

pelled to work. After planing a board thus held in a vise, he goes to the other end of it in order to sight down it with his left eye. With this eye he is an excellent judge of levels and straight lines. He steps off with the left foot first. The most remarkable thing about this case is that, although the man is a good hunter and 'an excellent shot,' he, from some unexplained reason, puts the butt of the rifle against his right shoulder. *But he does not sight with his right eye!* He leans his head sufficiently to bring the left eye in the line of the sights, and with this eye only he takes his aim. He chooses highly crooked or angled gun-stocks because of this necessity. The left-eyed, I suspect, will always be found to have some exceptional habits or vestiges of habits still unconquered by the outnumbering and preponderant right-handed ancestry.

The third case is that of a man who has been left-handed from infancy in the use of all instruments, knife and fork, billiard cue, gun, hoe, etc. But so much was he trained and forced to use the right hand in childhood and youth in writing with pen and ink that he now habitually writes with that hand, if using pen and ink. If using a pencil, chalk, etc., he is equally expert with the left and usually prefers it.

I gather that ambidexterity should be discouraged instead of stimulated. If a child prefers left-handedness, there will be a greater celerity and unity by means of the location of the three organs dominating action in one side of the brain.

I have never seen anything but bad results from the attempt to train children to use the right hand instead of the left, when there is a decided tendency or habit to be left-handed. Moreover the attempt is never successful. The best consequences are poor, and are only awkward mixtures of the two forms, which yield confusions and indecisions during the entire subsequent life. The instance of the billiard player of whom I have spoken is one. Another and more striking evil result is that of a naturally left-handed friend, A. V. P., who by arduous and continuous training during his childhood was compelled

to write with his right hand. For all other acts he is left-handed but he can not use his left hand for writing. Although now past fifty he has always hated any writing, the mere act of doing so, and he can not do any original thinking while writing. He is for this purpose compelled to rely on a stenographer, and then his ideas flow freely and rapidly. If he tries to think, plan, or devise and to write at the same time there is a positive inhibition of thought and he must make sketches, epitomes, several efforts, copyings, etc., in a painful and most unsatisfactory manner. The attempt at ambidexterity has been a lifelong obstacle to him in his professional progress. The chief centers most closely interrelated in writing and thinking are thus demonstrably better harmonized when in one side of the brain. The mechanics of neurology are plainly less difficult than could be achieved by any foolish and unsuccessful ambidexterity.

As to the appearance of left-handed children of right-handed parents and ancestors, we are, of course, in no scientific stage to explain, any more than we can explain dextrocardia or other embryologic anomalies. Perhaps, as I have suggested, the location of the speech center in the right side of the brain, by some exceptional condition of development is the ultimate cause both of left-handedness and of left-eyedness. The problem of heredity of left-eyedness and right-eyedness would prove a most interesting study by the method of Mendel. GEORGE M. GOULD.

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STUDENTS AT GERMAN UNIVERSITIES.

THE following table, as reported by United States Consul Warner, Leipzig, Germany, shows the number of students attending twenty-one German universities during the winter semester, 1903-4, arranged in the order of their numerical importance:

For the present winter course the total number of matriculated students at the German universities is 37,854, of whom 3,093 are foreigners, the largest number ever recorded. The number of foreign students is equivalent to 8.2 per cent. of the total number.

Name of University.	Matriculated.	Others Attending Lectures.		Total.
		Male.	Female.	
Berlin.....	7,503	5,791	562	13,856
Munich.....	4,609	224	22	4,855
Leipzig.....	3,772	573	62	4,407
Bonn.....	2,294	103	87	2,484
Breslau.....	1,770	111	98	1,979
Halle.....	1,753	160	51	1,964
Tübingen...	1,387	26	3	1,416
Göttingen...	1,370	51	57	1,478
Heidelberg..	1,359	123	53	1,535
Strassburg..	1,333	96	71	1,500
Freiburg...	1,305	156	26	1,487
Würzburg...	1,283	21	75	1,379
Münster.....	1,204	55	...	1,259
Marburg.....	1,154	74	18	1,246
Giessen.....	1,071	38	11	1,120
Erlangen....	982	21	10	1,013
Königsberg..	925	81	67	1,073
Jena.....	816	49	25	890
Kiel.....	758	41	15	814
Griefswald..	687	50	...	737
Rostock....	519	30	...	549
Total....	37,854	7,874	1,313	47,041

Consul-General Guenther, at Frankfort-am-Main, reports further that of these foreigners 739 are studying philosophy, philology or history; 722, medicine; 651, mathematics or natural sciences; 366, law; 231, political economy or forestry; 178, agriculture; 135, Evangelical theology; 32, Catholic theology; 26, dentistry and 13, pharmacy. Two thousand six hundred and twenty of them come from European and 473 from non-European countries. Among the former are 986 from Russia, 588 from Austria-Hungary, 318 from Switzerland, 162 from England, 73 from Bulgaria, 69 from Roumania, 64 from France, 59 from Greece, 55 from Servia, 49 from Holland, 41 from Turkey, 43 from Italy, 33 from Luxemburg, 33 from Sweden and Norway, 14 from Belgium, 13 from Spain, 12 from Denmark, 4 from Portugal, 2 from Montenegro and 1 from the principality of Lichtenstein.

Of the other foreign students, 319 are from America, 133 from Asia, 19 from Africa and 2 from Australia. The Americans are mainly from the United States and the Asiatics for the largest part from Japan.

These figures, however, include only the lawfully immatriculated students; to them must be added those who are enrolled as hospitalants, of which 9,187 are reported in the

foregoing table, including 7,874 male and 1,313 female attending as special students.

Noteworthy among other things, in the table above, is the numerical preeminence of attendance at Berlin, where the total exceeds that of Munich, Leipzig, Bonn and Breslau combined. But 42 per cent. of Berlin's attendance is made up of non-matriculated students, representing a floating element to a considerable extent. Elsewhere in Germany this feature is a minor one in university attendance.

Among non-matriculated students, one out of every seven is a woman, and over 42 per cent. of these women in attendance at the twenty universities are found at Berlin. Outside of Berlin women students among non-matriculants are best represented at Breslau, Bonn and Strassburg, but at none of these institutions does the attendance reach a hundred.

JOHN FRANKLIN CROWELL.

WASHINGTON, D. C.

RESOLUTIONS OF THE CHEMICAL SOCIETY OF WASHINGTON IN MEMORY OF E. E. EWELL AND E. A. DE SCHWEINITZ.

At the regular meeting of the Chemical Society of Washington, held in the Assembly Hall of the Cosmos Club on Thursday evening, March 10, 1904, the following memorial was presented by Dr. Harvey W. Wiley and, in accordance with the custom of the society, was ordered spread upon the minutes of the meeting, published in *SCIENCE* and a copy furnished the family of the deceased:

Mr. E. E. Ewell was a faithful and loyal member of the American Chemical Society and of the Washington Section thereof. At the time of his removal from Washington he was one of the vice-presidents of the section and in direct line to the presidency. For one so young his services to science were notable, and especially so in view of his willingness to engage in laborious routine work which occupied a great part of his time. His activities extended to all branches of agricultural and pharmaceutical chemistry. He organized in the Bureau of Chemistry the investigations of the qualities of the articles offered to the government under contract, and had charge of that part of the work committed to the bureau from the different departments of the govern-