

these barks so much resemble each other, that it is not easy to distinguish them at first sight. But before we examine the question, whether we shall one day discover, in the real cinchona, in the cuspa of Cumana, the Cortex Angosturæ, the Indian swietenia, the willows of Europe, the berries of the coffee-tree and uvaria, a matter uniformly diffused, and exhibiting (like starch, caoutchouc, and camphor) the same chemical properties in different plants, we may ask whether, in the present state of physiology and medicine, a febrifuge principle ought to be admitted. Is it not probable, that the particular derangement in the organization, known under the vague name of the febrile state, and in which both the vascular and the nervous systems are at the same time attacked, yields to remedies which do not operate by the same principle, by the same mode of action on the same organs, by the same play of chemical and electrical attractions? We shall here confine ourselves to this observation, that, in the species of the genus cinchona, the antifebrile virtues do not appear to belong to the tannin (which is only accidentally mingled in them), or to the cinchonate of lime; but in a resiniform matter, soluble both by alcohol and by water, and which, it is believed, is composed of two principles, the cinchonic bitter and the cinchonic red.* May it then be admitted, that this resiniform matter, which possesses different degrees of energy according to the combinations by which it is modified, is found in all febrifuge substances? Those by which the sulphate of iron is precipitated of a green colour, like the real cinchona, the bark of the white willow, and the horned perisperm of the coffee-tree, do not on this account denote identity of chemical composition;† and that identity might even exist, without our concluding that the medical virtues were analogous. We see that

that the roots of the real cinchona are not employed in pharmacy. Chemical researches are yet wanting upon the very powerful bitters contained in the roots of the *Zanthoriza apiifolia*, and the *Actæa racemosa*: the latter have sometimes been employed with success as a remedy against the epidemic yellow fever in New York.

* In French, "l'amer et le rouge cinchoniques."

† The cuspare bark (Cort. Angosturæ) yields with iron a yellow precipitate; yet it is employed on the banks of the Orinoco, and particularly at the town of St. Thomas of Angostura, as an excellent cinchona; and on the other hand, the bark of the common cherry tree, which has