SECTION II.

EVIDENCE.

Evidence, the material of proof, is furnished directly by our own senses or consciousness, or indirectly (as in testimony, tradition, or documents) through the senses or the consciousness of others.

If the evidence of our senses were confined to mere matters of fact, it would be more trustworthy than it is; Matters of fact but in almost all that we see, or rather say that we see, facts are mingled with inferences from facts. We speak of seeing an orange, for example; but what we do see is an object of a certain shape and color which experience justifies us in calling an orange. In this case, fact and inference seem to be merged in one. That they are not one is proved by common experience: we often imagine that we see what we do not see. A yellow ball, for example, may be mistaken for an orange, a white cloud for a snow-capped mountain, one person for another, one sound for another. In such cases, the mistake is not in fact but in inference from fact: what seemed a matter of fact turns out to be a matter of opinion. The difference between so-called matters of fact and so-called matters of opinion is, then, a difference beween matters in which the element of observed fact preponderates and those in which the element of inference from observed fact preponderates. Sometimes it is hard to tell whether what we are speaking of is matter of fact or matter of opinion, since opinion enters into almost all statements with regard to matters of fact, and since, the instant a reasonable doubt is raised concerning a so-called matter of fact, what seemed to be matter of fact becomes matter of opinion.

Large as is the proportion of inference to fact in the evidence furnished by our own senses or con-Evidence derived from sciousness, it is still larger in the evidence testimony. furnished through the senses or the consciousness of others,—that is, in evidence derived from testimony.

The admission of testimony as a means of arriving at fact is based on the general probability that men will say what they believe to be true rather than what they believe to be false; but this general probability, though it constitutes the ground for the admission of testimony, does not supply a reason for believing all that this or that witness says. Evidence that a witness has lied on one occasion tends to discredit his testimony on another. Of two equally honest eye-witnesses of a simple occurrence, one may have inferior powers of observation, which make him less able than the other to see a thing clearly; or inferior knowledge and judgment, which make him less able to draw correct inferences from what he sees; or inferior powers of expression, which make him less able to put what he has to say into intelligible language. The value of a man's testimony may, moreover, be affected by his habitual beliefs. A man who believes that spirits communicate with living men is likely to see or to hear what he conceives to be a spiritual manifestation; for he is in a condition of mind which inevitably affects his powers of observation and his inferences from what he observes. Self-interest, pride of opinion, professional jealousy, anything, in short, that affects in any way a man's ability to speak the truth on a particular occasion, tends in some degree to counterbalance the general probability that he will speak the truth.

In some classes of questions the intellectual character of a witness tells for more than in others. In a case in-Testimony of volving the property in a patent, for example, an expert, - that is, a person specially skilled in any subject on which a course of special study or experience is necessary to the formation of an opinion,1 may be the only valuable witness as to important matters at issue. It is, however, to be noted that the value of the testimony of an expert may be impaired by the fact that he is an expert. A specialist is in danger of seeing things through the distorting glasses of a theory, of looking at them from a professional rather than from a common-sense point of view, and sometimes, it is to be feared, of unfairly judging the work of a rival. Both the value of expert testimony and the risk attending it are shown by the fact that whenever such testimony is introduced, - whether the question relates to a prisoner's sanity, to the authorship of a letter, or to the infringement of a patent, - experts are usually called to support each side of the question.

Akin to the evidence derived from the testimony of experts is that derived from authority. As a man is unable to investigate for himself every question whenever it arises, he must accept the conclusions reached by others in matters of which they are competent judges. These conclusions are often the best evidence within reach: they are the conclusions of an expert.

The consequences of rejecting authority are pointed out in the following passage:—

"Suppose for a moment a community of which each member should deliberately set himself to the task of throwing off so far as possible all prejudices due to education; where each should consider it his duty critically to examine the grounds whereon rest every positive enactment and every moral precept which he has been accustomed to obey; to dissect all the great loyalties which make social life possible, and all the minor conventions which help to make it easy; and to weigh out with scrupulous precision the exact degree of assent which in each particular case the results of this process might seem to justify. To say that such a community, if it acted upon the opinions thus arrived at, would stand but a poor chance in the struggle for existence is to say far too little. It could never even begin to be; and if by a miracle it was created, it would without doubt immediately resolve itself into its constituent elements."

When a witness testifies against his own prejudices or interests, the value of his testimony is increased. Such is the testimony of a physician belonging to Unwilling one school of medicine to a wonderful cure testimony. effected by a physician of another school; that of a candidate for office to the ability or the integrity of his opponent; that of a disbeliever in "the Darwinian theory" to facts that go to support that theory. Such is testimony against the best friend of the witness or in favor of his greatest enemy. Such is testimony to the existence of a will the effect of which is to disinherit the witness.

When testimony is given incidentally its value is increased. The more incidental the point testified to, the more oblique an allusion, the less the like-Undesigned lihood of a falsehood; for a liar rarely takes testimony. pains with the small points of his story. In establishing an historical fact, an incidental allusion may do more than a direct assertion could do; for such an allusion implies that the fact alluded to was a matter of common knowledge.

¹ See Stephen's "Digest of the Law of Evidence." chap. v. art. xlix.

¹ A. J. Balfour: The Foundations of Belief, part iii. chap. ii. sect. i.

"The account given by Herodotus, of Xerxes' cutting a canal through the isthmus of Athos, which is ridiculed by Juvenal, is much more strongly attested by Thucydides in an incidental mention of a place 'near which some remains of the canal might be seen,' than if he had distinctly recorded his conviction of the truth of the narrative." ¹

"As an advocate was pleading the cause of his client before one of the prætors, he could only produce a single witness in a point where the law required the testimony of two persons: upon which the advocate insisted on the integrity of that person whom he had produced; but the prætor told him, that where the law required two witnesses he would not accept of one, though it were Cato himself. Such a speech from a person who sat at the head of a court of justice, while Cato was still living, shows us, more than a thousand examples, the high reputation this great man had gained among his contemporaries upon the account of his sincerity." ²

"Achilles, we are told, wept while the funeral pile he had erected was burning, all night long, the bones of Patroclos, 'as a father weeps when he burns the bones of his youthful son' (Iliad, xxiii. 222-225). This testifies to a general practice." ³

When Dostoevsky says in one of his novels, "Everything in the room indicated poverty; there were not even curtains to the bed," 4 he shows how common bed-curtains are in Russia.

Whenever there is a strong probability that the thing in question would have been mentioned had it existed, silence tends to prove its non-existence. Thus, the omission from an inventory of all reference to a valuable piece of property may, where other evidence is conflicting, determine the question of ownership. An example of evidence furnished by silence is given in the following passage:—

1 Whately: Elements of Rhetoric, part i. chap. ii. sect. iv.

² The Spectator, No. 557.

3 Gladstone: Preface to Schliemann's "Mycenæ."

"But of this residence [of Bolingbroke] at Oxford there is no proof at all. There is no entry of his matriculation on the books of the University, and these books are not, we believe, in any way deficient during the period of his supposed connection with Oxford. There is no trace of his residence at Christ Church on the Buttery Lists, and the Buttery Lists have from the Midsummer of 1695 been kept with scrupulous exactness. There is no trace of his residence to be found in the entry books of the Dean. We cannot find any allusion to his ever having been a resident member of the University in the correspondence of those accomplished men who must have been his contemporaries. But one circumstance seems to us conclusive. He was the patron of John Philips, and that pleasing poet has in two of his poems spoken of him in terms of exaggerated encomium. Philips was a student of Christ Church, and in his 'Cyder' he takes occasion to celebrate the eminent men connected with that distinguished seminary; but though he mentions Harcourt and Bromley, he makes no allusion to St. John."1

The independent testimony of every additional witness strengthens the probability that any statement in which all agree is true; for, in cases in which there concurrent has been no previous concert, it is more likely that such a statement is true than that the agreement in the testimony is accidental. The testimony of every additional witness, moreover, enlarges the surface exposed to attack, and consequently increases the likelihood that a falsehood on the part of any witness would be detected.

Evidence derived from testimony may have an immediate bearing on the question at issue, or it may relate to some circumstance from which an inference Direct and circumstantial may be drawn that has a bearing on the question at issue; that is, evidence may be either direct or

⁴ Feodor Dostoevsky: Crime and Punishment, part ii. chap. iv.

¹ John Churton Collins: Bolingbroke and Voltaire; The Political Life of Bolingbroke.

circumstantial. Of the distinction between the two no better statement can be found than that made by Chief Justice Shaw in his charge to the jury at the trial of John W. Webster:—

"The distinction, then, between direct and circumstantial evidence, is this. Direct or positive evidence is when a witness can be called to testify to the precise fact which is the subject of the issue in trial; that is, in a case of homicide, that the party accused did cause the death of the deceased. Whatever may be the kind or force of the evidence, this is the fact to be proved. But suppose no person was present on the occasion of the death, and of course no one can be called to testify to it,—is it wholly unsusceptible of legal proof? Experience has shown that circumstantial evidence may be offered in such a case; that is, that a body of facts may be proved of so conclusive a character as to warrant a firm belief of the fact, quite as strong and certain as that on which discreet men are accustomed to act in relation to their most important concerns. . . .

"Each of these modes of proof has its advantages and disadvantages; it is not easy to compare their relative value. The advantage of positive evidence is, that you have the direct testimony of a witness to the fact to be proved, who, if he speaks the truth, saw it done; and the only question is, whether he is entitled to belief? The disadvantage is, that the witness may be false and corrupt, and the case may not afford the means of detecting his falsehood.

"But, in a case of circumstantial evidence where no witness can testify directly to the fact to be proved, you arrive at it by a series of other facts, which by experience we have found so associated with the fact in question, as in the relation of cause and effect, that they lead to a satisfactory and certain conclusion; as when foot-prints are discovered after a recent snow, it is certain that some animated being has passed over the snow since it fell; and, from the form and number of the foot-prints, it can be determined with equal certainty, whether it was a man, a bird, or a quadruped. Circumstantial evidence, therefore, is founded on experience and observed facts and coincidences, establishing a connection between the known and proved facts and the fact sought

to be proved. The advantages are, that, as the evidence commonly comes from several witnesses and different sources, a chain of circumstances is less likely to be falsely prepared and arranged, and falsehood and perjury are more likely to be detected and fail of their purpose. The disadvantages are, that a jury has not only to weigh the evidence of facts, but to draw just conclusions from them; in doing which, they may be led by prejudice or partiality, or by want of due deliberation and sobriety of judgment, to make hasty and false deductions; a source of error not existing in the consideration of positive evidence." 1

SECTION III.

DEDUCTION AND INDUCTION.

From the point of view of logic, arguments may be classified according as they move from the general to the specific,—DEDUCTION,²—or from the specific to the general,—INDUCTION.³

A simple example of DEDUCTION has come down to us from Aristotle: "All men are mortal, Socrates is a man, therefore Socrates is mortal." In saying that "all men are mortal," we assert that every member of a class designated as "men" is mortal; in saying that "Socrates is a man," we assert that Socrates belongs to the class designated as "men;" in saying that "Socrates is mortal," we assert that what we have said concerning the class to which Socrates belongs is true of Socrates. The two assertions "all men are mortal" and "Socrates is a man" are called the premisses; 4 the asser-

¹ Chief Justice Shaw, in the case of John W. Webster, indicted for the murder of George Parkman. Reported by George Bemis.

² From de, from, and ducere, to lead.

⁸ From in, into, and ducere, to lead.

⁴ Praemissa, from prae, before, and mittere, to send or put.