## CORRESPONDENCE.

## ON THE BEST METHOD OF CONSTRUCTING AN INDEX.

To the Editor of the Assurance Magazine.

SIR,—Having recently had occasion to construct an index of the lives assured in the "Eagle" Company, I beg leave to submit to you a few observations upon the subject, which, if brought under the notice of your readers, may, perhaps, be interesting and useful to them.

The requirements of an index, and the proportions of its several parts,

are the two principal questions to be considered.

Under the first head, it may be observed, that the index of a Company upon a large scale should afford as much abstract information as possible. Those who refer to it do so with different views, for the objects of their inquiry must necessarily vary with their respective duties; it is, therefore, desirable that the index should be constructed with a view to provide for the wants of each person, so far at least as to enable him to obtain information in the most direct way; and it will be proper to insert in the index particulars, some of which do not usually find a place in such a book.

Let it be supposed that an individual, signing his name "J. Smith," inquires about the bonus, premium, or assignment, &c., of his policy, without stating either number, date, or amount. This is not an unusual case,

and it will serve to illustrate my meaning, by showing the nature of the difficulties which have to be encountered. J. may stand for John, James, Joseph, &c.; there will probably be many of each kind in connexion with the like surname, and it would be very difficult to discover, without a tedious investigation, to which policy "J. Smith" refers, unless the individuality of each person recorded in the index under that name be distinctly shown. The "locality" of the assurance might be adopted as a mark of distinction; and we should, in many instances, be able to fix upon the right name by simply comparing the address of the writer with the place where the policy was effected.

It is required to be able to ascertain the amount already assured upon any one life, when a further assurance thereon is proposed; but how, in the case of "J. Smith," or any other equally common name, can this be determined easily, unless there be some unfailing method of identifying the life proposed with the life previously assured? The "date of birth" will be the best evidence for this purpose: it is stated in the proposal, and, if recorded in the index, would be of great assistance in determining the amount of assurances already existing upon the given life. If it be important to be able to ascertain this with expedition and certainty in an individual case, how much more so when it is proposed to take over the business of another Company!—for, in the latter case, it will be necessary to immediately reassure the lives which, by the combination of assurances, will have become risks beyond the maximum limit.

For these and other considerations, which it would be needless to mention here, and allowance being made for any peculiar construction of the other office books, I think that the "heading" of an index, to be generally useful, should provide for the following particulars, viz.:—surname, Christian name, date of birth, agency or address; the number of the policy or policies upon the same life, amount, and month of renewal—the month of renewal to be indicated by a numeral placed under the number of the policy. One line in the folio of a book of moderate size (say, in inches, 16 by  $20\frac{1}{2}$ ) will suffice for all ordinary cases; one half being reserved for the particulars under the first four heads, and the other half for the last three: in the latter half there will be ample space for the particulars of five policies upon the same life. The compactness of this mode of entry will be its own recommendation.

Those who are familiar with the daily operations of an Assurance Company will perceive the advantage of constructing an index upon this plan. Thus expanded, the index would of itself afford information on some points, and indicate the nearest way to obtain it on others. Time and labour would be economised, reference be made easy in the operation and sure in the result, and the usefulness of this auxiliary book would be extensive and complete.

With regard to the second part of this subject—i.e. the proportions of the several parts of the index—I may observe, that the most useful mode of division appears to me to be that which is adopted by many Offices—namely, to classify the surname under its first letter, and to subdivide according to the first vowel thereafter, adopting the first subdivision for such names as "Ash," "Epps," &c., which have no succeeding vowel. The prefixes De, Mac, O', Von, &c., must be regarded as forming a part of the surname; and, as such, will of course indicate the division under which the names should be classed. Any change of name amongst the assured, either by royal permission, marriage, or succession to title, should be noticed

in the index. It will, however, be quite sufficient if the new name or title alone be recorded, with a reference to the former one in connexion with which the particulars are entered.

The relative proportion which each division of the index should bear to the others may be found without difficulty from the commercial lists of the *Post Office Directory*, containing, as they do, the names of the middle class of people from which assurance business is principally obtained.

The result of an analysis of some of these commercial lists, also of the index of three Assurance Companies, will be seen in the following table. The column showing the total average is founded upon a classification of nearly 233,000 surnames. The table gives the percentage to the nearest first decimal.

7	ADIE	Т

First Letter	Commercial	Directory Average of Liverpool,	Ass	Total				
of Surname.	Directory, London.	Hull, Manchester, Sheffield, Birmingham, Bristol.	Α.	В.	C.	Average.		
A	3.1	3.2	3:1	3.0	2.8	3.1		
В	10.9	11.8	11.3	10.3	11.1	11.2		
$\ddot{\mathbf{c}}$	-8.5	7.7	$\frac{11.8}{7.8}$	7.8	7.7	8.1		
D	4.3	4.1	4.6	4.9	5.2	4.3		
E F	2.4	2.3	$2 \cdot 2$	1.8	3.0	2.4		
F	3.6	3.3	3.5	4.0	2.8	3.4		
G	5.1	4.7	5.2	5.1	4.2	4.9		
H	8.6	9.4	8.6	7.8	9.4	8.9		
I, J	3.2	3.8	2.9	3.1	4.1	3.4		
K	2.0	1.9	$2\cdot 2$	2.7	1.8	2.0		
$\mathbf{L}$	4.7	4.5	5.4	4.8	4.4	4.6		
M	6.7	7.2	7.4	7.8	7.4	6.9		
N	2.0	1.6	1.7	1.6	1.9	1.9		
0	1.0	1.2	1.5	1.2	.8	1.1		
P	5.9	5.5	5.6	5.6	5.9	5.7		
Q	·2	•1		1	.2	·1		
$\mathbf{R}$	4.6	4.9	5.1	5.7	4.9	4.7		
Q R S T	9.7	8.9	8.7	8.6	7.8	9.3		
<b>T</b>	4.1	4.5	4.0	4.6	5.2	4.3		
Ū, V	1.0	.7	1.6	1.3	.8	.9		
W	7.9	8.7	7.4	7.9	8.2	8.2		
W X Y	1:	1 . 1	• •		• •	1 .:		
Y	.5	•4	•3	3	•4	4		
$\mathbf{Z}$	'1	•1	•2	•2		'1		

The general agreement of the several lists is very striking; and one cannot but regard the result shown by the total average as a very proper basis for the primary division of a well-proportioned index.

It is to be observed, that the "experience" of the A and B Assurance Companies very closely follows the general average. The books of these two Companies are subdivided in the manner before suggested; and it will be fair to assume that the proportions which their lists of names bear to one another may be adopted for regulating the subdivisions of an index to be constructed upon a much larger scale.

Table II. has been formed from the lists of the A and B Companies, with a view to show the proportion per cent. which each subdivision bears to its respective division.

TABLE II.

Division.			Subdi	vision.				Subdivision.						
	a.	е.	i.	0.	u.	y.	Division.	a.	e.	i.	о.	u.	у.	
A	15	48	16	10	7	4	N	12	40	21	20	6	1	
В	30	18	10	24	16	2	Ō	30	26	19	18	4	3	
C	38	6	7	39	10		P	31	23	19	18	6	3	
D	32	24	8	14	20	2	lo	۱.,				1		
E	46	22	18	9	3	2	Q R	16	21	15	39	6	3	
F	22	25	20	29	3	1	$\mathbf{s}$	30	21	23	14	9	3	
G	31	16	22	24	5	2	Т	19	13	11	36	17	4	
H	38	14	7	28	12	1	U, V	19	17	26	35	3		
I, J	20	30	3	45	2		W	28	18	41	11		2	
K	12	32	41	9	5	1	X							
L	27	29	10	22	8	4	Y	39	11		50			
M	51	7	11	21	8	2	Z	50	5	16	24	5		

The index of the Eagle Company has been constructed upon a scale sufficiently extensive to provide for the record therein of the names of 25,000 individuals, and to allow for 35 of them to each folio, making altogether 714 folios. The number of folios allotted to each division and subdivision will be seen in the next table. It must, however, be observed that, although the Tables I. and II. form the basis of allotment, some necessary adjustment has been made for the small quantities.

TABLE III.

Divi	sion.	on. Subdivision.			Divis	sion.	Subdivision.								
Letter.	Folios.	a.	е.	i.	о.	и.	у.	Letter.	Folios.	a.	е.	i.	0.	и.	<i>y</i> .
A B C D E F G H I, J K L	21 79 56 33 18 25 35 63 31 15 34 51	3 23 21 10 8 5 10 25 6 2 9	10 15 3 8 3 6 6 9 9 5 10 4	3 8 4 3 3 5 8 4 1 5 3 6	2 18 21 5 2 7 8 17 13 1 7	2 13 6 6 1 1 2 7 1 1 3 4	1 2 1 1 1 1 1 1 1 2	NOPQRSTU, VWXYZ	12 8 39 1 36 63 26 8 56 1 2	1 2 12 6 19 5 1 16	5 2 9	2 1 7 5 14 3 2 22 16 14 13	2 1 7  13 9 9 2 6 18 14 13	1 1 2 1 2 6 4 1 1 1 2 1 2 1 3	1 1 2 ·· 2 2 1 1 ·· 6 ·· 4 ·· 3

It will be seen by this table, that if an index were to be separated into two or more volumes, the separation should be made after J, for two volumes; after G and P, for three volumes; and after D, J, and Q, for four volumes; the total number of names being, at these points, divided into nearly equal portions.

Trusting that the foregoing observations may be acceptable to your readers,

I have the honour to be, Sir, Your obedient servant,

Eagle Insurance Office, 23rd August, 1858.

F. A. CURTIS.