

fulness of his supremacy. Neither Hildebrand nor Henry would have been very much pushed for an argument in defence of the position which they held, or assumed, if these had been exposed to no more formidable attack than that of the favourite assertion of the Presbyterian Covenant. "Headship"—we may suppose His Holiness very naturally arguing—"if chosen to denote that supremacy which Christ exercises over the Church He Himself has founded, is, of course, a position as much above, as it is different from, every other. The authority which we hold over the government of the Church is not rival, but subordinate to—not independent of, but derived from His." As the disputes between the various Christian communions of the world have respect, not to the existence or non-existence of Christ's Headship—since this is acknowledged by them all—but to the laws of sub-government, (so to speak) which He has indicated in His written Will, it is clearly most illogical and absurd for any one to cover its peculiar principles, in respect to these, under the assertion of a rudimentary truth, which all equally admit. Certainly some more conclusive argument must be selected by Presbytery whether against the supremacy of Popes and of Kings, or in favour of the supremacy of its own General Assemblies. For, if the non-existence of any earthly "Head" over the visible Church be enough to overthrow the assumed authority of Popes and Sovereigns, as involving claims of earthly Headship, it must be equally sufficient to deny the same authority to General Assemblies,—which also, we believe, hold their sittings upon earth. If it be not, the argument must be that the authority assumed by those bodies is neither of a kind, nor of a degree, to be incompatible with the sole Headship of Christ. But if proof of such compatibility be left open to General Assemblies, so must it also be open to Popes, to Bishops, and to Kings. Thus the dispute is referred back again to that legitimate ground of argument from which dogmatic fanaticism has withdrawn it. The controversy turns—not on the question whether or no Christ be sole Head,—but on the question to whom He has committed the lawful powers of sub-government over the visible Church,—what the nature of those powers are—whether they represent, in any degree, the powers attached to His Headship, or whether they are so reduced in extent, and altered in their nature when existing in the hands of men, that they are lowered, in fact, to the mere duty of ordering all things "in decency and order." But whatever be the truth on the important subjects involved in these questions,—whether the Popish, or the Prelatic, or the Presbyterian view be correct as to the nature, the seat, and the extent of "spiritual power"—the Headship of Christ is a truth in itself equally consistent with

them all; and nothing can be more clear, that if the principles of Presbytery be true principles on the government and nature of the Church, they must be more coherently expressed, and more logically supported, than by the clamorous repetition of the motto of the Covenant.

Holding as we do that those principles, rightly understood, are sound,—that they are of unspeakable importance to civil society, as well as to the society of the Church, we should wish to see them more fairly dealt with. The language we have referred to does not only fail to express them, but positively misrepresents them, by ministering to notions as to the nature of "spiritual power" with which those principles are inconsistent. The right of self-government which, as founded on true ideas of the nature of "The Church" is a principle on which we think all sound ecclesiastical politics must rest, is one which is nevertheless not susceptible of just expression as a religious dogma, or as an abstract truth. It is a right of too indefinite meaning to be capable of assertion in such a shape. It may exist in a thousand different forms, and is compatible with a thousand different modifications and restrictions. A Church would be self-governed in one sense and in one degree, which elected a single representative, and agreed to abide by his decisions. A Church would be self-governed in another sense and in another degree, whose legislative and executive powers were vested in an Episcopate originally appointed by election. A Church might be self-governed in another degree, which had grown up under conditions of civil society limiting to a certain extent its powers of government, and beyond this limit leaving it free. A Church might be self-governed in other degrees under the infinite varieties of circumstance and arrangement which it is easy to conceive. But the right of self-government in the earthly society of the visible Church,—even if it could be defined with accuracy,—has nothing to do with Christ being King of His Church; that is to say, that the Kingship of Christ, in the only sense in which this expression has any meaning at all, is equally compatible with every form of outward governance, which does not involve open and clear defiance of any of the positive ordinances of His written Will. And to such contravention of His ordinances, the acts and will of EVERY ecclesiastical government may lead, whether that government be vested in a Pope, an Episcopate, a Sovereign or a General Assembly. One may be more safe, another less safe, as a guide to truth. But none are to be absolutely trusted. None, therefore, represent the Headship of Christ; nor may that Headship be pleaded by any of them as in any direct sense the foundation of its own authority,—far less as the measure of the inviolability of its own power.

THE VITAL PRINCIPLE OF PLANTS.

One of the causes that most embarrass the progress of cultivation is our not perceiving with sufficient clearness the presence among plants of a vital principle identical with that of animals. Because plants neither walk, nor fly, nor crawl; because they are not endowed with the sense of pain or pleasure; because they neither struggle nor shriek, we are too apt to forget that they are alive, and consequently to treat them as if but rods of metal or plaits of leather. Once grant that they are living beings that breathe although we see no mouths, that they digest although no stomachs are discoverable by common eyes, and above all things, that they feel, however low their sensations may be, and half the modes of cultivation employed by unskilful gardeners will stand conspicuous as palpable errors. Only show that plants are endowed with a life, identical in its nature with that of animals, although different in its manifestations, and men must necessarily make it their first business to study the history of that life, and master all which interferes with its healthy exercise. That step once taken, no cultivator capable of using his reason will poison plants by a contaminated atmosphere, or paralyze them by an eternal footbath of cold water, or suffocate them in places where not a breath of air can reach them, or starve them by withholding the food without which they cannot exist, or cram them with incessant meals of heavy indigestible matter, which can but reduce them to the condition of an apoplectic glutton. At present these things are done every day.

In general, no such evidence can be found as will satisfy unreasoning minds of the presence among plants of an animal life. But here and there cases arise which leave no doubt upon the subject. We speak not of the power of motion possessed by the lower forms of vegetation, nor of the animal matter which others generate in their cells, but of the effects produced by certain powerful agents upon the most highly organised plants of which we have any knowledge.

It was long ago shown by Professor Marcet of Geneva, that if the common Kidney Bean, the *ilac*, and other plants, were exposed to the action of such poisons as destroy animal life, they will not only perish under their influence, but in a manner analagous to what occurs among animals. If an animal is dosed with arsenic, or corrosive sublimate, or any poisonous metallic salts, it perishes by inflammation or corrosion: plants die in a similar way, their leaves turning yellow and withering, no art sufficing for their recovery. On the other hand, vegetable poisons destroy life by a species of paralysis, leaves bending, and becoming flaccid, and the whole plant rapidly falling into a state resembling stupefaction, and ending in death.*

Professor Macaire varied these experiments with the same result. Every one knows that if the stamens of the common *Berberry* are touched with a point, they suddenly rise upwards and dash their anthers against the stigma; that after a time they fall back, and then they are able again to present the same phenomenon. Here we have an example of unusually concentrated vegetable vitality. When a twig of the *Berberry* in flower is placed in weak Prussic acid, or a solution of opium, the stamens lose their irritability, and become so flaccid and flexible that they may be moved backwards and forwards without difficulty; if the flowers are cut off and placed on Prussic acid, the same thing happens, but more rapidly. When, however, the *Berberry* is placed in solution of arsenic or corrosive sublimate, the stamens equally lose their excitability, but instead of becoming flexible, they are made stiff, hard, and brittle. Effects quite similar, are produced upon the Sensitive Plant and other species.

Here, then, we have direct proof, where plants are so constituted that their phenomena can be conveniently studied, that their life is affected by destructive agents in the same manner as if they were really animals; and hence we are led to the highly important inference, that the great principle of life within them is in its essential nature the same as our own.

* See Lindley's "Introduction to Botany," vol. II., p. 151, 4th edition.