

The assignment of orbits makes possible the prediction of spin and parity in cases in which the spin has not been observed. Since spin change and change of parity determine the selection rules for decay, it should be possible to test the theory against experiment. Work on this is in progress.

TABLE 1.

00c. No.	Square Well	Spect. term	Spin term	V_0 of States	Shells	Total No.,
0	is	is	$1a_{1/2}$	2	2	2
1	$1p$	2p	$3p_{1/2}$ $3p_{3/2}$	$4J$	v6	8
2	id A	3d 2s	$1d_{5/2}$ $1d_{3/2}$ $2s_{1/2}$	6 4 2		20
3	if C2p	4s A	$1f_{7/2}$ $1f_{5/2}$ $2p_{3/2}$ $2p_{1/2}$ $4f_{7/2}$ $4f_{5/2}$	8 6 4	8? 22	28? 50
4	(ig 2d 35	5g 4d A A	$1g_{7/2}$ $2d_{3/2}$ $3d_{5/2}$ $3d_{3/2}$	8 6 21 12)	32	82
5) 2f tL3p	A 4p	$1h_{9/2}$ $2f_{5/2}$ $3f_{7/2}$ $3p_{3/2}$ pj/2 $1i_{3/2}$	10 8 6 4 2 14)		126
6	{ 1i Ag 3d A	7i 6g 5d A	U11/7-			