

Several

From the COLUMBIAN CENTINEL.

[We ever feel happy in announcing the progress of the arts, sciences, mechanics and general prosperity of our country; and we think the public will receive equal happiness in reading the following.]

ACADEMY OF ARTS, &c.

AT a meeting of the American Academy of Arts and Sciences, May 26, 1795,

Voted, That there be a committee appointed in the three northern counties, the three western counties, the five eastern counties, and the four middle counties, to enquire into the state of new arts and manufactures, which have been introduced, the time of the introduction of each, and the means which may be had for the improvement of the same; the above committees to make an annual report to the Academy at their meeting.

In consequence of the above vote, a communication was presented to the Academy at their meeting in May 1796, by the Rev. PERES FOES, L. L. D. one of the committee; when it was

Voted, That the Rev. Doctor FOES, be requested to prepare a copy of his report on the state of new arts, for the press, and that it be published.

BENJAMIN DEARBORN, Rec. Sec'y.

The following, just received, is the report referred to in the above vote.

SIR,

DISAPPOINTED in my expectation of assistance from either of the gentlemen appointed as a committee with me, to enquire into the state of new arts and manufactures, which have been introduced in the northern counties, I have presumed alone to exhibit the following account as the best, which time and my opportunity for enquiry would allow.

Since the American revolution, there has been in this part of the country, not only a very great increase of former manufactures, but several new ones have sprung up. Within the counties of Plymouth and Bristol, there are now in operation, 14 blast, and 6 air furnaces; 20 forges, 7 slitting and rolling-mills, besides a large number of trip-hammer shops, and an almost incredible number of nail shops and others, for common smithery. These furnaces annually produce, from 15 to 1800 tons of iron ware.—The forges, on an average, manufacture more than 1000 tons annually, and the slitting and rolling mills, at least 1500 tons. The rolling and slitting of iron may well be considered as one of our new manufactures. There was indeed, upwards of 40 years ago, a slitting mill erected in Milton, and another in Middleborough, but when compared with those of modern improvement, they were imperfect and unproductive. This however, did not fail to excite the jealousy of Britain, and her Parliament soon interdicted this manufacture in America. After this, the first mill of the kind we hear of, was built in Taunton in 1776; this for a considerable time stood alone in New-England; and was then the best ever built in America. In the year 1780, another was erected in Bridgewater, and soon after another in Kingston. In the year 1787, the second, and in 1791, the third was built in Taunton. Three others were erected near together in the year 1793, viz. one at Stoughton, one at Plymouth, and the second in Bridgewater. There are all I have heard of within the limits of Massachusetts, and except one, they are all within the limits of the two counties. The various manufactures of these mills, have given rise to many other branches of manufactures among us.

From the annual production of three slitting and rolling mills in Taunton, which is not less than 800 tons of iron; more than one half is again manufactured into hammered and cut nails, spades and shovels within that town, i. e. about 50 tons are cut, 330 are hammered into nails, the remainder is wrought into spades and shovels. In the town of Norton, the annual amount of the nail manufacture, is not less than 300 tons. In Attleborough, 100; in Raynham, upwards of 60, and in less quantities in several other towns in the same county. The town of Bridgewater stands next to Taunton in this manufacture, and the first in all others, except mill saws, which are made of superior quality in East-town. Although a considerable number of rods cut in these mills are annually exported, yet an equal number at least, are imported—so that the full amount of all the rods cut in these mills are manufactured into nails within the limits of the old colony of Plymouth. This manufacture was not an object of any considerable attention until about the year 1785, when the general court laid a duty upon imported nails of every size. This gave sinews to the art, and motion to the hammer, which soon terminated in the complete establishment of the nail manufacture. From 4 or 500 nails indifferently made by one hand, in one day, more than 1000 are now well made in the same time. The iron shovel manufacture began at Bridgewater, in about the year 1785. The moulds were then wrought under hammers. But in 1788, they passed thro' the rolling mill. This improved method was owing to the ingenuity and enterprise of Samuel Leonard, Esq. of Taunton. He rolled the first shovel ever done in America. Since that time, the number annually made in Taunton, has not been less than 200 dozen, and more than twice that number in Bridgewater. This expeditious method of rolling the patterns has reduced the price nearly to one half. Wire drawing, and rolling sheet iron for the tin manufacture, has been successfully practised in one of the mills in Taunton, but the latter is now an object of more particular attention at the rolling mill in Plymouth. The art of casting cannon, cannon balls, &c. in air furnaces, ought to be ranked among the new and useful arts of our district.—The first furnace of this kind was built in Bridgewater soon after the commencement of the war; and when we consider the expense of heating a blast furnace to a sufficient degree for melting iron, and compare it to that of an air furnace, the superior advantage of the latter will appear, especially for casting military stores. Gunsmithery, or the art of making fire-arms, although introduced, was but little practised in Bridgewater, until after the American war. Since then it has been carried to greater perfection in that town than any other. The first gun, as well as the first scythe ever ma-

nufactured in New-England, was made in Bridgewater. From this place, fire-arms are now exported to Europe. The superintendent, as well as some of the principal workmen, now in the armory at Springfield, were original manufacturers from Bridgewater. The art of making steel was introduced in Easttown, by Capt. Eliphalet Leonard, in 1786: It has, since that time, been made there in very considerable quantities, and much cheaper than imported steel. For purposes that require large quantities of hard steel, as in plow shares, horse shoes, &c. it is equal to any imported, but for edged tools in general, it is found to be rather below it.

The manufacture of cut nails began soon after the revolution. The machine which gave it birth, was the invention of Mr. Ezekiel Reed, of Abington. Near the same time, and by the same ingenious mechanic, was made a wool-card machine—this gave rise to that manufacture among us. But who was the original inventor of that useful instrument, by which cotton and wool cards are now made cheaper and better in America than in any part of Europe, I shall not determine. It is, however, allowed to be an American invention.

The manufacture of linseed oil first began in Easttown, in 1792, and from an annual stock of about 3000 bushels of seed, there has been annually produced near 5000 gallons of oil. There is an oil mill in Plymouth, and another in Bridgewater. The manufacture of stone ware, of hand trowsers, and a ettle buttons, has lately been introduced in the county of Bristol, in all which the present prospect promises future success. In the towns of Norton and Taunton, there is a manufacture of a kind of earth or ochre, found there, into a pigment of a dark yellow colour. This originated in Norton, in 1776.

But, having enumerated some of the principal manufactures of this part of the country, the question will now arise, how, or in what manner can they be still improved? This already has been attempted, and in some instances happily succeeded by the help of machinery. The machine for making bricks, invented by Dr. Apollon Hinkley of Bridgewater, has well succeeded; for clay crude and unwrought, 1500 bricks have been well moulded in one hour. The machine constructed for the cotton manufacture on the boundary of this district, is, although complex, yet a most capital invention, but policy at present, conceals the annual product of this factory. The machine for cutting and heading nails at the present time, invented by Mr. Caleb Leach, of Plymouth, has been highly commended.—But with many it still remains a doubt, whether a machine so complicated, and yet so strong, as would seem necessary to cut and head iron nails, at one operation, will not be, at first so expensive, and afterwards so liable to derangement as greatly to diminish, if not wholly destroy its utility—should this, however, happen, it will be less regretted, as a youth of either sex can with the machinery cut and head at least 5000 in one day.

Want of time obliges me only to mention—a new and useful improvement in making window sashes—A discovery by which, in the manufacture of axes, the edge is made thin nearly as a knife, and yet sufficiently strong and durable. A method also of melting iron in an air furnace with one third less fuel than has been usually required. An easy remedy for the complaint which has been made against rolling of shovel patterns, &c. but these with a particular account of the manufactures of sauff, of wooden bellows for blast furnaces and especially of combs, the annual amount of which, in any town in Bristol county, is more than one thousand dozen; these, with some others which did not occur when I first wrote, may be the subject of some future communication—I am Sir, with friendship and esteem, your most humble servant.

PERES FOES.

Mr. BENJ. DEARBORN, Correl. Secretary.

Mr. Leach was the workman employed to execute in brass, the Planetarium, of an Orrery, the description of which I presented to the American Academy. In a letter which accompanied that description, although an honorable mention was made of him to that society, yet in justice and gratitude to him, I am happy in having this opportunity to bear a still more public attestation to his ingenuity, enterprise and merit; and to acknowledge the essential services rendered by that ingenious workman.

FROM THE SALEM GAZETTE.

WHEN particular and interesting occurrences do not employ our attention, we must take a more free range among writers upon subjects which have been thought useful and instructive, and which are summarily treated. The following state of Europe, as well as of the Ecclesiastical affairs of France, by a late Noble Emigrant, may be acceptable. We shall give the statements in the translation. "In all countries, even among Savages, there is a class of superior influence, the nursery of the government of the State. Such are, among the French, the Nobles. Among the English, the Bar, as connected with Parliament. Among the Dutch, Trade, as connected with riches. The Dutch indeed, and still more the English, have a strange expression, *What is he worth?* The answer is in pounds sterling: while a man's real worth is in his merit, and not in his money. Among the Spaniards, and in Italy, the Clergy. In Prussia, the Military. In Germany, Nobility, with a Coat of Arms of at least sixty-four quarters. In America, Agriculture. Among Savages, superior strength. Among the Turks, Slaves educated for the purpose of making Stateless. The following is a short, interesting, and probably authentic account of the late Ecclesiastical state of France. "The Church of France is composed of 18 archbishops, in the appointment of the King, as are the 118 bishoprics. The parishes amount to 34,498, and there are 4,644 annexed parishes. The regular clergy consists of 16 chiefs of congregated orders, 1100 abbots and monasteries, comprehending 16 large royal abbeys. The King names to 678 of these abbeys which are in commendam, and confirms the election of the others. Of religious mendicants there are 1520 convents, divided into 87 monastic provinces; the endowed monasteries and abbeys a-

mount to 557, of which 250 are in the royal nomination. The convents of different religious orders, of both sexes, are about 3800. The clergy assembles every five years; the other meetings are extraordinary. According to different calculations which have been made, there are in the kingdom about 366,264 regular and secular clergy, who enjoy a yearly revenue of about 116,216,600 livres (about five millions sterling.)

Table listing religious orders and their revenues in livres. Includes 136 Archbishops and Bishops (4,909,000), 11,850 Canons (8,209,900), 14,000 Singers of the Choirs (4,100,000), 4,000 Children of the Choirs (800,000), 10,000 Chaplain Friars (800,000), 44,000 Curates, Priors, Curates (46,000,000), 50,000 secondary Vicars (7,000,000), 60,000 Ecclesiastics employed in the Seminaries, Colleges, &c. without benefices, 208 Order of Malta (1,735,000), 55,500 Religious of Chief Orders, of Abbeys and Priors (19,553,600), 46,500 Religious Mendicants, of which 24,000 endowed at 250 livres each (3,600,000), 80,000 Nuns (16,300,000).

OF WHICH

Table listing specific religious orders and their numbers. Includes 16,000 Order of St. Augustin, 12,500 St. Clara, 11,000 Cisteriars, 9,500 St. Ursula, 9,000 St. Benedict, 7,000 Visitation, 4,500 St. Dominic, 3,400 Carmelites, 1,500 Fontevault, 3,900 living on alms, 2,000 of divers inferior orders. Note: And these returns are supposed to be marked at only half their value.

We are to remember that this is upon a population of thirty millions, of which this is but about the 30th part, and that 20 millions of dollars is an inconsiderable part of the wealth of this great nation. But this mighty mass has been destroyed and laid in ruins by the Revolution, and the misery of all attached by their habits to this institution has been rendered certain. To dismember so great a part of any community, especially an active part, must have been attended with great convulsions, not presuming even to imagine the anguish from religious scruples, quite distinct from their poverty, and the public injuries they must sustain. It was an establishment of usurpation, but it was a work of time. The present generation were by national education and laws built upon it, and violence to humanity must have been offered in their immediate destruction.

From the South Carolina State Gazette,

Messrs. PRINTERS,

WHEN the service of the citizens ceases to be the principal concern of the city wardens, and they chuse to frame excuses for their non-attendance, and some few of them chuse rather to stay at home and pay the small fines inflicted on them; instead of meeting each other in consultation concerning the public weal: thus in consequence of their indolence, the citizens are reduced to very great inconveniences.—And it is to be hoped that the citizens at the next general election for wardens will remember the present worthy defaulters, and make choice of such only as will attend to execute with punctuality, the trust reposed in them. There is one entitled to the following remark (viz.) John Johnson, Esq. He is a pattern of rectitude for the example of his hereafter chosen competitors.—There are many very salutary ordinances for the regulation of the city—but what do they avail, if not properly executed.

And shameful to relate, contrary to an ordinance ratified in the city council, 27th Feb. 1796, concerning billiard tables, retailing spirituous liquors, &c. &c. money has been received by men in office, and authority given by the same, to keep a billiard table, and retail spirituous liquors. These are facts, and facts are stubborn things, and very hard to be controverted.

The following interrogatories, by way of short catechism, are submitted to the citizens.

1st. How do the city magistrates keep the sabbath, or Lord's day, holy?

Answer—By taking a moderate airing, a recreation at cards, or some other agreeable amusement, and sometimes looking thro' their fingers, and winking at all transgressors, especially at negroes and dram shops.

2d. Is not profane swearing and blasphemy heard in our streets both night and day?

3dly. Is not forestalling, extortion, and every kind of iniquity winked at?

4th. Are not all our laws, both to God and man held in universal contempt?

5th. Who are we to thank for the calamitous conflagrations, that have so recently and repeatedly taken place in this Metropolis?

Answer—Our good magistrates, for not suppressing vice and immorality!

6th. The courts of justice stopped for the better accommodation of the magistrates to see the races. At that time of revelling and dissipation, one of the Associate JUDGES, gracefully galloping up Meeting-street, the better to convince the delighted spectators, that he really is—what you may call the THING. And two of his negroes following his example in defiance of the city laws!

Query—Should not the negroes have a bounty for excelling their masters in every species of vice, &c. &c.

It is earnestly wished these few hints may hereafter be properly attended to, which is the sincere wish of many who are friends to justice, and lovers of their country: Among whom is, Messrs. Printers, Your constant reader, 2 in the corner.

WINCHESTER, July 29.

Friday last was committed to the prison of this county, Jacob Snyder, charged with the murder of Joshua Strickler, by stabbing him in the belly with a knife, in the county of Hardy.

Philadelphia, August 8.

Extract of a letter from a gentleman at Newbury-Port, to his friend in Philadelphia, dated August 1, 1796.

"For these three weeks past we have been alarmed with the appearance of a fever something similar to that which was so fatal to the citizens of Philadelphia, though in no one instance can we trace its having been communicated by infection from one person to another; it was confined to a neighbourhood in Water-Street, and it is the generally received opinion that it took its rise from a stench, proceeding from a quantity of the entrails of fish, which were thrown in a dock and laid until they were in a state of putrefaction—five persons died from one family, and four or five others from the neighbouring families; the filth has been removed, and the fever has subsided.

The season to all appearance is equal to any ever known in this part of the Union.

From an English paper.

Smith, Higgins, and Le Maitre, the persons implicated in the pop gun plot, are discharged, the attorney-general having declined to proceed against them.

Old Bailey, May 11.

Last night the Recorder proceeded to pass sentence upon the persons who have been convicted this session; that of death upon Henry Weston.

Previous to receiving sentence, Weston addressed the court, to which he did not complain of the hardship of his conviction, but declared he had not committed the crime with the smallest intention of doing injury to any one, being fully confident he should have had the power to reinstate the money before it would be called for. He attributed the whole of his misfortunes to the allurements of the gaming table; and solicited the recorder would so far intercede with his Majesty to grant him a little time to make his peace with the Almighty, whom he must have highly offended by the procrustean attempt on his own life.

The Extract of a letter from London, this day published, is from a respectable quarter and deserves attention. It serves to show what dangers our national character has escaped, by the patriotic conduct of the American people. It contains also good news for our suffering merchants.

Extract of a letter from a respectable American in London, to gentleman in this city.

London, May 19, 1799.

"Every information from the United States is exceedingly interesting at all times—but in particular so when our national affairs are in so critical a posture as they were at the date of the latest accounts from America. I had occasion to call on Mr. — this morning, and from him received intelligence of so late a date from Philadelphia as the 17th April. Congress were then it seems engaged in debating the resolution laid on the table by Mr. M'Clay. It cannot be, that the House of Representatives would be so mad, as to adopt such a resolution—it is impossible they would expose us to the horrors of war, when we are on the eve of settling all differences with Great Britain amicably.

"The decisions of the Lords of appeal have of late been so favourable as we could expect, they have reversed several sentences of condemnation grounded on the orders of the 6th November 1793; they have determined to restore all property seized and condemned by virtue of those orders if not otherwise liable to condemnation.

"Doctor Nicholl has been named as one, and I hear a Mr. Antley is the other, of the commissioners under the treaty, on the part of this country. A better or fitter man could not have been selected than the former; and so far as I know, the latter may be an equally suitable man."

CARLISLE, July 27.

Departed this life, on the 5th inst. after a long and lingering illness, which he bore with Christian patience, in the 88th year of his age, Ezekiel Dunning, Esq. He was one of the first settlers in this county, and always maintained a respectable character as a good and useful citizen. He was an affectionate husband, a good neighbor, and an honest man.

This Day is Published,

By WILLIAM COBBETT, North Second Street, opposite Christ's Church, The Life and Adventures of PETER PORCUPINE; With a full and exact account of all his authoring transactions in America. By Peter Porcupine himself. Aug. 8.

District of Pennsylvania: to wit: BE it remembered, that on the 5th day of August, in the twentieth year of the independence of the United States of America, WILLIAM COBBETT, of the said district, hath deposited in this office the title of a book, the right whereof he claims as proprietor, in the words following: to wit,

"The life and adventures of Peter Porcupine; with a full and fair account of all his authoring transactions: being a sure and infallible guide for all enterprising young men who wish to make a fortune by writing pamphlets, by Peter Porcupine himself.

"Now, you-lying varlets, you shall see how a plain tale will put you down."

SHAKESPEARE. in conformity to the act of the Congress of the United States, entitled "an act for the encouragement of learning, by securing the copies of maps, charts and books to the authors and proprietors, during the times therein mentioned."

SAMUEL CALDWELL. Clerk of the District of Pennsylvania.

AUG. 8. 1799.

CABLES,

From 16 to 9 1/2 inches, for sale by Jeremiah Warder, No 12 north Third-street.

BY AN ARTIST, Resident at Mr. Oellers's Hotel.

MINIATURE LIKENESSES

ARE taken and executed in that elegant and delicate style, which is so necessary to render a Miniature Picture an interesting jewel.

He will warrant a strong and indisputable resemblance; and he takes the liberty to lay before the public of this place his most earnest intention to deserve their patronage by his best endeavors to please.

N. B. Specimens are to be seen. May 12.