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Because Bacon and others advocated that the experimental method could best be promoted by the corporate action of natural philosophers, frequent informal and sometimes secret meetings of men of science were held between 1600 and 1650 in various centers of Europe. These assemblies (sometimes referred to as the "invisible college") were soon to lead to the founding of many great scientific academies and societies. The results of the experiments and discussions, and the other events of philosophical and political importance in the early meetings, were frequently recorded. Copies of the records were then sent as letters to friends engaged in similar activities in other centers. Communication in all countries at that time was facilitated by Latin, the international language of the learned. But the vernacular was also coming into use by natural philosophers.—J. R. Porter: The Scientific Journal—300th Anniversary. Bact Rev 28: 211, 1964.
the effectiveness of hydroxyethyl starch as an antithrombotic agent.

References

From an Early Report on Phlegmasia Dolens

In the development of these facts, it will be my object to prove, or to attempt to prove, that the proximate cause of the disease called phlegmasia dolens, is a violent inflammation of one or more of the principal veins within and in the immediate neighbourhood of the pelvis, producing an increased thickness of their coats, the formation of false membranes on their internal surface, a gradual coagulation of their contents, and occasionally a destructive suppuration of their whole texture; in consequence of which, the diameters of the cavities of these important vessels become so greatly diminished, sometimes so totally obstructed as to be rendered mechanically incompetent to carry forward into their corresponding trunks the venous blood brought to them by their inferior contributory branches.—David D. Davis: An Essay on the Proximate Cause of the Disease Called Phlegmasia Dolens. Med-Chir Tr 12: 426, 1823.

Circulation, Volume XXXIII, June 1966
Paradoxical Expiratory Venous Engorgement (1723)
(Atrial Arrhythmia?)

Valsalva, therefore, having cut open the skin in the neck, and laid bare the jugular veins, observ'd that these vessels, which were turgid with blood, became less tumid, when the dog inspir'd; but in expiration, that they again became turgid, especially when the respiration approach'd more nearly to its natural state: and he saw the same afterwards, also, in other dogs, and a kind of systole and diastole in those veins.

These thing, . . . which he observ'd, . . . of the jugular veins, . . . would, perhaps, have been known to no-body, even at this time, if the observations of the celebrated Schlichtingius (s), which were publish'd in the year 1750, had not put several persons upon enquiring why the brain is rais'd up in every expiration, and subsides in every inspiration. . . .

When I repeated the experiments of Valsalva, which I have a little before described, about the end of the year 1723, I made these remarks. The integuments, on the right side of the neck, being so separated, and drawn back, in a dog, that the whole of the external jugular vein, which had been cover'd by them, lay quite bare, a tremulous kind of motion was seen in it, as there was also in the neighb'ring part of the neck, as much of it as was laid bare. Soon after, fixing my eyes attentively on the vein, and applying my hand to the abdomen, I very evidently perceiv'd, that as often as the muscles of this part were rais'd by inspiration, that vein, at the same time, immediately became tumid, nor did its tumour decrease before the abdomen subsided in expiration; for at that time, also, the turgescency of the vein manifestly decreas'd. And as these things were contrary to the observation of Valsalva, I observ'd them so much the more dilligently again and again, and took care that they should be observ'd by those who were present, . . . there seem'd the less danger of falling into error, in proportion as respiration, in both its parts, or inspiration, at least, was great, and of long continuance, and, in alternate order, always similar to itself; so that there was no difference in its state, through the whole of the observation. And I wish'd, indeed, at that time, respiration might at length return to its natural state, that I might more certainly compare my observation with the observation of Valsalva.—JOHN BAPTIST MORGAGNI: The Seats and Causes of Diseases (translated by Benjamin Alexander). London, Printed for A. Millar and T. Cadell, 1789, p. 518.
An Intellectual Exercise and Challenge to Contemporary Writing

The scientific paper is a fraud in the sense that it does give a totally misleading narrative of the processes of thought that go into the making of scientific discoveries. The inductive format of the scientific paper should be discarded. The discussion which in the traditional scientific paper goes last should surely come at the beginning. The scientific facts and scientific acts should follow the discussion, and scientists should not be ashamed to admit, as many of them apparently are ashamed to admit, that hypotheses appear in their minds along uncharted by-ways of thought; that they are imaginative and inspirational in character; that they are indeed adventures of the mind.—P. B. MEDAWAR: Is the Scientific Paper Fraudulent? Yes; It Misrepresents Scientific Thought. Saturday Review, p. 43 (Aug. 1), 1964.
PULMONARY CAPILLARY BED CHANGES


Malignancy and Phlebitis

Phlebitis (phlegmasia alba) in a lower limb, occurring in a patient after middle life, not obviously of a gouty habit, should suggest the possibility of carcinoma of the stomach, which has, so far, not presented ordinary symptoms of this malady.—Trousseau.

Circulation, Volume XXXIII, June 1966

Successful Search for Authorship

Thus in this pursuit of source material I discovered Mrs. Sarah Hoare, a minor British poet of the early 19th century, whose poems devoted to flowers, included this much-quoted verse dedicated to the foxglove:

And Digitalis wisely given,
Another boon of favoring Heaven
Will happily display;
The rapid pulse it can abate,
The hectic flush can moderate,
And blest by him, whose will is fate,
May give a happier day.


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A Problem of Retrograde Vertebral Flow, 100 Years Ago

Successful Operation for Subclavian Aneurism.—The first No. of the New Orleans Medical Record, edited by the well-known indefatigable Dr. Bennet Dowler, contains an interesting account, by Dr. A. W. SMYTH, of a case of a mulatto man, thirty-two years of age, admitted into the Charity Hospital, New Orleans, May 9, 1864, with aneurism of the right subclavian artery. The tumour was of the size of a small orange, "was circumscribed and round in shape, filling up the posterior inferior triangle of the neck; strong pulsatory movement was visible even at some distance, and on applying the ear to its surface, a loud bellows sound was heard accompanying the arterial beat. . . ."

The patient was seen by a number of surgeons, and among others Dr. D. L. Rogers, of New York, who strongly urged the ligature of the innominate and carotid arteries at the same time. . . . "no difficulty was experienced in placing a ligature on the innominate artery a quarter of an inch below its bifurcation, and another on the carotid, an inch above its origin. On tying the former all pulsation stopped in the tumour. The temperature of the arm and hand was immediately increased, and in about forty-eight hours after the operation a perceptible undulatory motion was discovered in the arteries of the wrist. . . ."

"On the 29th of May, fourteen days from the time of operating, a severe hemorrhage occurred, causing syncope rapidly, and ceasing of its own accord. . . ."

After studying the subject, Dr. S. concluded that the vertebral carries on almost the entire anastomosing circulation into the subclavian artery, and he therefore decided to ligate the former vessel. . . . "A marked decrease in the circulation of the arm was now apparent, the slight pulsation at the wrist disappearing. . . . No further hemorrhage having taken place after the second operation, the new wound healed rapidly; the ligature coming away on the tenth day. . . ."—American Intelligence: Domestic Summary. Amer J Med Sc 52: 280, 1866.

Electroshock Cardiac Resuscitation, 1774

In the register (apparently transactions) of the Royal Humane Society for the year 1774, it is reported that a child, three years old, fell from one pair of stairs window upon the pavement, and was taken up without signs of life. A medical practitioner being sent for, declared that nothing could be done, and the child was irrevocably dead; but a gentleman having proposed a trial of electricity, the parents consented. At least twenty minutes elapsed before he could apply the shock, which he gave to various parts of the body without any appearance of success. On directing a few shocks through the chest, a small pulsation became perceptible, and soon after the child began to sigh, and to breathe though with great difficulty; in about ten minutes, it vomited. A kind of stupor remained for some days; but it was restored to perfect health and spirits in about a week.—William W. L. Glenn: The Pacemaker Team. Ann NY Acad Sci 3: 815, 1964.
Comments on a Trial

An icy wind was sweeping over the rubble-heaps of Nuremberg when the trial began on December 9, 1946. It enveloped all of us in thick clouds of dust. The cold was oppressive—and the atmosphere too remained oppressive. . . .

If we, as physicians, propose to claim that unconditional trust of the halt and the sick is indispensable to our work, we must not shun the full light of publicity, we must gloss over nothing. It is quite likely that some scientist or other who here sees his name mentioned in connection with the crimes that now stand revealed, even though but on their farthest outskirts, may now for the first time perceive the frightful linkage necessarily hidden from his view in the time of tyranny. The editors are very far from seeking to exalt themselves self-righteously above even a single such man, nor do they seek to indict him in the eyes of his fellows. The years of disaster have enmeshed all of us in guilt deeply enough, as it is, and the task of the day is to find bridges that will lead us to deeper insight. Not indictment but enlightenment, not ostracism but the blazing of a new trail—a common path into the future that may, in all our misery, at least spare us from self-abasement—such is the purpose of this record. —ALEXANDER MITSCHERLICH and FRED MIELKE, translated by HEINZ NORDEN: Doctors of Infamy: The Story of the Nazi Medical Crimes. New York, Henry Schuman, 1949, p. 151.