

rapid. The writer in this case communicates his ideas *currente calamo*, and aims not at elegance of language, resting his claim on the value of the communication only.

## SUMMARY.

**PLYMOUTH BREAKWATER.**  
We have before us a model of the Breakwater at Plymouth, (Eng.) This noble structure is 1700 yards in length, running nearly East and West, with an average width of 30 yards at the base, and 16 yards at the top. The expense, including piers, light houses, &c. was \$5,199,240. The general figure of the Breakwater is represented by this diagram:

South or Sea side—1000 yards.  
North or Land side.

As the slope of the southern side is in the ratio of three yards horizontal to one yard perpendicular, and of the northern, a yard and a half horizontal to one yard perpendicular, it follows that the perpendicular height of the Breakwater is 69 feet and a third, and in solid contents 72,000,000 cubic feet. That portion of the pile which is above the water presents a smooth surface, while below the rocks are of course piled in with less order.

The only undertaking of the kind in this country, which will bear any comparison with the above, is the Breakwater erecting at the mouth of the Delaware. The figure will be nearly the same—the northern side being 740 yards in length, the N. W. flank 1740 yards, and the N. E. flank of 580—total 1760; or 60 yards longer than the Breakwater at Plymouth. The Angles which the flanks make with the centre, are 135 degrees each. The estimated cubic feet of stone required for the undertaking, is 26,908,646; and the estimated expense, \$3,326,627. The difference in the amount of stone required for this Breakwater and that at Plymouth arises principally from the greater depth of the water in the latter case. The main depth of the water to be created at the mouth of the Delaware, at low tide, will be 28 feet. Some portions of the walls are already within 12 feet of the surface. The slope of the interior side is to be in the ratio of half a yard horizontal to one perpendicular. The position of this Breakwater is near the Cape of the Delaware, having between itself and the shore about half a mile of good anchorage. Either by the shore or the Breakwater all winds will be excluded except those from the E. N. E. and a large space will be sheltered even from these.—*Journal of Commerce.*

**CHERRIES RESIDENCE FOR TWO YEARS AND SIX MONTHS.**—Four seamen belonging to the ship *Royal Sovereign*, of London, were safely taken off from the Isle of Desolation, where they had remained two years and a half, having been driven on shore in a shallop. Their only subsistence was on the sea elephant, a few fish and birds, and a species of Wild cabbage, the only vegetable to be found there. There was not even a shrub on the whole island. They found a volcano, with the lava of which they "paid" the seams of their shallop after caulking her. Former navigators have never mentioned a volcano on this island, but the general nature of the islands in the South Sea is volcanic.

**BREACH OF PROMISE.**—At the last Circuit Court and Court of Oyer and Terminer for Livingston County, amongst the civil causes tried was one for a breach of promise of marriage, brought by *Emeline Kellogg* against *David Wallace* in which the jury found a verdict for the plaintiff, of \$1000.

After the Duke of Richmond's horse Chaco had run the first heat at Goodwood Races on Friday night, for the Waterloo Stakes, he attacked the groom (Grant), whilst proceeding to wash his mouth, knocked him down with his head, then seized him by the hip, and carried him to a ditch, about twenty or thirty yards distant, when it was with considerable difficulty the surrounding spectators could prevent him doing any further injury, which he attempted, by forcibly pressing the man against the ground with his knees.—*[London Paper.]*

## UNITED STATES.

## DE WITT CLINTON.

Colonel S. L. Knapp, formerly of this city, known as one of the most elegant scholars and accomplished orators of the age, recently made to the General Grand Chapter of Royal Arch Masons of the United States, convened at New York, as chairman of a committee, the following admirable report, relative to the demise of the late Governor Clinton:—Colonel Knapp, in this beautiful eulogy, has rendered no more than justice to the illustrious subject, who was once a brilliant ornament to the institution which it was his pride to cherish, and an honour to the nation which now mourns his absence from her councils. Among all the splendid and finished tributes which have been poured from the hearts and pens of his bereaved friends, we have seen none more chaste, more just, or more affecting, than that which follows.—*Boston Bulletin.*

The committee that had under consideration the subject of a proper notice of our bereavement, in the death of Dr. Wm. C. Clinton, the first officer of this masonic body, ask leave to report—

That, as more than nineteen months have elapsed since this mournful event, in their opinion the customary funeral rites so consonant to the heaviness of recent grief, and so proper in their season, should be dispensed with at this meeting; as, shouldering our council chamber in black, or wearing a badge of mourning for thirty days, would add nothing to the deep sense we feel at a loss or fix more indelibly on our minds the recollections of his services; but as no accident nor length of time, can ever efface, or blot out his name from the pages of his country's history, or lessen the weight of his character, we deem it most meet and proper, while in session for the first time after his death, to leave on our records a brief memorial of so great and good a man as our late High Priest, and also to tell the world how sincerely we loved him, and to give our successors, or those who may search our archives, hereafter, to understand what manner of man we thought him; we, who lived in his day, and were guided by his councils.

For in him were united exalted genius, profound acquirements, a happy taste in business, with great patience and unwearied industry. In the morning of life, he took the noble determination to be great; and to make usefulness the basis of that greatness.

He came to the duties of a freeman when our republic, exhausted with the struggles for independence, was attempting to fix our institutions upon the rights of man, and the principles of eternal justice, but there was

often seen a timid hand and vacillating policy. In the conflict of honest opinions, he boldly took his part, and his zeal at times excited the fears of his followers, his patriotism won the hearts of his opponents.

The portals of knowledge were then just opening anew, in this country, with the brightest promises, and he was charmed with all her paths. With the grasp of genius, he held the lamp of science through the windings of literature, and the mazes of politics; and moral, political and literary institutions received advantages from his intellectual light; nor was he content to rest here, for he saw at a glance that Omnipotence, when he stamped the features and marked the physiognomy of the earth, gave intimations to man that he might change and improve these features for his benefit. His mind no sooner conceived, than his soul was fired with the project, which he carried into effect; it was his narrow plan no pitiful experiment, governed by village economy, or district politics; the design was worthy of a master mind, and the execution of an herculean arm; the seas of the wilderness were united with the Atlantic ocean. He saw the labour finished, and he heard the voice of the people pronouncing it to be good.

In the midst of these arduous labours, he did not forget how much human happiness depends upon well regulated affections and permanent charities, and he entered the pale of order, assumed the duties of master, almoner, and priest; to teach the ignorant and to check the wandering; to feed the hungry, clothe the naked, and to inspire blessings upon all mankind.

He was morally as well as physically brave. In the generosity of his nature, he did not shrink from the duties of a soldier, and that miserable flock, who, in the mild and peaceful day, turned their plume to the sun for brilliant reflections to attract notice and gain admiration from the world; but who were not to be found when the elements were troubled; he placed his eagle wing in the whirlwind, and fearlessly breast the peltings of the storm.

His enemies reviewing his life, are silent when they cast up the amount of his virtues, and his friends love him the more when they recount the deeds that he has done; he never charged him with vanity, nor did slander ever whisper that he could be corrupted by gold; if sometimes disappointed ambition in a paroxysm, at the loss of office, alleged that he was partial, in a calmer mind she was forced to confess that his love for his country, and his love for his people, were not from him, sprung from the irregular pulsation of too warm a heart; and from too much confidence in the professions of assimilated virtue; and even envy, that first wishes and then believes all ill of him, he is gone, that the only harvest he ever gathered in was glory; and all must acknowledge, that the only estate that he left for his orphan children, is his fame.

His exertions were not limited to the temporal affairs of his fellow countrymen, for he knew that the excellency of all knowledge consists in divine truth, and he was unflinching in his efforts to disseminate the sacred writings, believing that in them are the oracles of God, and the promise of everlasting life.

His death has been deplored as that of one who died too early; but if the prominent deeds of men are so many mile-stones in the journey of life, his course cannot have been short who has set up so many monuments as he has to the eternity of his name, and whose finished before he had required the sustaining staff, or the helping hand.

Such was our companion and brother, the late chief officer of this General Grand Chapter—the pride of those who loved him, and the example for those who may hereafter arise to take a distinguished part in the welfare of our country. Let the true biographers write his life; let talented artists chisel his monument, and mould his bust for admiring people, while we must content ourselves with a miniature profile of him, traced in a single moment, when kneeling at our altar; but there is some consolation for us in feeling that his sketch is made, as it were, upon our jewels, and is to be worn on our breasts, as an emblem of his faith, and of his image in our hearts.

## SAM PATCH.

Extract of a letter to the editors of the Albany Daily Advertiser, dated Rochester, Friday Evening, Nov. 6, 1829.

I do not remember a more imposing spectacle than was exhibited at the falls to day. The banks on each side, were lined by a living rampart, to a great distance below the cataract, while every spot which afforded a foot hold, on their steep sides, were occupied. Certainly not less than 10,000 persons were present. All Rochester was for a while congregated together; none but the bed-ridden remained at home, and the country for miles around, was fully represented. Long before two o'clock, every vacant place was filled. On the steep promontory of the Brighton side, the spectators formed a solid phalanx, which seen from the opposite shores, looked more like an army drawn up in battle array, than aught else to which I can compare it—and certainly, if the intense feeling which pervaded that vast assembly is taken into view, the scene could not have been much unlike the "moment before the battle." A *spurious* Sam Patch, in his appearance, and excited a cheer from the multitude, about a quarter past two—he bowed to the people and having with much gravity examined the abyss below him, and placed himself in posture for the great leap, suddenly wheeled, and with much activity sprang from the falls. In about half an hour, however, the real Simon Pure appeared on the precipice, dressed lightly, and in white. "There was no mistake," he very coolly looked around on the multitude, and having remained long enough to fasten the attention of the thousands who surrounded him sprang from the cliff. It was a beautiful leap, and Sam descended like an arrow. He was under the water about five seconds, when he appeared to the many wondering eyes, who had witnessed the feat. After a freak or two, he swam on shore, and was received with exultation by the crowd below the falls, when he was met by his wardrobe, a plain sailor's jacket and trousers, and his green essential, a bottle of St. Croix. Sam bought a box at Buffalo, which he afterwards, to show that "some things can be done as well as others," threw off the falls, at the same point whence he had taken his surprising leap. The bear came safely down, and swam home with as much facility as did his master.

**STEAM BOAT STOCK.**—The steamboats De Witt Clinton and Victory, were this morning to have been sold at public auction. The cost of the De Witt Clinton was \$44,000; and of the Victory \$55,000. They were put up the first at \$25,000; and the second at \$30,000. These sums, we understand, to have been the exact cost of the respective engines; and no advance seen to the amount of a single dollar was obtained. They are both positively to be sold on this day week.

**DEATH FOR BIGAMY.**—The Raleigh Register of the 5th inst. states that Thomas Norman, who had been convicted of bigamy, the previous week at Guilford Superior Court, was sentenced to be hung on Saturday the 21st inst. A respite, however, had been granted until the 10th of December, to give opportunity for the exertion of Legislative clemency.—*Con. Ad.*

## FOREIGN.

**EIGHT DAYS LATER FROM ENGLAND.**  
By the packet ship *Silvanus Jenkins*, Capt. Allen, from Liverpool, the editors of the Commercial Advertiser have received London papers of the 8th of October, Liverpool of the 9th, and Shipping Lists of the 7th, all inclusive.

The restoration of peace in the East, is now placed beyond a doubt. Despatches were received by the British Government, on the 7th of October, from Sir R. Gordon, at Constantinople, bearing date the 16th of September, confirming the intelligence of the signing of the Treaty of Peace at Adrianople, on the 14th—but the conditions had not transpired at Constantinople.

We add such rumors of the conditions of the peace, as have come to hand. One account says the propositions of the Russians are not thought so moderate as it was supposed they would be. This refers principally to the amount of indemnity claimed by Russia, which is said to be four millions sterling, of which the Turks are to pay as much as they can in money, and the rest in Asiatic fortresses. The following are given as the most authentic outlines of the conditions in the Liverpool Mercury of October 9th.

"The Porte to pay to Russia, for the expenses of the war, 25, or other accounts say, 30 millions of silver rubles, for which a period of twenty years is to be granted, during which the principalities and the fortress of Silistria should remain in the possession of the Russian Empire."

"The payment in addition of the indemnity to Russian subjects, stipulated in the Convention of Akermann, (all the articles of which the Porte agree to fulfill), and which amounts to 48 millions of Turkish piastres. The said payments to be made in three instalments. After the payment of the first, the Russian army to retire to the Balkan; on that of the second, over the Balkan; and on that of the third, over the Danube.

"The fortress of Akhalzik, Akhalakala, Port, and Anapa, in Asia, to be ceded to Russia.

"In Europe the fortresses of Tournouk, Kale, Giurango, and Ibrailow, (on the left bank of the Danube), to be razed, and not again rebuilt.

"The fort districts hitherto separated from Servia to be reunited to that province, and to enjoy the same privileges."

**REPORTED CAPTURE OF CHOUNLA.**—It is said that a communication has been received at Portsmouth from an officer of the British Naval Squadron, dated off Tarapita, in the Bosphorus, Aug. 28, narrating the capture of Chounla, by the Russians, after an obstinate resistance from the Turks. It was carried by assault; and the Vizeir with all his staff, were prisoners. He states that the invaders were advancing with confidence, and had pushed the Russian European side of the Hellespont, and the other to seize those upon the same side of the Bosphorus. The latest Vienna account says:—Though the news of the taking of Chounla has reached us by different channels it does not seem to be fully confirmed."

**Count Diebitsch Sabalkensky.**—A medal is to be struck at Berlin in commemoration of the capture of Adrianople. On the obverse is the inscription "Hadrinopolis Victorious Russiae." Copied deus d. 8 Aug. H. V." and on the other side "Auspiciis gloriosissimis Nicolai I. Imp. et ducis Jo. Comitis de Diebitsch Sabalkensky." (Adrianople surrendered to the victorious Russian troops, on the 8th of Aug. (old style) 1829, under the most glorious auspices of the Emperor Nicholas I. and the command of Count John de Diebitsch Sabalkensky.)

The epithet "Sabalkensky" has been the source of much ingenious conjecture, but nothing more than *Choula*, or *Palmer of the Balkans*. A similar etymology had been previously adopted in Russia to commemorate some remarkable military feat; and, by being in a constant use as an appellation to the family name, it preserved the glory of the exploit which had given occasion for it in all its original freshness. Field Marshal Romazoff, the first Russian commander, who in modern times forced the passage of the Danube, was honoured with the surname of Sadouiskoi, or the Ultra Danubian. These honorary distinctions are not hereditary; if we are not mistaken, the celebrated Suvarov was in a similar manner surnamed Rimnikoi.

## GREAT BRITAIN.

A Cabinet Council was held at 2 o'clock on Wednesday, October 4. The Ministers present were—

The Lord Chancellor, the Duke of Wellington, Lord Bathurst, Rosslyn, and Aberdeen; Lord Ellenborough, Mr. Secretary Peel, Sir George Murray, the Chancellor of the Exchequer, Mr. Harris, and Mr. Vesey Fitzgerald.

The Ministers remained in deliberation during three hours and half. In the evening the Cabinet Ministers re-assembled at the residence of the Duke of Wellington, in Downing-street where his Grace entertained his Colleagues at Dinner.

Several of the Cabinet Ministers came to attend the Council. The Duke of Wellington arrived on Tuesday night from his seat at Stratfieldsay, the Lord Chancellor from Wiltshire, Mr. Peel from the seat of his father in Staffordshire, and Mr. Herbert from Seton, Kent.

Viscount Melbourne was the only member of the Cabinet absent. His Lordship is at present in Scotland.

**Claims on Brazil.**—The following notice has been addressed to the underwriters at Liverpool.

"Gentlemen,—As the period fixed for receiving claims on the Brazilian Government, on British vessels captured in the River Plate, is drawing towards a close, I take leave to recommend to those underwriters who have settled in fall to meet for the purpose of arranging the necessary documents, and to lose no time in forwarding the same to Rio Janeiro. The commissions were installed on the 5th of July last, and they can admit of no claim after the expiration of eight months from that date. (Signed) J. STEVENSON."

A foreign house of business, established in London, stopped payment on the 14th of Oct. Its difficulties have been owing to

an extensive speculation in Cotton, entered into the close of the year 1826, the effects of which have never since been recovered. Its creditors are an eminent Dutch firm, with a few of the leading London houses; and the debts amount altogether we are informed to rather more than \$79,000.

**British force in the Mediterranean.**—The following is a statement of the British naval force in the Mediterranean; 9 sail of the line, 722 guns; 1 fifty gun ship, 50; 6 frigates, 102; 9 sloops, 114; 1 surveying vessel, 8; 3 bombes.—Total, 27 sail—1064.

The London Morning Journal, of the 8th of October says—"The weather yesterday was more like the idea of Jan, than the commencement of October. A fall of snow of some three hours duration, at this season, does not augur very favorably for the poor starving artisans, whose prospects have been blighted, and their families reduced to desperation by the free trade crusaders and the mighty philanthropist of Waterloo."

**Captain Dickenson.**—The costs to this gallant officer of his defence on the late Court Martial are said to have amounted to 504 a day; making a gross sum of 1000.

From the Liverpool Mercury of Oct. 9.

## STATE OF TRADE.

**Turn out of fine-spinners at Manchester.**—After a duration of six months, the turn out of fine-spinners at Manchester is at an end, it having been determined at a meeting of the men on Saturday, by a majority of 767 to 760 to return to work.

Business is undoubtedly reviving. The last accounts from India announce a considerable advance in the value of yarn and muslins; and there have, in consequence of these agreeable tidings, been extensive purchases of apparatus and other fine goods. The works of Henry Monteith and Co., at Barrowfield, which, for a considerable time, were but partially employed, are now we are happy to learn, in full and active operation. We learn, also, that the printing works at Canpie have not been for a long time so fully employed as at present. The improvement, we trust, will be great enough to give full work to the weavers.—*Glasgow Chronicle.*

## LOWER CANADA.

Quebec, Nov. 16.

The election for the County of Stanstead closed on Friday last by the return of Messrs. PECK and CHILDS.

The result of the Poll at the close on the third day was as follows.—Mr. PECK, 246; Mr. Childs, 238; Mr. Chamberlin, 21; Mr. Dickerson, 4.—*Gazette.*

The steam-boats, with the exception of the *St. Laurence*, expect to make another trip up and down before the close of the navigation.

There remain in port about forty vessels. The weather is mild with the wind at east, the *Robson* of Greenock, with a ship and two brigs, beat out of the basin this afternoon. The *Margaret* for Liverpool, *Margaret Miller* for Dublin and several others went to sea yesterday with a fair wind.

The *Cherub* for Greenock, *Horatio* for Liverpool, *Kingfisher* for Barbados and Demerara, and several others which have cleared for sea, remain in port.—*ib.*

Some Indians who set out about the beginning of the month on their hunting excursions, after proceeding as far as St. Anne, 50 miles N. W. of Quebec, were forced to turn back on the 5th inst. in consequence of the snow being a foot deep. About 30 or 40 men, and some of their dogs, were frozen or five inches of snow.

Some snow fell about Quebec on Friday and Saturday. The ground having been frozen it still remains. Winter carriages were used yesterday, but the snow is not two inches deep.

The principal Chief of the Sault St. Louis Indians, of St. Regis, a few miles above Montreal, arrived here on Thursday, accompanied by his nephew, (another Chief) and an interpreter on their way to London, to settle the other half of their territory of St. Regis, which they have been refused. They have taken their passage in the ship *Montreal*, which will sail to-morrow or next day for Liverpool.

It is understood that Kotsky, one of the Chiefs of the Huron village at Lorette, near this city, will also take his passage for England, and that the deputation is empowered by the tribes in both Provinces, to make complaints of the diminution of their government supplies of guns and ammunition, clothing, &c. to the British Government.

## TREATY OF PEACE.

WEDNESDAY, NOV. 25, 1829.

The last dates from Europe confirm the intelligence of the signing of the Treaty of Peace between Russia and the Turks.

We perceive by a Proclamation in the Upper Canada Gazette, that the King has dispensed a Bill passed during the 4th Session of the 9th Provincial Parliament of Upper Canada, entitled "An Act for enabling William Warren Baldwin, Esq. to carry into effect the will of the late Laurent Quetton St. George, and for purposes relating to the Real and Personal Estates which were of the late Laurent Quetton St. George." The Bill for the relief of Daniel Erb and others has been assented to by His Majesty.

On Monday last we received an invitation, dated St. Catharines, Nov. 14th, to attend at the opening of the Welland Canal, which ceremony was appointed to take place yesterday. It is intended (says the Secretary of the W. Canal Company) to assemble at St. Catharines at 6 o'clock, A. M. and to proceed up the mountain to the Welland River, where a Steam-boat will be waiting to tow any vessels in attendance to Chippawa.—The following morning to sail up the Niagara River to Black Rock and Buffalo harbours and return on Thursday to St. Catharines."

We regret that the inclemency of the season, and the late period at which the invitation reached us, prevented our being present on the above interesting occasion.

**MINOR COLLEGE.**—It will be seen by an advertisement in another column, that Minor College, established at York, will soon be ready for the reception of pupils. How this Institution is endowed, or upon what principles it is to be conducted, we know not; but it is probably intended to supersede King's College, which Sir John Colborne considers rather too exclusive for this meridian.

The *Brookville Gazette* states that the Magistrates of the Johnstown District have appropriated a portion of the Public Money to the payment of one of themselves for officiating as Chairman of the Quarter Sessions.

The American papers confirm the account of Sam Patch's death on the 13th inst. He "jumped from a platform raised 25 feet above the Genesee Falls, making a height of 135 feet, and never rose again. An immense crowd was assembled, supposed to amount to about 10,000 persons, to witness this shameful self immolation. His body had not been found. It will be seen that Sam was successful on the 9th inst.

The Rev. Mr. Lochead, Pastor of the Union Presbyterian Church in this town, preached, for the first time since his appointment, on Sunday last. The following paragraph is from the Montreal Herald of the 18th inst.

"The Rev. Mr. Lochead, who has for three five months past occupied the pulpit of St. Andrew's Church in this City, in the absence of the Rev. A. Matheson, left Montreal on Monday last, to enter upon a charge at Kingston—taking with him a testimony of exemplary Christian deportment, and evangelical ministry here during that period."

**BLACKING.**—We beg leave to direct the particular attention of those who are anxious to encourage domestic manufactures to the advertisement of Mr. T. Ostrom. This gentleman, with his accustomed zeal for improvement, has taken upon himself the arduous task of manufacturing a superior kind of Blacking for the use of the good people of Canada, and we shall be greatly surprised if his laudable exertions be not extensively patronized. If Mr. Ostrom's Blacking should prove equal in quality to W. Allen's incomparable Jax, (and we are persuaded it will) and can be sold at the same price, why should a preference be given to the foreign article? Besides, by using the "Canadian Jax" we shall materially aid another useful manufacture, namely, the *Kingston Pottery*, and thereby preclude the introduction of such immense quantities of Eastcheapware from States. We trust every Patriot will give this subject his serious consideration.

**LOWER CANADA ELECTIONS.**—Mr. PECK and Mr. CHILDS, the Members-at-large for the County of Stanstead, were nominated at a Public Meeting held in Lenoirville in August last. Mr. BROOKS and Mr. TREMAIN have been elected without opposition for the County of Sherbrooke. Mr. BROOKS and Mr. GOODRUE were the gentlemen proposed at the above Meeting, but the latter declined being a candidate, & recomended Mr. K. O'LEWY as a candidate, who was unanimously chosen. Mr. K. O'LEWY was recommended for the County of Shefford, but the result of that Election is not yet known. All the persons whom we have named are in favor of the principles upheld by the majority of the Assembly of Lower Canada.

**THE WEATHER.** for some days past, has been changeable and boisterous. On Saturday and Sunday several inches of snow fell, but on Monday morning scarcely a vestige of it remained upon the ground. On Sunday, a few persons travelled from Belleville to Kingston in a sleigh.

**STEAM BOATS.**—The Lake Steam-boats have taken up their winter quarters.—The *Niagara* and *Queenston* are at Prescott, and the *Alceiope* in the Port. The *St. Lawrence*, *Montreal* and *Town* still continue their trips as regularly as the weather will permit.

A person named John Johnson was found dead on Saturday last in the eighteen mile woods. It is supposed that he was intoxicated, and perished from cold.

On Wednesday as Mr. John Hastings, son of Mr. T. Hastings of Cote de la Visitation, was engaged in charging a rock for the purpose of blasting the labourer, who was employed in assisting him, inadvertently struck the spindle, and an explosion immediately followed. Neither of the persons employed were injured so as to endanger their lives, but both have been much hurt, and are entertained as to the safety of their eyes. Their faces have been severely wounded, and their medical attendants have extracted several pieces of stone from their cheeks and vicinity of the eyes.

**Current.**  
Accidents similar to the above frequently occur, and every precaution ought to be observed by those engaged in the dangerous employment of blasting rocks. In the "American Journal of Science and Art," we find the following method recommended to prevent the premature explosion of Gun powder.

"About twenty years since another method of charging a blast was proposed and circulated in the newspapers, which, since that time, has been preferred to some extent in different parts of this country.—This method may be briefly described as follows, viz. After putting in the powder, take a rye or wheat straw, which is long enough to reach from the powder to the top of the hole, and having filled it with powder, insert one end of it into the charge; after which put in a small quantity of wadding, and then fill up the hole with coarse dry sand, simply poured in without any ramming."

When about ten years since my attention was turned to blasting, I made a trial of this method, with great success in some cases but without any effect in others. I soon found that when the hole was deep, the effect was as follows, viz. Having put in the powder, and having filled it with powder, and inserted into it, on one side, the straw filled with powder, as directed above, put in a small quantity of wadding and press it compactly down; then make a cone of wood, the diameter of whose base is not less than ten times its diameter of the hole, & whose height is a little less than the distance from the top of the wad to the top of the hole. Set the base of this cone on the wad, and then keeping the vertex in the centre of the hole, fill in around it with coarse dry sand. If the hole be very shallow, the sand may be pressed down around the cone with a small wooden rod, but if the length of the cone be eight or ten inches this will be unnecessary.

For the purpose of testing this method, before I proposed it to you, I have, within the last week, made seven trials of it, six of which were successful. The failure of the other, I attributed to the circumstance that the cone was so low that the base as to bind on the sides of the hole. The same hole was afterward charged, using a smaller cone, and the blast was effectual.

I have spoken of the piece of wood to be used in this method of blasting as a cone. Strictly speaking, however, its form should not be that of a true cone. In a cone, the areas of the sections which are parallel to the base, are as the squares of their distances from the vertex; but the proper form for the pieces of wood, is that in which these areas are in the duplicate, but in the simple ratio of the distances from the vertex. This gives the form of the true paraboloid; and to this form the workman, in making the piece, should certainly approximate as nearly as convenient; particularly as it respects the main part of the length, from the base toward the vertex. Near the vertex the form will not be so important. It is more conveniently formed, and is perhaps better, to terminate in a conical point, rather than in the more obtuse form of the paraboloid.

I here give a longitudinal section, showing on a small scale, nearly the form of the pieces which I used in my experiments.



It will be proper to remark here, that the very great degree of precision will be necessary in forming the pieces, particularly for holes which will receive one as long as eight or ten inches. When the workman has formed a just conception of the proper form, he may make one with sufficient precision, for any depth of hole, with no other instrument than a common axe. The pieces, especially when more than five or six inches long, should be made of dry seasoned wood. When once made they may sometimes be used several times in succession, as they will not often be thrown to a great distance; sometimes not even out of the hole. In my experiments I used one piece three times another twice.

Though the time occupied in charging in this way, is somewhat more than it takes to charge in those cases where sand alone may be used, it is still much less than in the old method, as is described by Mr. Catlin. Should this method, on further trial, be found to be sure and effectual, it will afford as full a remedy, as can perhaps be expected, for the latter dangerous nature of the employment.—With the most respectful consideration, I am, Sir, your friend and servant.

ELI W. BLAKE.

## COMMUNICATIONS.

THE PUBLIC SCHOOLS.

No. 4.

MR. EDITOR.

The arguments already adduced, though these have not been as forcibly presented as a more eloquent pen would have portrayed them—lead, I think, inevitably to the conclusion, that our Public Schools ought to be maintained; and, if approved, invigorated and extended.

There has just occurred to my memory an article in Dr. Johnson's Rambler, in which neither leisure nor opportunity at this moment to refer to it—directed against what he calls the *scratches* of the human species; persons whose distorted vision, whole course of nature seems to be a way and who can discern in nothing a sign for satisfaction or praise. Now I think that much of the every-day clamour against the defects of Education—especially the defects of Government—is attributable to that morbid disposition that may very strikingly cause such a discontent. For, if in the sincerity of our wishes to apply a remedy where the disease can be made evident, we entertain a particular notion of the errors which are complained of, the inquiry is dismissed by some rapid reference to the voice of public opinion—a quietus is put upon all discussion by the very same remark that when there is much complaint, there must be much abuse. It has just come into my mind that the virtuous Aristides was an exile from his native city by the influence of reasoning very tantamount to this.

I am not, however, so entirely desirous of the means of public complaint as to doubt that there are many grounds for dissatisfaction on the subject of our present discussion; it would be unreasonable not to confess that the best devised human systems are fallible, that they are liable to abuse, and that they are only to be maintained in their purity by a watchful care and superintendence. In short, I concede the last part of such a discontent, generally; but long that its origin is to be referred to errors in the ground-work or outline of the present system of Education. Provide the schools which we have with able Masters—let other words, *fulfill the original intent of their institution*—and all the fruits which the most sanguine could anticipate will be sure to follow. For I have proof, of the soundness of this induction—where the system has been faithfully acted upon, the results have been satisfactory. I would, therefore, Sir, your own District School which, has, from time to time, furnished certain highly respectable scholars; but I would find fault a little further back and recall to public view that distinguished man, a name powerful which has proved so many of our countrymen for our Bar and Church. Whatever diversity of sentiment may be entertained respecting the venerable gentleman who enjoys the honor of being educated so many of the most able and able, will concur in ascribing such a pre-eminence to that School, that few will deny to it—with the usual allowances for private license—the application of the poet's words.