CORYDALIS, TURKEY CORN OR TURKEY PEA

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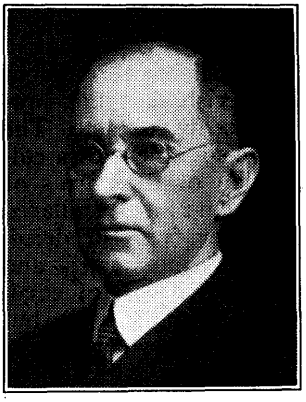
TWO species of dicentra, very similar as concerns foliage and habits, are indiscriminately gathered by root diggers and sold under the name "turkey corn" or "turkey pea." This indiscriminate collection of these related plants has unquestionably been followed by collectors during the entire time that the tubers of these plants have been used in medicine.



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However, notwithstanding the similarity of the top, the corms of the two plants differ so materially as to render them easily distinguishable.

The American Dispensatory has given therapeutic preference to Dicentra canadensis, cautioning the reader as follows against Dicentra cucullaria :

"Dicentra (Corydalis) canadensis must be distinfrom the Dicentra (Corydalis) cucullaria, which flowers at the same time, and very much resembles it."

The fact is that Dicentra cucullaria, or "Dutchman's

(1) In the February issue of The Druggists' Circular attention was called to the fact that,, under the name "turkey corn" or "turkey pea" both Dicentra cucullaria and Dicentra canadensis were indiscriminately collected. Since that date the opening of the season has permitted me to make a study of the corms of these related plants and to present herewith descriptions and illustrations. This plant being of interest to both the professions of pharmacy and medicine, this paper is sent simultaneously to a journal in each field.

Breeches," dominates' the drug of commerce. A recent lot of the green corms before me, brought by a responsible root digger, located near Cincinnati, as turkey pea, has the proportion of Dicentra cucullaria, 28 parts, to Dicentra canadensis, 1 part. Commercial specimens also present about the same proportion.

Dicentra Cucullaria Characteristics.-The corms present a triangular appearance, and are bunched together in a cluster about the base of the stem of the plant. The mother corms of preceding. years are of a dark brown color and perfectly opaque, drying hard and woody. This is, shown by Fig. 1, as well as by the central, dark colored group of Fig. 2. Bunched above them, and closely encircling the base of the growing stem, is to be found the newly formed nest of corms. They are nested, as a rule, within or upon the upper part of the cluster of last year's corms (Fig. 3), but there may also be bunched offshoots in small, clusters separated from each other (Fig. 2). The newly formed corms (of a light color in our illustration) are of a pink color, slicing throughout with a turniplike texture, of a bitterish. but not pronouncedly so, taste. The large specimens of a collection of the corms of Dicentra cucullaria, whether fresh or dried, are of the shape, and about the size, of small beech nuts (Fig. 1), but without. the sharp edges. The nesting (Fig. 3) of the new crop of corms on the summit of the growth of the preceding year tends to gradually raise the corms. of the plant to the surface of the earth. With natural woods growth the uplift and consequent exposure is overcome by the deposit of the fresh layer

F IG. 2 -Old and young corms of Dicentra cucullaria, natural group.

of leaf mould that each winter forms upon the surface of the ground. In my garden five years' growth finds the corms that were originally planted four inches deep now on the very surface of the earth, the corms being also very feeble as contrasted with the original stock.

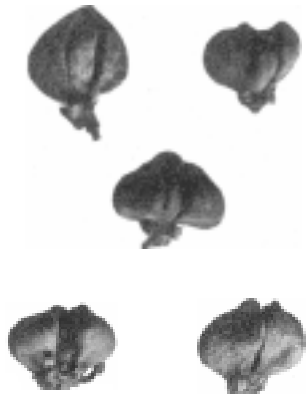

FIG. 1 .-Young corm of Dicentra cucullaria, natural size.

Dicentra canadensis produces globose, flattened corms, of a yellowish or brownish-yellow color when fresh, slicing turniplike and semitransparent throughout (Fig. 4). The new corms dry yellowish and translucent, and then become very hard and horny. They are so different in appearance from the corms of Dicentra cucullaria, that is botanically so nearly like it, as to render the replacement of the one by the other impossible if a person has acquainted. himself with the appearance of either (Fig. 4). Note the seal scar on the center of each bulb. It is characteristic.

Claytonia Virginica, or "Spring Beauty," blossoms simultaneously with the dicentras in the early springtime. This plant not only grows in dense woodlands, but is common, exposed to the sunshine, under trees in "wood pastures," which latter is not true of either species of dicentra. The bulb of Claytonia virginica is unquestionably, at times, mixed with commercial turkey pea, though in appearance it is so. different that it cannot be confounded with Dicentra cucullaria. The corm of Claytonia may be readily distinguished from that of Dicentra canadensis as follows : The corm is brown, and much larger. It is often of an oval shape, but instead of being flattened from above downward, stands edgewise in the earth, inclining at times to an irregularity in form that gives its protuberances somewhat the appearance of an artichoke. Instead of being bare of roots, as is Dicentra canadensis, separated bunches of long, strong

fibers spring from different parts (eyes) of the corm (Fig. 5), thus distinguishing it from Dicentra canadensis. The taste is also different, being sweetish instead of bitter.

Microscopic examination of the corms of these three plants will unquestionably present characteristic structural features, but the foregoing descriptions are so characteristically marked as to enable any one to easily and accurately differentiate between the corms of these three plants.

FIG. 3.-Corms of Dicentra cucullaria, showing young corms nested above those of preceding year.

SUMMARY.

There are two species of dicentra, which are very similar as to foliage and habits, and are indiscriminately gathered by root gatherers.

First-Dicentra canadensis, called Turkey Corn, with round flower spurs and globose corms.

FIG. 4 -Corms of Dicentra canadensis, natural size.

Second-Dicentra cucullaria, called Dutchman's Breeches, a form with more acute spurs, which has more

FIG. 5.—Corms of Claytonia virginica, natural size.

or less triangular corms, collected in a cluster at the base of the stem.