

AN IMPORTANT PROPERTY OF BERNOULLI'S TABLE.

In the foregoing table the sum of the Differences between separate figures of the Bernoulli Series and Dr. Ed. Young's United State^a Fish Series is equal to double the sum of the positive terms or excess of values of the Canadian Cotton Series of Differences in 1878.

This relation in another form obtains between some of the Bernoulli Series.

For instance: When the Difference between the separate figures of the Series in Column IX and XI to 23 terms is taken, the sum of these Differences without regard to signs is equal to double the difference between the last terms of each, or with regard to signs, equal to 0. This relation is shown below:

Column IX.	Column XI.	Differences.
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
1	0	+
9	0	9
45	1	44
165	11	154
495	66	429
1,287	286	1,001
3,003	1,001	2,002
6,435	3,003	3,432
12,870	8,008	4,862
24,310	19,448	4,862
43,758	43,758	0
75,582	92,378	-16,796
167,960	167,960	0 or 33,592 without regard to signs.

The last term of Column XI is..... 92,378

The last term of Column IX is..... 75,582

Difference..... 16,796

Sum ... 167,960

or the sum is equal to ten times the Difference, and $33,592 \times 5 = 167,960$.

This property of some of the Columns of Bernoulli's Table is introduced here for future reference.