death." As a substitute for so grave an alternative, Mr. Key, in his valuable work "On Practical Surgery," recommended the continued use of a "well-adapted knee-cap, and which produced a cure in some cases recorded by him. But in other cases the effects were merely palliative and only to be secured by a perpetual use of the knee-cap. Cooper, in the seventh edition, (page 850,) of his "Surgical Dictionary," offers little hope from any other treatment, than that of excision. He says:—"If we except an incision into the joint for the purpose of extracting these cartilaginous formations, we are not acquainted with any certain means of freeing a patient from the inconvenience of the complaint."

The successful issue of the following case induces me to record it with the hope that others will give the same mode of treatment a trial, and if from further experiments it shall be found productive of the same results, then another safe means may be offered the patient of avoiding the dangers attendant upon incisions into the large joints. It is probable that the different results from the same mode of treatment will be found to depend upon the greater or less predominance of osseous or cartilaginous matter in these substances. But as this cannot be determined before hand, it will of course be right to propose to the patient the advantage of a safe and mild course of treatment, before subjecting him to an operation uncertain in its effects on health and life itself.

A. B., a healthy young woman, aged 22, acting as housemaid in a gentleman's family, applied to me in April 1851, on account of a violent pain, occasionally felt in the left knee-joint. It had existed for some time, but becoming worse and more frequent she could barely perform her ordinary duties. I found a substance of an oval form, rather less than a flattened sparrow's egg, lying on the inner side of the ligamentum patellæ, and in front of the semilunar cartilage. It was moveable but could not be forced into the cavity of the joint; pressure gave considerable pain; ordinarily the knee was free from pain. I began the treatment by strapping and bandaging the joint, avoiding direct pressure over the substance. This plan afforded so little relief, and the frequent returns of pain so much interfered with her duties that the necessity for an operation was considered. To avoid this extreme measure I tried the effects of increasing the action of the absorbents by blisters repeated every two or three weeks, and by friction in the intervals with compound iodine ointment. Under this treatment, the substance lessened and became small enough to slip frequently between the articular surfaces, causing intolerable pain and the risk of suddenly falling down. Absorption continued, and at the end of about nine months the patient ceased to feel pain or inconvenience; and now, (May 25th, 1852,) I can discover no remains of loose cartilage. With the exception of some irregularity in menstruation, which yielded to a short course of iodide of iron, her health has been perfectly good, nor have any unpleasant effects followed the long-continued use of the iodine ointment.

Wrexham, May, 1852.

THE LIFE OF THE BLOOD, AS VIEWED IN THE LIGHT OF POPULAR BELIEF.

FROM
NOTES OF AN INTRODUCTORY LECTURE DELIVERED
BY THE PROFESSOR OF GENERAL PATHOLOGY IN THE
FACULTY OF MEDICINE OF MONTPELLIER.*

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THE next singular proof of the belief in the life of the blood, entertained more especially during the middle ages, is to be found in the superstitious notion that when an individual had been murdered, his blood would begin to flow afresh at the sight of the murderer, demanding as it were justice and revenge.

The origin of this belief appears undetermined. We know neither the people among whom it took its rise, nor the period at which it became general. This, however, we know, that in the twelfth century it was one of many other superstitions, founded upon a misconception of certain natural phenomena, and was considered worthy of implicit confidence.

In 1189 Henry II., of England, died at Chinon, in Touraine, and was conveyed, according to his previously expressed wish, to Fontevrault. The body was lying in the Church of the Abbey, waiting for interment, when Richard, afterwards Cœur de Lion, arrived. On entering the Church and approaching his father's coffin, he perceived that his countenance was contracted, and gave evidence of a painful death. Richard shuddered at this spectacle, remembering all the wrongs he had done his father, and the opposition he had ever made to him. He knelt at the altar, and the historians of the time assure us that during his stay in the Church, blood continued to flow from the nostrils of the corpse. (*Regis utroque naris sanguine coepit manare et quamdiu filius in Ecclesiâ fuerat not cessavit.—Scripta rerum Francicarum*, xviii., 158.)

In the sixteenth century the same belief prevailed in Italy. Come de Medicis, Grand Duke of Tuscany, caused his son Garcias to be put to death, because his second son, the Cardinal de Medici, having been assassinated, the blood of the murdered man burst out at the sight of Garcias. Thus the false interpretation of a medical fact, true in itself, has cost the life of more than one innocent individual, and we cannot avoid surprise at finding that in the seventeenth century—the age more especially of literature, taste, and refinement—the same superstition should have existed in full force, and that the practice of appealing to the blood of a murdered individual was general.

Ranchin, Chancellor of the University of Montpellier, has written a very singular monograph upon this subject, entitled "*Traité sur les causes de la cruentation des corps morts en presence des meurtriers.*" He enters upon his subject in the following manner:—"We look with pity and commiseration upon a naked

* Concluded from page 265.

corpse, pierced with wounds, and without any appearance of life; we see the judges, with certain ceremonies, present the individual suspected of being the murderer, and place him before the body, and we behold with delight the closed wounds re-open spontaneously, and pour forth blood, which cries for vengeance and demands justice. Is not this enough to astonish philosophers, physicians, and theologians." Ranchin, in treating of the subject, does so with the utmost solemnity and good faith, conducting his inquiry as minutely as did Don Calmet with regard to the vampires. He divides his work into twelve chapters, in which he endeavours to elucidate the following questions:—

1st. If the cruentation of dead bodies before their murderers be an absolute fact?

2nd. If the appearance of the phenomena to the judges and witnesses be sufficient to condemn the accused to death.

3rd. What are the ceremonies to be observed by the judges in presenting a suspected murderer to a dead body?

4th. What are the opinions of theologians upon this subject, as to whether this effusion of blood depend upon natural or supernatural causes?

5th. If demons and sorcerers may cause the effusion of blood?

6th. If the soul of the dead person is to be considered as returning and causing the effusion?

The remaining chapters are filled with inquiries relative to the power of spirits, the existence of sympathy or antipathy, or the agency of external causes in producing these effects. In fact, the whole subject is treated of in the most complete manner. The illustrious professor exhibits indeed a marvellous amount of erudition, and occasionally his good sense divests itself for a moment of the superstitious belief of the age; he, nevertheless, adopts the worst of theories, and rejects the only good one. Ranchin, in fact, concludes that the phenomena depend on the miraculous intervention of the Divinity, with a view to the detection of the culprit; in other cases he attributes them to the influence of demons, endeavouring to destroy innocent individuals. He thus entirely rejects the only true theory, that of a relic of vitality in the blood itself.

The phenomenon in question, however, affords its own explication, without having recourse to other causes than those of a vital character, since authentic facts prove, that such posthumous hæmorrhage may occur in cases of natural death, and even several days after the extinction of life.

During our short period of existence, our corporeal organs, linked as it were to the vital flame, become separated from it at death, only by effort. They retain always for a time, some few sparks of that divine fire which has animated and directed them during the curt period of time which they have traversed together. As wood remains still in a state of ignition after the flame has been extinguished, so with our internal organs, so with the heart, that centre of sanguification—the most noble, the most mysterious, whether physically or morally, of the centres which preside over the acts of

vitality. Thus, as the blood is the first formation in the embryo, and as in fact the first blood globule is the primordial rudiment, to which the principle of life is attached, so is it the last to die, and the most tenacious of preserving the last trace of existence. It was this characteristic that constituted one of the principal arguments of Harvey, who with justice speaks of the blood, as the first to live, the last to die; the "*primum vivens et ultimum moriens*."

To the preceding superstition, there succeeds one still more incredible, but equally capable of bearing witness to the truth of the assertion—that the "*life of the blood*" was an idea universally diffused among all classes, at the period alluded to. Vampirism, indeed, bears more than any other superstition upon the subject under consideration;—a moral epidemic, and one of the most degrading that the human race have to be ashamed of. It was at the commencement of the same eighteenth century, which was designated as the age of philosophy, that it prevailed in Hungary, Moravia, and even in France.

It is not very certain how the idea originated, that if one of two enemies were to die, he had the power of reappearing and recovering his life, by sucking the blood of the survivor. Of course the individual believing this superstition was liable to dreams, and malevolent spectres failed not to pursue and suck these imaginary victims, who were far more to be pitied than real invalids, and thus it was that a portion of Europe was for ten years frightened from its propriety. What could be more natural than the recital of a dream, more especially if extraordinary? and when repeated from mouth to mouth, with the usual additions, what more likely way of rendering the superstition general? It became so in fact, and the effect was so rapid that the exhausted dreamer died in a state of syncope, the victim of a diseased imagination.

To arrest this species of mental epidemic, it was thought better to humour it to a certain degree, and the magistrates of the period appear to have adopted the best means of putting a stop to it. They began by giving in to the popular belief on the subject, and pretended indeed, that they themselves believed in vampirism. To save the living, however, it was thought necessary to violate the sepulture of the dead. In doing so, the most rigorous exactitude was observed, and everything conducted in the most approved legal fashion; evidence was taken, witnesses were brought up on both sides, &c. &c., and if any imaginary evidence of vampirism was detected on the bodies of those, whom public opinion accused, their bodies were forthwith decapitated and burnt by the public executioner.

If, then, according to popular belief, the blood has had the power of resuscitating the dead;—if, in the eleventh book of the *Odyssey*, it restores to the shades of the departed the faculty of speech which they had lost at death;—if the shade of Tiresias pronounced its oracles only after drinking of that blood, which, while bubbling in its infernal receptacle, attracted around it the departed souls, thirsting for a victims blood;—if the fluid which flowed from the wound inflicted by

Jupiter upon Saturn should, in falling on the earth, have produced a race of giants;—if the blood of an outraged parent, should (as when *Coelus* was mutilated by Saturn) give origin to the Furies;—and if, lastly, the blood could give life to bodies hitherto unpossessed of it, and return it to those that had lost it, is it to be doubted, that a like belief may have led to its employment as a medicinal agent? And in truth such was the case.

The Romans for instance, when a gladiator was expiring, rushed to drink of his warm gushing blood, for the blood of the gladiator was looked upon as a specific in cases of epilepsy. Thus *Celsus*, (*Lib. iii., cap. ii., sec. 10.*) says:—“*Quindem jugulasti gladiatoris calido sanguine poto, tali morbo se liberarunt.*” And according to *Pliny*, (*book xxvj., chapt. 5.*) The elephantiasis of the Romans could only be cured by baths mixed with human blood.

The belief in the remedial efficacy of the blood reappears during the reign of *Louis XI.* of France. It seems that old men were then in the habit of drinking it, with the view to the restoration of youthful vigour; and the king himself is reported to have drunk that of a child with the same motive; thus almost realising the fable of the vampires.

It is said that this singular custom was introduced by Jewish physicians, who, during the middle ages, were privileged to be the physicians of the whole of Europe. If this assertion be true, it is singular that such a practice should have originated among those whose religion strictly prohibited its employment, and who, while forbidden to use it as food, should have done so as a medicine.

But it has been sometimes thought necessary to diminish the vital energies; and at the time that this idea prevailed, it was as usual, carried out through the instrumentality of the blood, the inconsiderate expenditure of which, surpasses all that has been sarcastically said by *Lesage* and *Beaumarchais*, against the abuse of venesection.

There is a period in history, extending over about six centuries, during which the ridiculous expression, “*minution*,” served to express a still more ridiculous custom. It was this:—Whether sick or well, no inhabitant of a cloister was exempt from the stroke of the lancet, and when once the vein had been opened, the blood was allowed to flow, until arrested by the superior of the cloister, that individual alone having the right to apply the compress. This custom had been so abused in some convents, that *Louis IX.* was under the necessity of imposing certain restrictions upon the inmates of the *Hotel Dieu* of *Pontoise*, by which they were prevented from being bled oftener than five times a year—viz., at Christmas, Lent, Easter, in the month of August, and on All Saints’ day.

It is reported by certain historians, that up to so recent a period as the year 1788, there were some religious orders, amongst whom venesection constituted a species of discipline, to be undergone at least once a year. To render this as little irksome as possible, the day on which the operation was performed, partook of

the character of a festival. The community was divided into two parts, each of which, on a given day, underwent phlebotomy; during the three succeeding days, those who had undergone the process were considered exempt from all manual labour, and received double ration. After this, the superfluous blood having been removed, they resumed their occupations as usual, while the other half of the inmates were submitted to a similar ordeal.

Certainly the absurdity of this process is only equalled by the idea of *Beaumarchais*, informing the *Hero* of *Seville* that “the entire garrison will take aperient medicine on the morrow.”

But, again, whenever the renewal of life, or at least its prolongation, has been a desideratum, the blood has been appealed to, as though it were the life itself. Hence arose the celebrated method of transfusion, described by *Libavius*, (a disciple of the school of *Paracelsus*,) 150 years previous to the disputes between France and England, relative to the priority of the discovery.

“Take (says *Libavius*) a man on the point of death, and one in full vigour, then, having two silver tubes, open the artery of the healthy individual, and introduce one of them, do the same by the sick man, and then cement the tubes in such a manner that the blood of the former shall flow into the arteries of the latter; the result will be, the disappearance of every infirmity, the source of life having been restored.”

It is evident that at its origin, this process was looked upon as an assurance of immortality, since, to use the words of *Libavius*, “the source of vitality itself was appealed to.” But the restoration of youthful vigour through the instrumentality of the blood is no new idea, it dates, indeed, from the age of fabulous history, from the same epoch from which date all the instinctive ideas of man, who, when first perceiving his own infirmities, would naturally wish to avert them. Did not *Medea* restore to youth *Eson*, father of *Jason*, and to avenge herself of *Pelias*, did she not cause him to be sacrificed by his daughters, after persuading them that his venerable blood might be replaced by that of vigorous youth.

This idea of appealing to the blood, in cases where some modification of vitality was the object sought after, was after all, a very natural one, inasmuch as in the popular belief of the day “the blood was the life.” * * * * And truly the blood is as it were the vehiculum of our existence,—the inextinguishable source of strength,—the germ of growth,—the essentially organizing and regenerating fluid. And how should it be otherwise, since it is the mainspring of that power which penetrates, animates, and keeps in movement, the different portions of the human machine; which forms, arranges, develops, and even repairs them. And when transgressing the laws of health, our organs become a prey to disease, the blood has in reserve many a wonderful resource to obviate its effects; as though containing within itself an inexhaustible treasure of life and organization.

The blood was denominated by *Borden* “a species

of liquid flesh," an expression most happily chosen. To complete it, we may say that this marvellous fluid actually fashions the mould in which it circulates; and that Prometheus like, but superior to, the Prometheus of ancient story, it furnishes in itself the creative power. But the blood, and the blood alone, possesses this peculiar property—this singular privilege; art, however far advanced, can never, will never, achieve such a triumph, nor even approach it. Art will never create even an atom of gelatine, a drop of milk, of blood, or of bile. And those physicians who allow themselves to be blindly led by the mere results of chemistry, are, as it were, walking backwards. They ignore the most essential part of the phenomena of the blood, without which the blood is no more blood, than is the cold corpse the living man.

But the instinctive belief of which we have been speaking, could not long exist without being represented through the medium of language. Language in itself, is nothing more than a depository for the thoughts, ideas, and wishes of the mind. It is the reflector or mirror, in which they assume a visible, tangible form. The instinctive notions of the mind, have on all occasions greatly influenced manners, customs, and institutions;—whether civil, religious, or political; morals have been imbued with them, and every species of popular belief tintured by them. From thence, advancing a step further, they have shown themselves in various forms of speech. Language in fact, preserves and reproduces them at every step; and it is a remarkable fact, that if we investigate the matter a little, we shall find that in the various dialects of the human race, the blood is used as synonymous, not only with the life, but also with every modification of which, whether organic or moral, it is susceptible. In fact, whatever modification we may wish to express, we shall find in various languages the word blood substituted for the word life. Thus the blood is said to be on *fire*, *frozen*, *curdled*, *appeased*, *shed*, &c. Indeed every physical or moral change of which life is susceptible, has been described under this denomination. In organic life it expresses the containing for the contained; the vehicle for the power of which it is the bearer. In the moral life, it indicates the sustaining principle of this latter, and becomes the living, visible, and appreciable symbol, of an existence that is in itself spiritual, invisible, and untangible. It is evident moreover, that as the word life, metaphorically expresses the notion of intelligence, the word blood, which is also in turn synonymous with life, should also, metaphorically, express the principle of intelligence, and hence the meaning of the word blood, in the tragedies of Seneca, where it is designated as possessing all those qualifications which might, with propriety, be attributed to the principles which guide the free will in the performance of various actions. Thus, the terms *magnanimous*, *abject*, *unjust*, *powerful*, *hostile*, &c., are applied to the blood by substitution, in the writings of the ancient tragedians; while similar terms are employed in the numerous proverbs, which in all ages have had the vitality of blood for their fundamental idea.

The public then, it is evident, are in possession of very important truths on almost every subject, even in relation to the science of man. Many a treatise has been written upon *popular errors*; a more interesting one might have for its subject, *popular truths*. Public opinions, when widely diffused, are always extremely worthy of attention; they generally conceal precious truths, modified, indeed, by the influence of time, but requiring only to be restored to their noble and primitive simplicity.

These truths pertain to the moral instinct of a people, and afford important food for meditation. Nature has exempted man from the necessity of seeking, through the instrumentality of reason, those rules which should regulate his conduct towards his fellow-creatures; these she teaches him by a species of inspiration, and by that internal satisfaction which results from their performance. She leads, indeed, the multitude by the impressions of a moral instinct, and by a vague and even unreflecting sense of truth; but to the philosopher only does she condescend to explain her motives. He, however, may seek and discover the intimate connection between popular belief, and those facts which form the ground-work of his own doctrines; and thus, while demonstrating such connection to those who are merely conscious of its existence, may confirm, by reflexion and inductive reasoning, that which to the many is but the impression of an instinct.

Cheltenham, June 1, 1852.

Provincial Medical & Surgical Journal.

WEDNESDAY, JUNE 23, 1852.

IN our recent remarks upon Dr. COWAN'S suggested alterations in the management of this journal, we candidly admitted, that although, as we have reason to know, it is conducted to the satisfaction of the great majority of those members whose interests and opinions it represents, there is considerable room for improvement. The question is—How is that improvement to be effected? Is the defect—admitting a want of perfection to be such—to be laid to the score of the Editors, or of the subscribers to the *Journal*—the Members of the Association generally? Now, as regards ourselves, we are far from wishing to assume more than is our due—nay, more, we have no objection if it will be agreeable to those who wish for a modification in the management, to avow that in some respects we are inferior to our metropolitan contemporaries. At the same time we must, in self defence, remind Dr. COWAN, that the positions of a London and a Provincial Editor are totally