

Table I.

| Mesh.      | New Sands. |      |      |      | Old Sands. |      |      |      |
|------------|------------|------|------|------|------------|------|------|------|
|            | A          | B    | C    | D    | A          | B    | C    | D    |
| + 6        | 0.0        | 0.0  | 0.2  | 0    | 0          | 0.6  | 0    | 0.2  |
| + 8        | 0.3        | 0.2  | 0.2  | 0.1  | 0          | 0.3  | 0.3  | 0.4  |
| + 10       | 0.2        | 0.3  | 0.4  | 0.1  | 0.2        | 0.6  | 0.5  | 0.6  |
| + 14       | 0.4        | 0.8  | 0.6  | 0.5  | 0.6        | 0.9  | 0.8  | 1.1  |
| + 20       | 0.4        | 1.6  | 0.7  | 0.4  | 0.7        | 1.3  | 1.1  | 1.9  |
| + 28       | 0.2        | 2.5  | 1.2  | 1.1  | 0.9        | 1.7  | 1.5  | 3.7  |
| + 35       | 0.3        | 3.8  | 1.6  | 1.6  | 1.2        | 2.6  | 2.0  | 3.4  |
| + 48       | 0.4        | 6.9  | 5.0  | 1.9  | 11.5       | 9.4  | 9.1  | 6.2  |
| + 65       | 0.6        | 10.2 | 7.8  | 5.8  | 13.8       | 10.4 | 11.2 | 7.1  |
| +100       | 1.4        | 32.2 | 23.1 | 23.0 | 16.4       | 18.6 | 19.9 | 19.0 |
| +150       | 2.9        | 23.5 | 27.0 | 20.3 | 7.4        | 16.9 | 18.0 | 18.9 |
| +200       | 2.7        | 3.3  | 4.7  | 12.2 | 2.2        | 4.7  | 4.2  | 4.7  |
| +270       | 24.0       | 4.6  | 4.8  | 15.6 | 10.0       | 8.1  | 8.0  | 12.8 |
| -270 (Pan) | 49.9       | 4.5  | 9.2  | 7.1  | 28.9       | 13.0 | 13.8 | 9.7  |
| Clay       | 17.0       | 5.5  | 13.6 | 10.4 | 5.6        | 10.4 | 9.3  | 9.5  |

## 23. On the Device to Observe Zeeman Effect at 1 cm Wave

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To produce 1 cm Wave, we converted 3 cm Wave from a klystron 2K25 to 1 cm Wave by the use of a silicon crystal 1N23 and other necessary components.

Our device are otherwise composed of TE<sub>123</sub> sample cavity, TE<sub>011</sub> 3 cm cavity wave meter, 1N26 crystal detector with mount magnet and vacuum tube circuit.

We succeeded in observing very clearly the cavity resonance in the mode curve of the klystron tube.

Thus we are prepared to observe Zeeman effect at 1 cm wave with the magnetic field intensity 5000 Gauß at most.

## 24. Studies on Biocatalyses. (XVI)

### On the Distribution of Boron in Several Fruits

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Of various fruits, the boron rich fruits such as apple, orange and tomato were