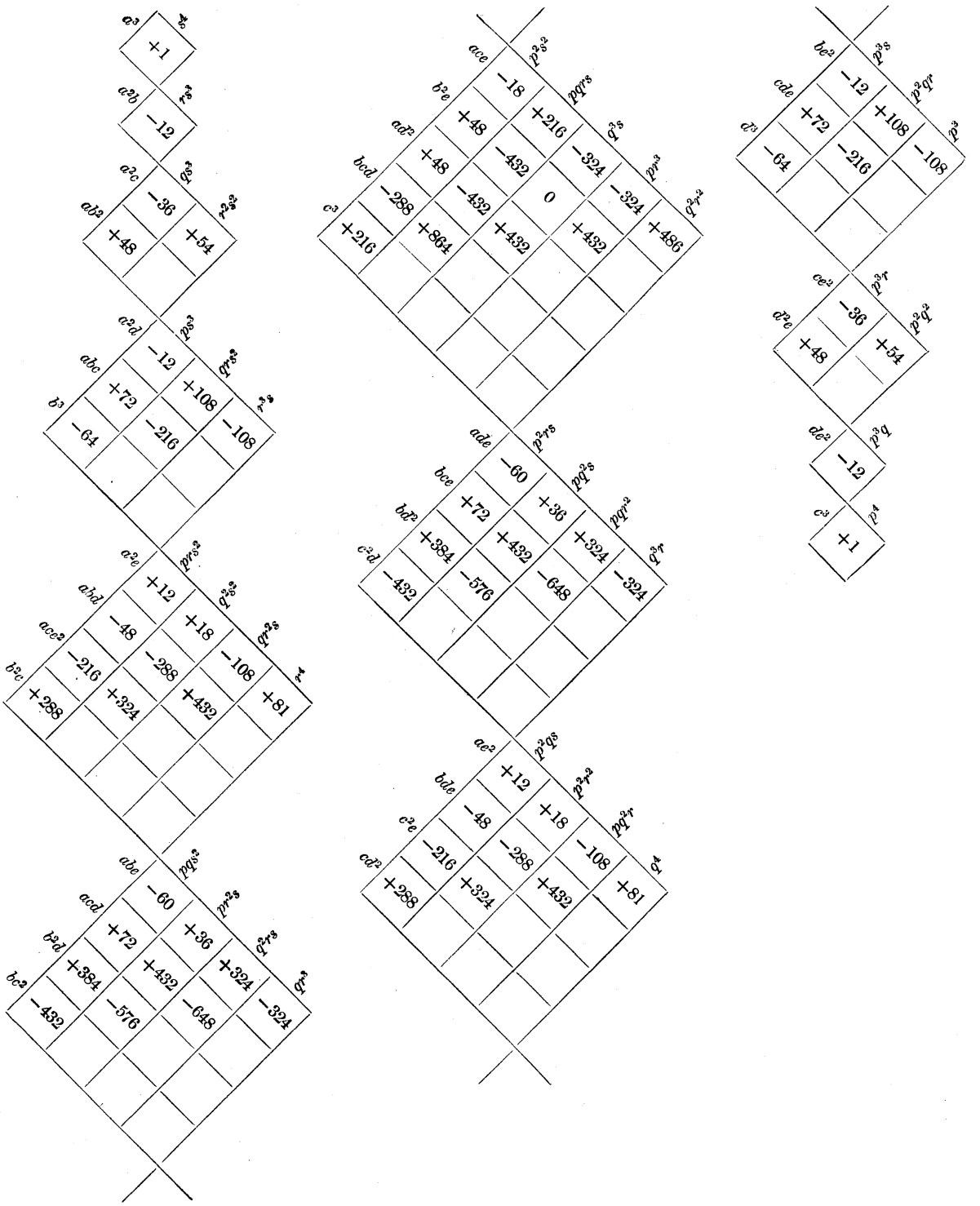
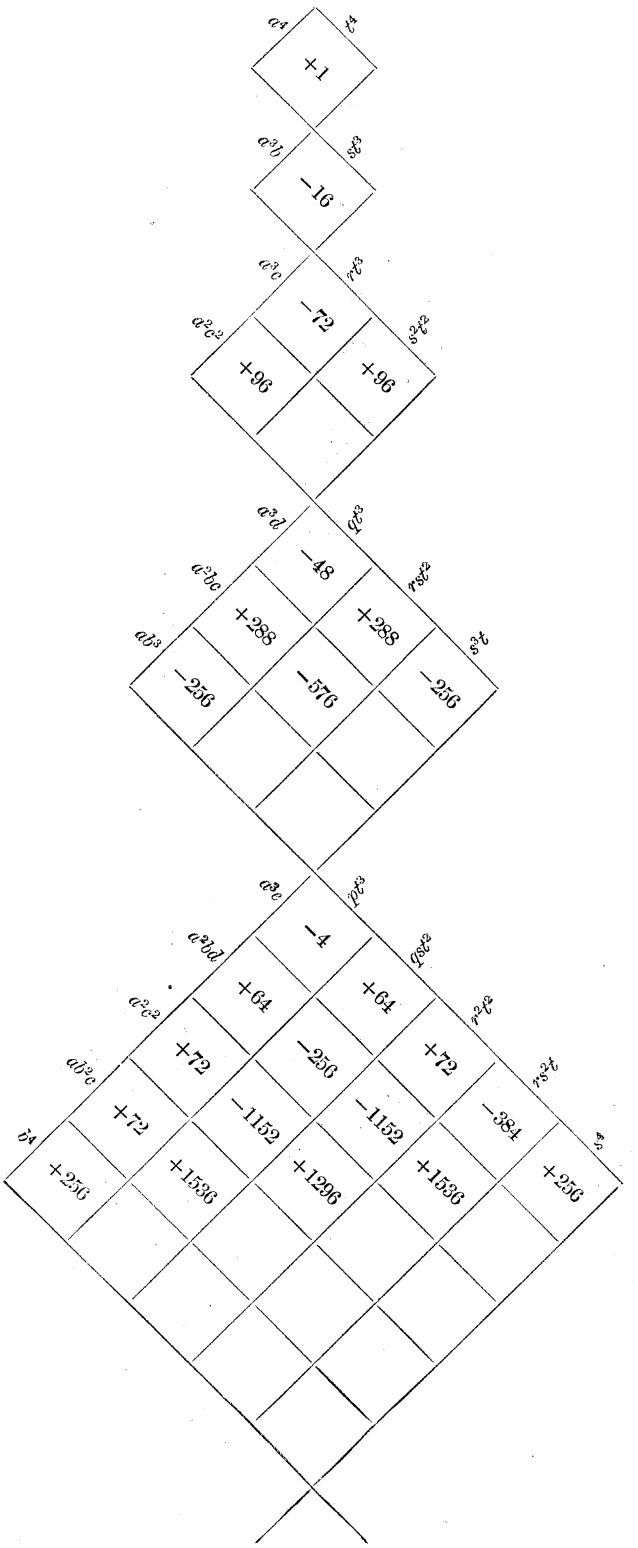


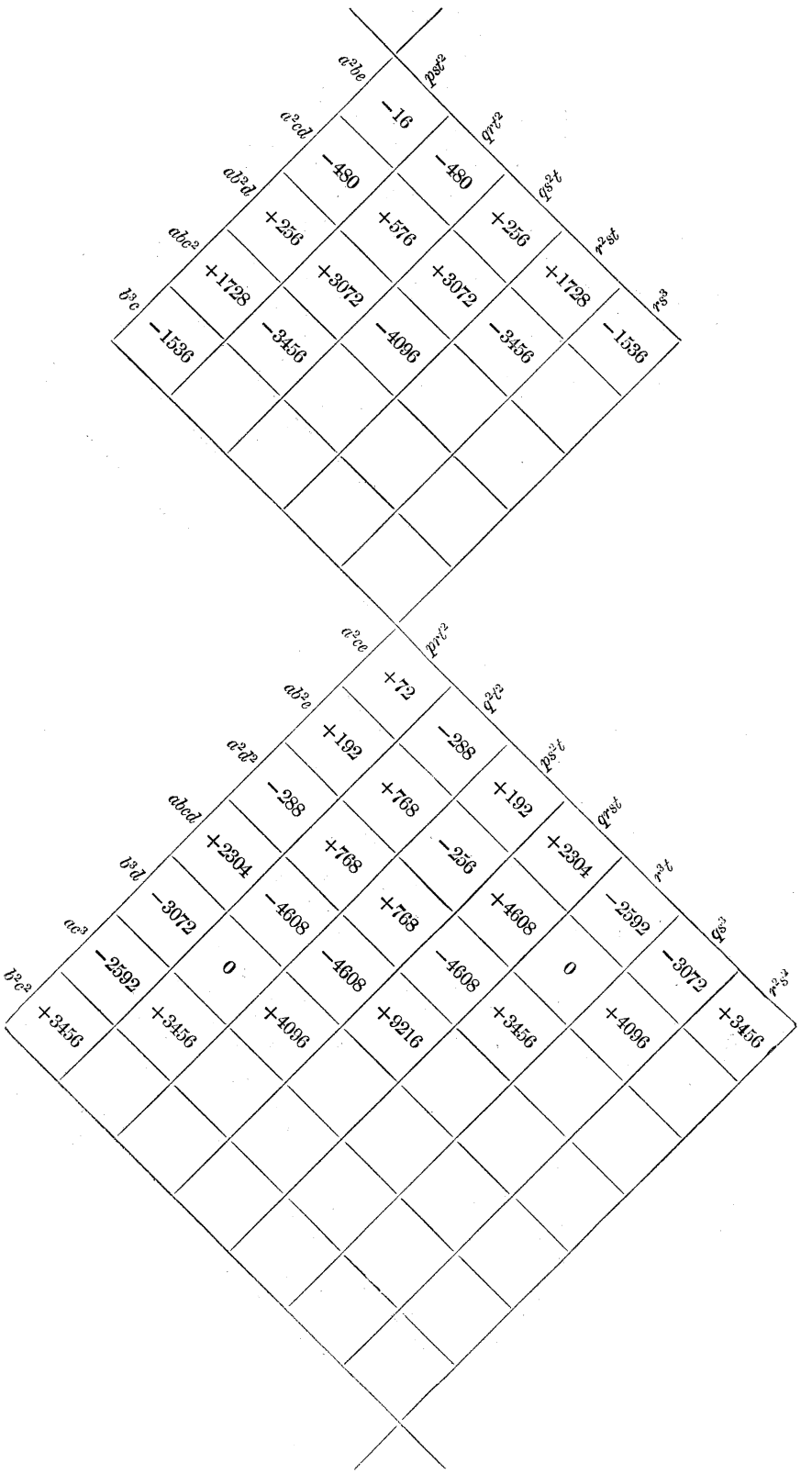
Table (4, 4).

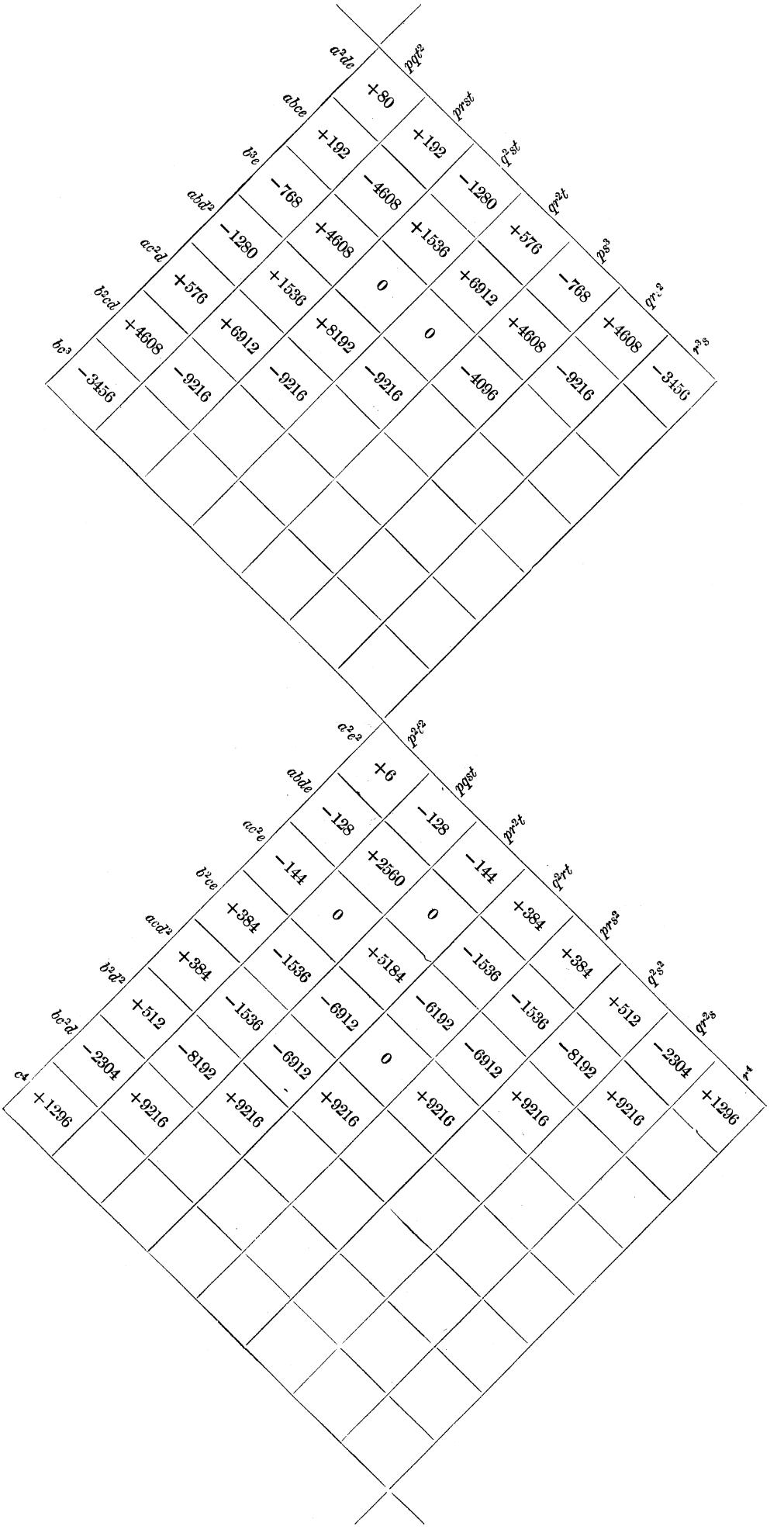
Resultant of

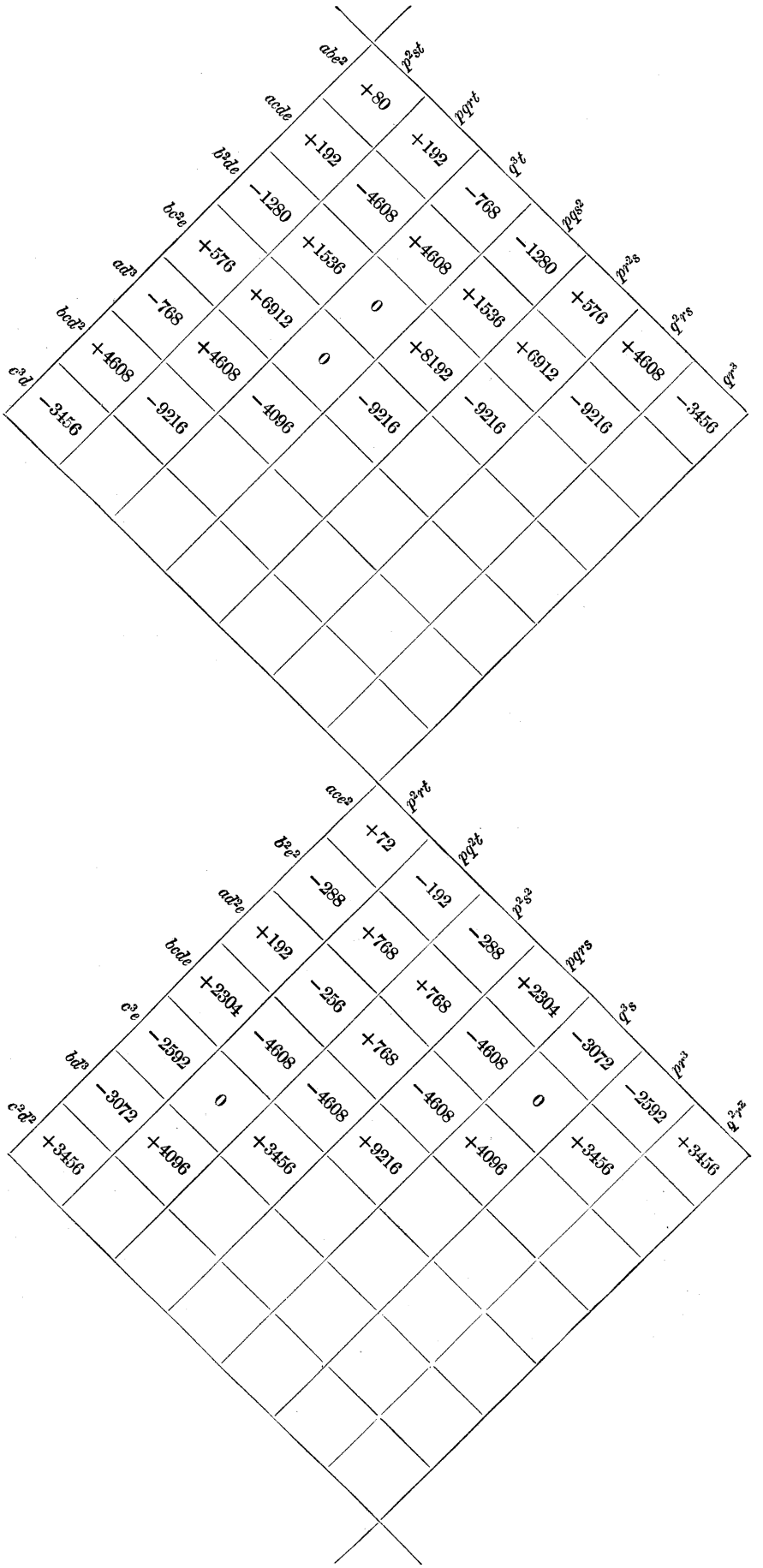
$(a, b, c, d, e)(x, y)^4$,

$(p, q, r, s, t)(x, y)^4$.




a^2be pst^2
a^2cd qrt^2
ab^2d qs^2t
abc^2 r^2st
b^3c rs^3
−16 −480 −480
+256 +576 +256
+1728 +3072 +3072 +1728
−1536 −3456 −4096 −3456 −1536
a^2ce prt^2
ab^2e q^2rt
a^2de $pqst$
$abcd$ qr^2t
b^3d pr^2t
ac^3 q^3t
b^2c^2 r^3s
+72 −288 +192
+192 +768 −256 +2304
−288 +768 +4608 −2592
+2304 −4608 +768 −4608 −3072
−3072 0 −4608 +9216 0 +4096
−2592 +3456 +4096 −4608 +3456 +3456
+3456


a^2de pqt^2 +80
$abce$ $prst$ +192 +192
b^2e qs^2t −768 −4608 −1280
abd^2 qr^2t −1280 +4608 +1536 +576
ac^2d ps^3 +576 +1536 0 +6912 −768
b^2cd qr^2s +4608 +6912 +8192 0 +4608 +4608
bc^3 r^3s −3456 −9216 −9216 −9216 −4096 −9216 −3456
a^2c^2 pr^2t^2 +6
$abde$ $pqst$ −128 −128
ac^2e pr^2t −144 +2560 −144
b^2ce $qrst$ +384 0 0 +384
acd^2 pr^3s^2 +384 −1536 +5184 −1536 +384
b^2d^2 q^2s^3 +512 −1536 −6912 −6192 −1536 +512
bc^2d qr^2s^2 −2304 −8192 −6912 0 −6912 −8192 −2304
c^4 r^4 +1296 +9216 +9216 +9216 +9216 +9216 +9216 +1296


ade^2 p^2st +80
$acde$ $pqrt$ +192 +192
b^2de q^2t −1280 −4608 −768
bce^2 pqs^2 +576 +1536 +4608 −1280
ad^2e pr^2s −768 +6912 0 +1536 +576
$bcde$ q^2rs +4608 +4608 0 +8192 +6912 +4608
c^2de qr^3 −3456 −9216 −4096 −9216 −9216 −9216 −3456
bd^2e
c^3d
acc^2e p^2rt +72
b^2e^2 pq^2t −288 −192
$abde^2$ p^2qs +192 +768 −288
$bcde$ $pqrs$ +2304 −256 +768 +2304
c^2e^2 q^2s −2592 −4608 +768 −4608 −3072
bd^2e pr^3 −3072 0 −4608 −4608 0 −2592
c^3de q^2r^2 +3456 +4096 +3456 +9216 +4096 +3456 +3456
bcd^2e
c^4d^2

	p^2qt	p^2rs	pq^2s	pqr^2	q^3r
ade^2	−16	−480	+256	+1728	−1536
bce^2	−480	+576	+3072	−3456	
bd^2e	+256	+3072	−4096		
c^2de	+1728	−3456			
cd^3	−1536				

	p^3t	p^2qs	p^2r^2	pq^2r	q^4
ae^3	−4	+64	+72	−384	+256
bde^2	+64	−256	−1152	+1536	
c^2e^2	+72	−1152	+1296		
cd^2e	−384	+1536			
d^4	+256				

	p^3s	p^2qr	pq^3
be^3	−48	+288	−256
cde^2	+288	−576	
d^3e	−256		

	p^3r	p^2q^2
ce^3	−72	+96
d^2e^2	+96	

	p^3q
de^3	−16

	p^4
e^4	+1