

TABLE I

	Compounds	Rotation in the visible	First absorption band in A.	Contribution of first band.	Second absorption region	Contribution of second absorption region	Sum of all other contributions
	Aldehydes						
I.	2-methylbutanal-1	-	2960	-			?
	3-methylpentanal-1	+	2940	+			-
	4-methylhexanal-1	+	2940	+			-
	Azides						
II.	2-azidooctane	+	2880	inactive	from 2200	+	?
	1-azido-2-methylbutane	-	2880	"	"	-	+
	1-azido-2-methylnonane	+	2880	"	"	-	+
	1-azido-3-methylpentane	-	2880	"	"	-	+
	Amino—						
III.	2-aminooctane	+	2300	-			+
	2-aminooctane hydrochloride	-	2100	-			-
	1-amino-2-methylbutane	+	2300	+			-
	Thio—						
IV.	2-thiobutane	-	2300	inactive	from 2100	-	?
	2-thioheptane	-	2300	"	"	-	?
	1-thio-2-methylbutane	-	2300	"	"	+	-
	*Iodo—						
V.	2-iodobutane	+	2630	+	from 2000	+	?
	2-iodooctane	+	2630	+	"	+	?
	1-iodo-2-methylbutane	-	2570	?	"	+	-
	1-iodo-2-methylheptane	-	2570	?	"	+	-
	1-iodo-2-methylnonane	-	2570	?	"	+	-
	1-iodo-3-methylhexane	-	2570	-	"	-	?
	1-iodo-4-methylheptane	-	2570	-	"	-	?
	1-bromo-2-methylbutane	-	2000	+		-	
		Isopropyl Derivatives					
VI.	2-iodo-3-methylbutane	+	2670	+	from 2000	-	
	4-iodo-5-methylhexane	-	2670	negligible	"	-	
	1-iodo-2, 3-dimethylbutane	-	2570	"	"	-	
	1-iodo-3, 4-dimethylpentane	-	2570	-(slightly)	"	-	
	1-azido-2, 3-dimethylbutane	-	2880	inactive	from 2200	-	+

\* Most of the normal halides were prepared by Mr. R. E. Marker.

The detailed results on these substances will be published under joint authorship.

values of  $n$ , and in one case depends upon the value of  $R_1$ .

(2) In those groups of substances in which all members are configurationally correlated (I, II, III) the direction of the predominating partial rotation of  $X$  changes sign when  $n$  passes from the value 0 to that of an integer.

The case of the halides of the normal series needs special discussion. In the secondary halides, both the first and the second absorption regions of the halogen atom seem to be active and to furnish the major part of the rotation in the visible region. In the iodides having  $n = 1$ , the principal contribution in the visible apparently is furnished by the third absorption region of the iodine atom, the first and second being of opposite sign and of small numerical value. In the bromide the rotation in the visible seems to be furnished principally by the second absorption region of the

bromine atom, the first being of opposite sign and of small value.

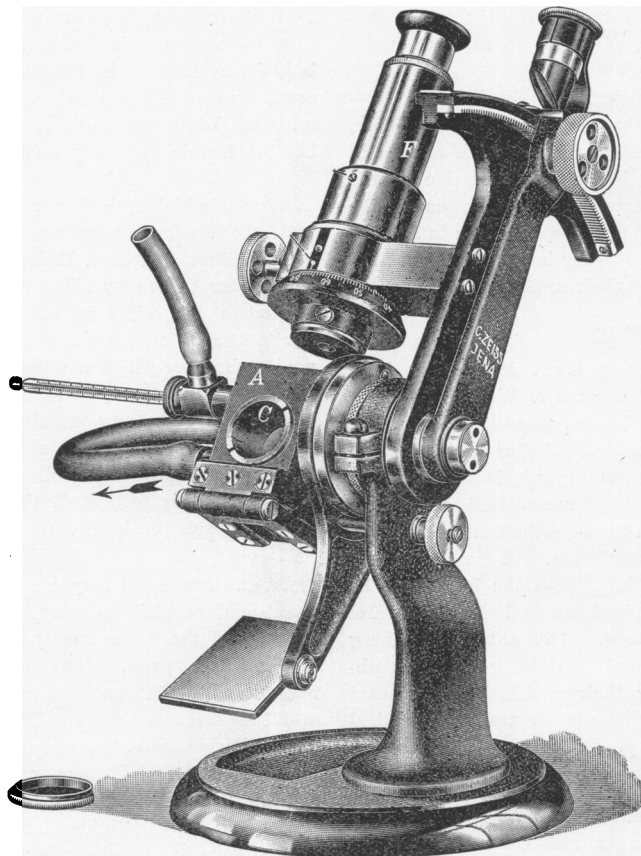
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### BOOKS RECEIVED

- CURTIS, OTIS F. *The Translocation of Solutes in Plants*. Pp. xiii + 273. McGraw-Hill. \$3.00.
- DALCQ, ALBERT. *L'Organisation de L'Oeuf chez les Chordés*. Pp. viii + 322. 100 figures. Gauthier-Villars, Paris.
- RAMSEY, R. R. *Fundamentals of Radio*. Pp. xiv + 426. 18 figures. \$3.50.
- Rôle et Formation du Bibliothécaire*. Pp. 384. Institut International de Coopération Intellectuelle, Paris. 50 fr.
- The Scientific Journal of the Royal College of Science*. Vol. V. Pp. 138. Illustrated. Edward Arnold, London. 7s., 6d.
- VERDOORN, FR., Editor, and others. *Chronica Botanica*. Vol. I. Pp. 447. Illustrated. Chronica Botanica, Leiden, Holland.

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