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[Taken from Page 284]

III. – BOTANY AND ZOOLOGY.

1. *Wild Potatoes in New Mexico and Western Texas.* – We have received from Dr. A. J. Myer, U.S.A, through the Surgeon General, a detailed communication on the discovery in western Texas of what he takes to be the common potato (*Solanum tuberosum*, L.) in a wild state. Accompanied with specimens of the tubers and of the whole plant neatly dried and prepared. Dr. Myer first detected the plant on and near the Rio Limpio, and afterwards ascertained that it was pretty widely diffused throughout all that region and into New Mexico. The tuber, though small, being rarely as large as a hickory nut, have been gathered, cooked and eaten by officers and soldiers, and they proved to be both palatable and innocent. It naturally occurred to Dr. Myer that his discovery might be turned to useful account; that these wild potatoes would probably increase in size and improve in flavor under continued cultivation; and that, if the well-known potato-rot were owing, as many suppose, to an attack of minute Fungi, or to a general debility of constitution resulting from propagation for generation after generation by the tuber, and seldom renewed by seed, or from both these causes combined, the proper remedy would be to begin anew with a wild stock; and that these indigenous potatoes of our own country would furnish an excellent stock for the purpose, and one which might be expected to resist the disease for a long time, if not altogether.

Such, in brief, is the substance of Dr. Myer's commendable communication, made to his official superior, the Surgeon General, and by him offered for publication in this journal. The article is too long to be inserted, however; especially as the facts and suggestions it comprises have not the novelty, which Dr. Myer naturally supposed they had. But his laudable endeavors and observations ought not to pass unnoticed; and having given this very brief abstract of his personal points, -which he has ably but rather diffusely elaborated, we take the opportunity to remark: --

- (1) That the wild potato-plant in question is a true potato, but not of the same species as the common potato, the *Solanum tuberosum*. Indeed two tuberiferous species of *Solanum* occur in that region. One has a white and 5-parted corolla, and oblong-lanceolate leaflets mostly acute at the base, and is probably *S. Jamesii* of Torrey (which, if we are correct, was wrongly thought to be annual): the other, to which belong the specimens sent by Dr. Myer, has a blue, 5-lobed corolla, and ovate or roundish leaflets which are often a little heart-shaped at the base; and this if really undescribed, will soon be published under the name of *S. tuberosum* by having their leaflets uniform, or only the lowest pairs smaller, while in the common potato, and the 18 allied forms recognized by Dunal as species (but perhaps all mere varieties of one species,) a set of much smaller leaflets are interposed between the larger ones.
- (2) These wild potatoes have been known for some time. Passing by Dr. James, who gathered the one which bears his name, 36 years ago, but without knowing it was tuberiferous, we may attribute their proper discovery to that most excellent botanical explorer, Mr. Fendler, whose collection made nine years ago in the northern part of New Mexico, comprised both species, with their tubers. They were also gathered by Mr. Wright, in 1849, and are contained in his invaluable collection made between Eastern Texas and El Paso by the military road then opened through that region; and again in 1851 and 1852, they were gathered in various parts of New Mexico by Mr. Wright, Dr. Bigelow, and the other naturalists attached to the Mexican Boundary Commission, who recognized their near relationship to the common potato.
- (3) Some experience has already been had in cultivating other and nearly related species as a substitute for *Solanum tuberosum*, but without the good results that were hoped for. M. Alph. De Candolle relates (*Prodr.* 13, p. 667) that the Mexican *Solanum verrucosum*, was cultivated two years in Switzerland, near Geneva, without being effected by the disease which destroyed all the crops of the common potato in the vicinity; but on the third year this was attacked. (*Vide Alph. Decand. Geogr. Bot.*, p. 815).