

ACTION AND THERAPEUTICS.

By many the action of this drug is thought resemble that of ergot (*see* p. 590), and it is used uterine diseases for the same purpose.

GRINDELIA.

Grindelia. The dried leaves and flowering tops of *Grindelia squarrosa* and of *Grindelia robusta*.

CHARACTERS. The leaves of *Grindelia robusta* alternate, pale green, smooth, coriaceous, beneath, often serrate, and at the axils have the involucre bracts are long with reflexed serrate points. Those of *Grindelia squarrosa* are very similar. Odour balsamic. Taste pungent, bitter.

Officially used in Australasian Colonies and North American Colonies.

Preparation.

Extractum Grindeliæ Liquidum. 1 in 1 of water and alcohol (90 per cent.).

Dose, 10 to 20 m.

ACTION AND THERAPEUTICS.

In small doses grindelia is a mild stomachic and cardiac sedative, but its main action depends upon the fact that in its excretion by the bronchial mucous membranes it acts as an expectorant, and also relaxes the muscular coat of the bronchial tubes, and this probably explains its efficacy in asthma. Two or three doses of twenty or thirty minims of the liquid extract (in milk, to prevent the resin, which is precipitated by excess of water, adhering to the vessel) given every twenty minutes will often allay the paroxysms of asthma. Between the attacks this dose should be taken three a day. The same quantity may with advantage be added to mixtures prescribed for chronic bronchitis, for not only is grindelia an expectorant, but it relieves the asthma-like paroxysms which so often accompany bronchitis. It is very bitter; its taste is best concealed by Spiritus Chloroformi.