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| 2. Largest stomata studied. Occasionally, there are two stomata with their guard cells touching. Stomata are accompanied by characteristic neighboring cells. | 2. Stomata are practically absent from the upper surfaces of these leaflets. | 2. Both surfaces of these leaflets show stomata present. |
| 3. Hairs are present on both surfaces. | 3. Hairs are absent from both surfaces. | 3. Hairs are absent from both surfaces. |
| 4. Occasionally, very small hairs are found along the margins. | 4. Hairs of large size are present along the margins. | 4. Hairs are absent along the margins. Margins are serrated. |
| 5. Two rows of palisade tissue. | 5. One row of palisade tissue. | 5. One row of palisade tissue. |
| 6. Petioles are devoid of glands. | 6. Petioles show the presence of conical or club-shaped glands. | 6. Petioles show the presence of cup-shaped glands. |
| 7. Plants are shrubs. | 7. Plants are perennial herbs. | 7. Plants are annuals. |
| 8. Apices are conical or ball-shape. | 8. Apices taper slightly. | 8. Apices taper to a sharp, slender point. |

CONCLUSIONS.

In conclusion, an examination of the three groups will bring out the following:

(1) That there are three groups, each group being distinct in itself. The resemblance of any group to each of the other two, is merely superficial.

(2) The differences between Group I and the other two are far greater than the differences between these two groups. It would therefore be only logical that, if Group III is separated from *Cassia*, Group I should also be separated from this genus. We would therefore have Group I composed of the official sennas, consisting of *Cassia angustifolia* and *C. Senna* (*C. acutifolia Delile*), considered under a new Genus, *Senna*, and then recognized as *Senna angustifolia* and *S. acutifolia*, Group II composed of *Cassia Marilandica* and *C. Medsgeri* continued under Genus *Cassia* and Group III, composed of *Cassia nictitans*, and *C. Chamæcrista*, under Genus *Chamæcrista* and known as *Chamæcrista nictitans* and *C. fasciculata*, as already recognized by botanists.

REFERENCES.

- (1) C. C. Plitt, *Cassia Medsgeri*, Shafer, in Md., Jr. *Md. Acad. Sciences*, Vol. 1 (1930), 61.
- (2) Gilg-Brandt, "Pharmacognosie," 3 Auflage, 167.
- (3) L. E. Sayre, *Am J. Pharm.*, 69 (1897), 298-307.

ABSTRACT OF PAPER PRESENTED BEFORE SECTION ON PRACTICAL PHARMACY AND DISPENSING, A. PH. A., WASHINGTON MEETING, 1934.

"A Study of the Physical and Chemical Properties of a Number of Specimens of Calomel of American and European Manufacture," by C. H. LaWall and J. W. E. Harrison.

The authors have made an investigation of fourteen commercial samples of calomel, nine of which are of American manufacture and five of European manufacture.

Especial attention was paid to the physical properties and the microscopic appearance, in the light of the U. S. P. requirement that it should show "only small isolated crystals when viewed under a lens having a magnifying power of one hundred diameters."