

TABLE SHOWING THE ARITHMETICAL RELATIONSHIP BETWEEN BERNOULLI'S COLUMN NO. IV, DR. EDWARD YOUNG'S FISH TRADE FIGURES OF 1872-73 AND THE CANADIAN TRADE TABLES OF 1878.

No. IV shows the difference between Bernoulli's Series, No. IV, to 48 terms, and Dr. Edward Young's United States Fish Trade Figures of 1872-73.

No. V. and VI show that these differences are equal to the sums of the Positive Terms or "Final Differences" between the entries for Home Consumption and Imports for 1872-73.

No. VII shows that the figures are reciprocally interchangeable, sums one of the other, and apply also to the negative Differences.

No. IV.			No. V.		No. VI.	
BERNOULLI'S SERIES IV, with 1146 intercalated, the figures in italics.			DR. YOUNG'S FISH TRADE FIGURES OF 1872-73.		THE FIGURES IN THE DESPATCH OF MARCH 19TH, 1879. THE FINAL SERIES FOR COTTONS AND WOOLLENS IN 1878.	
			DIFFERENCES.			
			Sum of Negative or positive Differences.			
					POSITIVE TERMS OF EXCESS OF VALUES entered for "Home Consumption over values of "Imports," being Final Differences.	
					NEGATIVE TERMS, OF DEFECT OF VALUES entered for "Home Consumption," as compared with "Imports," being Final Differences.	
					Positive Terms.	
					Negative Terms.	
1	3	—	2		1	90
4	6	—	2	2	2	100
6	8	—	2	2	3	158
10	30	—	20	6	4	176
30	52	—	34	9	5	300
35	58	—	23	39	6	519
50	62	—	6	20	7	842
84	76	—	8	23	8	1043
120	108	—	12	32	9	1470
165	174	—	9	38	10	2287
177	240	—	69	3739	11	2523
220	258	—	35	2791	12	3406
280	320	—	6	13382	13	3705
364	320	—	35	49068	14	6683
455	338	—	117			
500	350	—	210			
680	353	—	327			
816	450	—	357			
960	700	—	269			
960	830	—	130			
1140	900	—	240			
1330	932	—	398			
1540	980	—	551			
1771	1188	—	583			
2024	1338	—	686			
2300	1571	—	729			
2560	1642	—	958			
2925	1712	—	1213			
3270	1863	—	1413			
3654	1884	—	1770			
4060	2144	—	1916			
4495	2354	—	2141			
4960	2477	—	2483			
5430	2508	—	2858			
5984	2614	—	3370			
6515	2810	—	3715			
7140	3452	—	3688			
7770	3801	—	3669			
8436	4553	—	3883			
9139	4790	—	4349			
9880	5204	—	4076			
10660	5293	—	5307			
11480	5904	—	5596			
12341	6530	—	5811			
13244	7804	—	5350			
14190	17929	—	3739			
15180	17971	—	2791			
16215	29507	—	13382			
0	49068	—	49068			
195,726	195,726	or	138,366			
Sum of Differences without regard to signs			138,366			
" " according to signs			69183 - 69183 = 0			

It follows as an arithmetical consequence of the foregoing relations, that if double the sum of the "Excess of Values" entered for "Home Consumption" over values of "Imports" for Cottons and Woollens in the Canadian Trade Tables of 1878, be added in the form of the Column of Differences to Bernoulli's Column No. IV, with 1146 intercalated, the resulting quantities are Dr. Edward Young's United States Fish Export Trade figures in British America in 1872-73. Numerous other relations will appear in succeeding pages.

But this is not all. No. VII shows that the separate terms of the Differences when properly grouped make up not only each separate term of the excess of values entered in the Canadian Trade Tables for "Home Consumption," on which duty is paid, but also the defect of values entered for Home Consumption as compared with imports. But these separate terms constituting the "defect of values" do not appear in the aggregates 138,366 or 69,183, and yet they are represented figure for figure, when proper adjustment of the Differences is made. These Differences, then, enclose term for term two Series, viz., the Positive terms and also the Negative terms of the Final or Dominion Differences for Cottons and Woollens in 1878. They make up as shown in No. VII, not only 69,183 but also 24,350 and the sum of these, viz., 93,533, and they do this term for term.

So that the Differences between Bernoulli's Column No. IV and Young's United States Fish Trade Figures 1872-73 made up, term for term, all the Final or Dominion Differences in the official Canadian entries purporting to represent Canadian Trade in Cottons and Woollens with Great Britain and the United States in the year 1878. In other words, the differences between Bernoulli's Column IV and Young's Fish Trade Figures, are Dr. Edward Young's and Mr. Commissioner Johnson's private representation of the trade of Canadian merchants with the United States and the people of Great Britain in Cottons and Woollens for the year named. And this private representation is based on a prior private representation of trade between the United States and Canada in respect of the Products of the Sea.