Managers.

Samuel V. Merrick,	John C. Cresson,
Abraham Miller,	James M. Linnard,
William H. Keating,	Andrew M. Eastwick,
John Struthers,	Isaac P. Morris,
Matthias W. Baldwin,	Charles B. Trego,
Alex. Dallas Bache,	Henry Troth,
Jas. Henry Buckley,	John S. Warner,
Alexander Ferguson,	William H. Carr,
John Agnew,	*Robert M. Patterson,
John Wiegand,	*Henry D. Rogers,
Alexander McClurg,	*John Gilder,
Samuel Hufty,	*William D. Parrish.

(Extract from the minutes.)

JAMES RONALDSON, *President.*SOLOMON W. ROBERTS, *Rec. Sec. P. T.**Fourteenth Annual Report of the Board of Managers of the Franklin Institute.*

On the return of the period which terminates their official career, the Managers of the Franklin Institute present to their fellow members their Fourteenth Annual Report.

It is with sentiments of unalloyed satisfaction, that the managers feel themselves authorized on this occasion, to renew their congratulations upon the continued success which has attended the labours of the Institute, in its useful and unpretending career.

Notwithstanding the temporary cloud, which has cast so deep a shadow over our recent manufacturing prosperity, the Institute has continued to receive the undiminished support of its members; and has, in return, imparted to them its accustomed, varied, gifts of knowledge, by means of its lectures and drawing school, its library and cabinets of minerals and models, by the social and informal interchange of opinion and experience at the Monthly Conversation Meetings, and by the valuable fund of practical and scientific information, spread upon the pages of its Journal.

Nor have its benefits been diffused only within the circle of its own members, widely as that circle is now extended.

The Committee on Science and the Arts, have maintained their zeal and activity, with no other incitement than the love of doing good; and will have contributed no small share of disinterested exertion to the common weal.

Number of new subjects brought before the Committee	37
Do. lying over from last year - - -	8
	<hr/>
	45
Do. disposed of by report or otherwise -	41
	<hr/>
Do. remaining for future action - -	4

The Committee on Explosions of Steam Boilers, after a laborious investigation, continued during four successive years, have completed the task assigned to them; and their reports to the government of the United States

*New members.

have furnished a fund of valuable materials, which may constitute the basis of patriotic and wise legislation for the protection of the lives and property of our citizens.

The Committee on Weights and Measures, after reporting to the legislature of this state, a project of laws for ensuring a uniform system, have been engaged in maturing the plan for carrying the law into effect; and are now prepared to verify the standards of weights and measures, whenever the requisite authority shall be delegated to them by the Executive.

In the early part of last year, the Board decided that it was inexpedient to hold the usual exhibitions of American manufactures, on the return of the biennial period in the autumn of 1837. Although this decision was not founded upon any anticipation of the general paralysis of business, which has since occurred; an additional cause for approval of their course is found in the almost total cessation of manufacturing operations, attending the commercial derangements. As some comment has been made upon the temporary discontinuance of our exhibitions; and the supposition has been entertained, that the omission last year arose from a want of zeal on the part of our members, the Board deem it but just, to lay before the Institute the views on which their decision was founded; leaving it to their successors to determine how far these views shall continue to influence their future course.

At the time when the Franklin Institute first started into existence, the manufactures of Philadelphia, and indeed of the whole Union, were in a condition of weak and destitute infancy. The mechanics of the country were unaided by the enlightening influence of science; and had not yet learned to avail themselves of that great lever of social prosperity, the systematic and free interchange of ideas, and co-operation of interests.

The primary object, therefore, of the Institute at this period, was, to effect an extensive and intimate acquaintance between the various classes of manufacturers, and likewise between the producer and the consumer.

A rapid series of improvements in the arts, partly the cause, and partly the effect, of the exertions of the Institute, called for the frequent repetition of exhibitions, designed to keep the public mind informed of the progress of our domestic industry.

But that state of infantile weakness, and of rapid change, has now in a great measure passed away; and the more mature and steady growth of the arts, does not require, and would not repay the labour of such frequent displays. They were originated with a view to the benefit of the community, and should be continued no longer than the interests of society require. The energies of the institute have become too valuable to be expended in getting up a mere idle pageant.

It is believed, however, that exhibitions of domestic manufactures, of a character worthy the true friends of the arts, might be held at periods of four or five years; which would allow a sufficient lapse of time for the development of important and interesting improvements; and would thus retain their character of novelty and usefulness.

Although any self-gratulation on the subject at this time may seem premature, the Board cannot close their report without expressing their sanguine hopes, of the speedy development of a feature of the Institute, which has been warmly cherished in prospect from the earliest days of the society. In their first annual report, the Managers of the Institute suggested the establishment of a school of arts, in which the mechanic, the manufacturer, the miner, and the civil engineer, might receive instruction in all the sciences which have a practical bearing upon their several pursuits; and from that

period the Institute has been anxiously looking forward to the time when public opinion should be sufficiently awakened to the vast importance and utility of such an institution.

It is confidently believed that the time has now arrived, in which enlightened legislation, on a subject so deeply interesting to the community at large, and to the mining, manufacturing, and agricultural population of our own state in particular, will be sustained by acclamation, from one extremity of the commonwealth to the other.

There has, probably, never been any public measure pressed upon the attention of our legislature, which has met with more cordial and unanimous approval, from men of all parties and all conditions in society. The conviction being universally entertained, that the claims of the productive classes of the community, upon legislative munificence, are strong and imperative.

The Committee on the Chesnut Street Hall, have effected some further sales of the loan during the year; but have not yet disposed of a sufficient amount to warrant them in carrying into effect the improvements necessary to fit the building for the purposes of the Institute. The property at the present time yields an income beyond the interest on its cost, and there is no reason to doubt that it will continue equally productive until more auspicious times shall enable them to complete the intended alterations, and thus increase the accommodations of the Institute to the extent which its large list of members requires.

During the past year the Institute has elected 183 new members. 93 have been lost by resignation, and 23 by death. Increase during the year 72. Whole number of members 2078.

The following named gentlemen have become life members: Messrs. J. J. Barras, Thos. Earp, Davis Henderson, Jno. K. Kane, Wm. McIlvaine, Israel Morris, Wm. S. Otis, Solomon W. Roberts, Return Sheble, Thos. S. Stewart and Jos. Saxton.

JOHN STRUTHERS, *Chairman.*

WILLIAM HAMILTON, *Actuary.*

Report on Prof. Morse's Electro-Magnetic Telegraph.

THE COMMITTEE ON SCIENCE AND THE ARTS constituted by the Franklin Institute of the State of Pennsylvania, for the promotion of the Mechanic Arts, to whom was referred for examination, an Electro Magnetic Telegraph invented by Professor F. B. Morse, of the city of New York, REPORT,

That this instrument was exhibited to them in the Hall of the Institute, and every opportunity given by Mr. Morse and his associate Mr. Alfred Vail, to examine it carefully, and to judge of its operation; and they now present the following as the result of their observations.

The instrument may be briefly described as follows:

1st. There is a galvanic battery of sixty pairs of plates, seven by eight and a half inches each, arranged according to the very convenient plan devised by Prof. Hare, and set in action by a solution of sulphate of copper.

2d. The poles of this battery can be connected, at pleasure, with a circuit of copper wire, which, in the experiments we witnessed, was ten miles in length. The greater part of the wire was wound round two cylinders, and the coils insulated from one another, by being covered with cotton thread.

3d. In the middle of this circuit of wire,—that is at what was considered