rationalism; (2) Moderate rationalism; (3) Indifferentism, lati- tudinarianism; (4) Socialism, communism, secret societies, Bible societies, clerico-liberal societies; (5) Errors regarding the Church and her rights; (6) Errors regarding civil society both in itself and in its relations with the Church; (7) Errors regarding Christian and natural morality; (8) Errors regarding Christian marriage; (9) Errors concerning the temporal power of the pope; (10) Errors relative to modern Liberalism. It was paragraphs 5, 6 and 10 which especially gave rise to discussion. In reality, however, the Syllabus did not contain a new doctrine: the Church was defending· her traditional doctrine against the progressive invasion of what were called modern ideas of liberty, *i.e.* the independence of religious authority shown by secular societies, liberty of conscience, equality of all religious confessions before the state, &c. She upheld her theoretical position as in the time of Philip the Fair or of the Reformation, and the Syllabus goes no further in this respect than the En­cyclical *Quanta cura* of the same date, or that of Gregory XVI., *Mirari vos,* of the 15th of August 1832. But the unusual form of the document should be considered: instead of an exposition of doctrine it enumerates the errors in the form of bare proposi­tions, without any qualification, and with no variation in the degree of condemnation; the result being that many people on both sides were misled.

The name Syllabus has sometimes also been given to the collection of 65 “ modernist ” propositions condemned by the decree *Lamentabili* of the Holy Office, dated the 3rd of July 1907; but this name is in no wise official.

Bibliography.—The documents from which the propositions of the Syllabus were borrowed have been collected together in the *Recueil des allocutions consistoriales, &c. citées dans l'encyclique et le syllabus* (Paris, 1865). For the history of the Syllabus: P. Hourat, *Le Syllabus, étude documentaire* (Paris, 1904); and P. Rinaldi, *Il Valore del sillabo* (Rome, 1888). For its theological value: Newman, *A Letter Addressed to his Grace the Duke of Norfolk* (London, 1875); P. Vιollet, *L’Infallibilité du pape et le syllabus* (Paris, 1904); L. Choupin, *Valeur des décisions doctrinales et dis­ciplinaires du Saint Siège* (Paris, 1907). See also Mgr. Dupanloup, *La Convention du 15 septembre et l'encyclique du 8 décembre* (Paris, 1865); and for the opposite view, see Trarieux, *Le Syllabus et la déclaration des droits de l’homme* (Paris, 1902). (A. Bo.\*)

**SYLLOGISM** (Gr. *συλλογισμός,* from *συν,* and λoγoς, an argument resulting from combination, *i.e.* of premises), in logic, an argument consisting of premises and a conclusion. Aris­totle’s definition is *(Anal. Pr. a* i. 24 b 18; cf. Top. *a* i. 100 a 25): *σvNλoycσμbs tστι* λ0γos *èv ω τtθtvτωv τtvωv ertpóv η τωv κeιμivωv kξ avaγκηs συμβalvtι* τω ταύτα eΓvαι, “ a syllogism is an argument in which, certain things being posited (the premises), something other than the premises necessarily results from their being true.” This definition, though it contains the really important facts, is too wide in two respects. (1) Aristotle himself and subsequent logicians restrict tbe term to arguments in which there are but two premises. (2) In point of fact, all logicians further confine the syllogism to arguments in which the terms are related as subject and predicate (or attribute in the widest sense). A fortiori arguments, for example, wherein relations of quantity are brought together, though syllogistic in type, are generally excluded. Owing largely to the simplicity and symmetry of the syllogism it has been a commonplace of logic to make the syllogistic form the type of all thought. Modem logicians (cf. especially F. H. Bradley in his *Logic)* have, however, shown that in practice its importance is greatly exaggerated.

A. *The Deductive Syllogism.—*This argument is the simplest form of “ mediate ” inference, *i.e.* an argument in which two terms are brought into a necessary relation by the aid of a “ middle ” term which serves as a bridge. It requires, therefore, two propositions known as premises@@1 (also spelled premisses, as being more in accordance with the Lat. *praemissae [propositiones sententiae],* things put or posited in advance) which

contain one common term and one other term each. In the conclusion the middle term disappears and the other two are brought together. The premises are assumed: whether true or false, the conclusion follows necessarily. If the premises are true, the conclusion must be true: if they are false the great' probability is that the conclusion is false. The predicate of the conclusion is called the *major* term, the subject the *minor* term; the term which is common to the premises and disappears in the conclusion is the *middle* term. Hence the premise which contains the major term is called the major premise: that which contains the minor, the minor premise. The form of the syllogism is therefore:—

A is B Major premise

C is A Minor „

C is B Conclusion

Syllogisms differ in (*a*) “ figure ” and (*b*) “ mood.” (*a*) Difference of figure depends on the order of the terms in the premises. The above is the scheme of figure I. If the middle term is the predicate in both premises, the syllogism is in figure II.: if the subject in both, figure III. These are the only figures recognized by Aristotle, though he points out that the premises in figure I. may justify a conclusion in which the predicate is not, as normally, the major term, but the minor. This possibility, according to Averroes, led to the adoption by the physician Galen of the so-called fourth figure, in which the middle term is predicate of the major and subject of the minor. This, however, destroys the appropriateness of the phrases major and minor term which are specially chosen because in fact the major term does imply the more comprehensive notion. The conclusion is an artificial proposition which would be stated naturally in the converse.

*b.* The distinction of moods is according to the quantity or quality of the propositions of the syllogism (universal, particular, affirmative, negative, in all the possible combinations). So far as mere form goes, each mood may occur in every figure, though in many cases the conclusion apparently yielded from the premises is invalid. A simple calculation shows that formally there are 64 possible moods. Investigation shows that of these nineteen@@2 only are valid, and rules have been formulated which give the reasons for the invalidity of the remaining 45.

The rules which govern syllogistic arguments thus described are:—

i. A syllogism must contain three and three terms only, (*a*) Four terms would mean the absence of any connecting link. (*b*) If the middle term is ambiguous there are really four not three terms. The violation of (*a*) is the fallacy “ Quaternio terminorum of (*b*) “ ambiguous middle.”

ii. The middle term must be distributed in one premise at least, *i.e.* it must be taken universally, as including all the particulars over which it extends (see Extension). Violation of this is the fallacy of “ undistributed middle.”

iii. No inference can be made from two negative premises.

iv. If either premise is negative, the conclusion is negative.

v. The conclusion cannot be negative, if both premises are affirmative.

vi. No term may be distributed in this conclusion which was not distributed in the premise in which it occurs. Violation of this rule is called an “ illicit process of the major (or the minor) term.”

vii. From two particular premises nothing can be inferred?

viii. If either premise is particular, the conclusion must be particular.@@3

@@@• Aristotle *προτάσεις,* originally translated *propositiones∙, prae- missae* dates from 12th century Latin translations of Arabic versions of Aristotle. The term “ premises ” (a house, &c.), is derived loosely from the legal phase denoting that which has already been mentioned in a document, and is etymologically the same.

@@@2 The following mnemonic hexameter verses are generally given (first apparently in Aldrich’s *Artis logicae rudimenta)* to aid in remembering these moods. The vowels in the words, A, E, I, O, show the quantity and quality of the premises,—

Barbara Celarent Darii Ferioque prions;.

Cesare Camestres Festino Baroco secundi; Tertia Darapti Disamis Datisi Felapton Bocardo Ferison habet: quarta insuper addit Bramantip Camenes Dimaris Fesapo Fresison.

@@@3 These latter are corollaries of previous rules.