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DELIVERED

TO THE

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MECHANICS INSTITUTION,

MARCH, 1832

BY DR. DUNLOP.

Mark:

PRINTED FOR THE MECHANICS' INSTITUTION, AT THE GUARDIAN OFFICE.

W. J. Coates, Buinter.

1832.

ADVERTISEMENT.

The reader is requested to bear in mind, that the following Address was not written with the view of being printed—but the Committee having expressed a conviction, that its publication would be beneficial to the institution, the author at once consented, as he thought the good of the Society ought not to be forgone for any disadvantage he might suffer in having a composition read, which he intended should only have been heard.

ADDRESS,

&c. &c.

What constitutes the power, the wealth, the greatness, the happiness of nations? Not the soil, however rich—the climate, however genial; or the population, however numerous or dense. These form but the inert body of national greatness, which, like other inert matter, must be subservient to the moral power of another body, unless the soul of intelligence is breathed into its own.

Did physical circumstances cause national greatness, Egypt and India, the oldest countries in the world, as well as the most fertile, and which, from their proximity to where the subsiding waters of the Deluge left the Ark, probably were first settled by that part of the human family who remained after the general destruction of the Antedeluvian world—which were the cradle of Science, of knowledge, and of the Arts of life—where Astronomy and Geometry had their birth; and where, it is probably not too great a stretch of imagination to suppose that, a portion of the knowledge that the Patriarch of the Flood had received from those who lived in the days when God was more familiarly known to his creatures was handed down by tradition.

These countries, rich beyond parallel in a teeming soil which returns an abundant harvest twice every year, all but spontaneously, with a climate ripening and bringing to perfection all the fruits of the earth, with a population as numerous as the sands on the Sea shore, what are they now? the one ground down and trodden under foot by Tartar hordes; and the one hundred and seventeen millions of the other legislated for, and governed by, the moral power of twenty-two thousand Europeans.

The advantage of historical knowledge consists, to a great extent, in the power that it gives us of judging of the causes of the rise, progress, decline, and fall of Nations, to enable us to regulate the present BY, and read the future IN the past.

Why are these Nations fallen? Because, though great in the Arts and Sciences, their knowledge was not diffused through the body of society, but confined rigorously to a part of it. Caste, that

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spell which paralizes honest ambition and industry by precluding the possibility of a man bettering his condition or raising himself in the world, at the same time that it bestows all power and honor on one part of the community, necessarily renders the remainder indifferent to the public good, of which they have no share, and of the public improvement, which can not benefit them; and we shall find, in the prosecution of this enquiry, that whenever every class of the people of a State unite for the purpose of promoting its greatness, success is certain; but whenever the head of the State, or the lower parts of it exclusively pursue that object, failure is inevitable: in the one case, it is the hilt of the sword without the blade; in the other, the blade without the hilt; in either case it is useless as an instrument oither of attack or defence.

Next in Chronological order follows Greece, the land of Heroes, of Poets, of Sages, of Arms, and of Arts-a land, each separate State of which contained scarceely more surface or more inhabitants than in an English County; yet, which for ages defied the greatest powers of the earth. Whence arose this wonderful phenomenon in the history of man? Simply, from all classes of the community being sufficiently intelligent to sympathise with, and participate in, all that constituted her national greatness. The eloquent harangues of Demosthenes were thundered in the open Market place to the assembled multitude-those prodiges of Art which claim our admiration and defy our imitation, the master pieces of a Phidias, or a Praxiteles, were open to the inspection of the people in the body of every Temple, while the wisdom of Plato was poured to his listening disciples from their porticoes. The Odes of their Poets were recited at the public Games, and the prize awarded by the voice of the multitude. Every Greek, whatever his rank might be, was a soldier by education, and every Greek could appreciate what caused the greatness of his country. Whatever his condition in life, he was a Critic in Philosophy, Eloquence, Poetry, Science, and the Fine Arts; and, exulting in his superiority over the rest of the world. he divided the human family into two classes—the Greek and the barbarian.

But knowledge and science, without virtue, cannot save a nation. Gold effected what Steel could never perform—the Rulers of Greece were bribed, and she became enslaved.

Rome followed Greece almost as a service copyist; but not having her enthusiasm in the prosecution of science, she was necessarily try by precluding the raising himself in the ver and honor on one remainder indifferent re, and of the public and we shell find, in er every class of the moting its greatness, he State, or the lower is inevitable: in the blade; in the other, useless as an instru-

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yist; but not having she was necessarily less successful. War and aggrandisement were the great object of Roman ambition. In Greece, the honors of War held only an equal place, in the estimation of the people, with the honors of Science; and the Crown awarded by the public voice for superiority of genius raised its possessor's rank in society equally the same whether that Crown was composed of laurel or of parsley.

Rome colonized for military purposes only; and having the resources of the world at her command—holding its mines and its revenues to fill her Exchequer, and its very inhabitants for her slaves, for a time continued to exist and flourish without the aid of Commerce or Manufactures. But this system necessarily wrought its own destruction. The successful General, or Prætor, who amassed a fortune greater than that of a modern Monarch by the plunder of a Province, became a Roman Noble, while the soldier who had fought by his side must be contented with his scanty pittance of unground wheat for his food, and a little vinegar and water for his drink. Thus the wealth of all the world became collected in Rome at the very time when ninety-nine out of the one hundred of its inhabitants were either retainers of the wealthiest Nobility the world ever knew, or paupers, subsisting chiefly on the donations of corn allowed them to save them from starvation out of the public stores.

Thus Rome, by a different road, arrived exactly at the same end that Egypt and India had done. The few alone had any interest in the well-being of the State-the many, feeling that they were as low as the could be, were perfectly conscious that no change could be for the worse. What constitutes the strength of England was the weakness of Rome. The extent of her possessions, instead of by Commerce adding to her wealth, by the expence that they caused deducted from her resources. And in the second and third century we find that the Rulers of Rome became aware of the danger of their situation. We find her gradually withdrawing her Garrisons from the extremities nearer to the centre, and that her barbarian foes, conscious of her declining strength, never failed to occupy the ground that she had abandoned, till, by little and little, they were driven from Brtain to Gaul, then across the Alps, till at last the second invasion of barbarians got possession of the Capitol itself. The light of Science and Literature, driven from their ancient seats of Italy and Greece, burned with a feeble flame in the Western Empire, till the hordes of the East extinguished it there. Then succeeded that long night of ignorance, that chaos of the moral world, which can only be described in the sublinely simple wo with which the Scriptures depict the primeval chaos of the physiworld, "it was without form and void, and darkness was on the fe of the deep."

What Rome wanted was Commerce and Manufactures. The must necessarily, in all communities, establish a middle order society, which forms a communicating link between the highest a the lowest; and one rank, shading imperceptibly into another, pe mits a common sympathy to pervade the whole: and in this sta of things every man must have an interest in the common good for, though only a part of the community can possess property at be men of rank and of influence, yet, every man sees that the do is open to him to possess these distinctions, and every man fee anxious to promote the good of a community, which, at the san time, may, or must, promote his own individual good: whereas when there are but two classes in the community, the Lord and th Slave, the one is at such an incalculable distance above the other that hope in the lower class to reach the rank of the higher woul be madness.

The ashes of the fire of knowledge had smouldered where the fire had burned longest and brightest—in Italy. And there, accordingly, we find it burst forth anew, connected, as it always is with Mechanical and Commercial power.

The small Italian Republics, having gradually shaken off, or amal gamated with, their barbarous conquerors, set out in pursuit of the Arts and Commerce. Their country produced silk, and they learned the arts of weaving and dying it. Glass, then a matter of luxury was almost exclusively manufactured at Venice: and Navigation being in its infancy, and the route to India by the Cape of Good Hope not discovered, their local situation gave them the monopol of the trade of the East, and their Cities became the Enterpot and the Mart of the Commodities of the two ends of the then know world; and, stimulated by wealth, their Merchant Princes acquire imperishable fame by resusciating learning that had been dead for centuries, and reviving those Arts which were all but forgotten.

Up to this period, we have been contemplating the decay of na tional power and greatness—here we have its rise: The Mechanics Arts produce Commerce—Commerce wealth, and wealth knowledge and again, all these principles re-act on each other, and each tend

Manufactures. These blish a middle order in between the highest and ptibly into another, perhole: and in this state in the common good; an possess property and y man sees that the door s, and every man feels ity, which, at the same vidual good: whereas, unity, the Lord and the stance above the other. ink of the higher would

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sublimely simple words strengthen and increase the rest. What these have done for val chaos of the physical England, I shall not attempt to describe; as, from want of knowdarkness was on the face ledge, I may be unable, and, from the partiality of a Briton, unfit. I shall, therefore, borrow the eloquent eulogy of a Statesman, a a Scholor, a Philosopher, a Patriot, and a Foreigner:*

"We have pointed out the means offensive, and defensive, of a Country which Nature has separated from the rest of the world, by the obstacles of the Sea, and which Nautical Science has surrounded by ramparts hitherto impregnable: ramparts which serve also as means of attack; which convey armies from one hemisphere to another, and which, even on the most distant shores, meet with England still! England, equally prudent and ambitious, possesses on every Continent, out posts which, according to the fluctuations of her fortune, in turn give aid to her in conquest, and refuge in retreat; and which, at all times, are fields for the enterprise and activity of a Commerce which braves every danger, and never allows itself to rest.

"Let us pause for a moment to contemplate this spectacle, unexampled in the history of Nations. In Europe, the British Empire borders at once, towards the North upon Denmark, upon Holland, upon France; towards the South, upon Spain, upon Sicily, upon Italy, upon Western Turkey. It holds the keys of the Adriatic and the Mediterranean; it commands the mouth of the Black Sea, as well as of the Baltic. No sooner had its Navy, the Arbiter of the Archipelago, ceased to be adverse to the cause of Greece, than on the instant the Ports of Peloponnesus found new liberators in the posterity of the Heraclides: and, from Corinth to Tennedes, the Sea which leads to the Bosphorus, became to the descendants of the Argonauts the road to Victory, and to a second and a richer golden fleece—National Independence! In Europe the British Empire permits this conquest.

"In America it gives boundaries to Russia towards the Pole, and to the United States towards the temperate regions. Under the torrid zone it reigns in the midst of the Antilles, encircles the Gulf of Mexico, till, at last, it meets those new States, which it was the first to free from their dependence on their Mother Country, to make them more surely dependent upon its own Commercial industry; and, at the same time, to scare, in either hemisphere, any mortal who might endeavor to snatch the heavenly fire of its genius, or the

^{*}The Baron Dupin.

sterret of its conquests, it holds, midway between Africa and Arrica, and on the road which connects Europe with Asia, that r to which it chained the Prometheus of the modern world.

"In Africa, from the centre of that Island, devoted of yore, un the symbol of the Cross, to the safety of every Christian Flag, British Empire enforces from the Barbary States that respect whi they pay to no other power. From the foot of the Pillars of H cules, it carries dread into the remotest Provinces of Morocco. the shores of the Atlantic it has built the Forts of the Gold Cod and of the Lion's Mountain.* It is from thence that it strikes the prey which the Black furnish to the European, races of men; as it is there that it attaches to the soil the freed men whom it snatched from the trade in slaves. On the same Continent, beyond the tr pics, and at the point nearest to the Austral Pole, it has possesse itself of a shelter under the very Cape of Storms. Where the Spa niards and the Portuguese thought only of securing a Port for the Ships to touch at—where the Dutch perceived no capabilities beyon those of a Plantation—it is now establishing a Colony of a second British people; and, uniting English activity with Batavian patience at this moment it is extending around the Cape the boundaries of a settlement which will increase in the South of Africa to the size of those States in the North of America. From this new focus of action and of conquest, it casts its eyes towards India; it discovers, it seizes, the stations of most importance to its Commercial progress, and thus renders itself the exclusive ruler over the passes of Africa, from the East of another hemisphere.

"Finally—As much dreaded in the Persian Gulf, and the Erythream Gulf, as in the Pacific Ocean, and the Indian Archipelago—the British Empire, the possessor of the finest Countries of the East, beholds its Factors reign over eighty millions of subjects. The Conquests of its Merchants in Asia begin where those of Alexander ceased, and where the Terminus of the Romans could never reach. At this moment, from the banks of the Indus to the frontiers of China—from the mouths of the Ganges to the Mountains of Thibet; all acknowledge the sway of a Mercantile Company, shut up in a narrow street of the City of London!

"Thus, from one centre, by the vigor of its institutions, and the advanced state of its Civil and Military Arts, an Island, which, in the Ocean Archipelago, would scarcely be ranked in the third class,

^{*} Sierra Leone.

d, devoted of yere, under States that respect which ot of the Pillars of Her. vinces of Morocco. Forts of the Gold Coast ience that it strikes the an, races of men; and d men whom it snatches ntinent, beyond the troal Pole, it has possessed orms. Where the Spasecuring a Port for their d no capabilities beyond a Colony of a second with Batavian patience, pe the boundaries of a of Africa to the size From this new focus of rds India; it discovers, Commercial progress, er the passes of Africa,

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between Africa and Ame kes the effects of its industry, and the weight of its power, to be rope with Asia, that rock it in every extremity of the four divisions of the Globe; while, at the same time, it is peopling and civilizing a fifth, which will follow laws, will speak its language, and will adopt its manners with overy Christian Flag, the trade, its arts, its cultivation, and its enlightenment.

"This immense and wide-spread extent of Colonies and Provinces, hich would cause the weakness and the ruin of any other nation, enstitutes the safety and the power of the British people. It is beause England is separated from her exterior Provinces by enormous istances that she is not vulnerable through them: it is because hese Provinces are separated one from another by distances so treat, that they cannot at the same time fall under the blows of one adversary. To attack them is difficult; to blockade them is imposable. To supply the wants of industry, of trade, and of government, between the Mother Country and possessions scattered upon the shores of every Sea, a vast number of Ships is necessary, even in time of peace; and these Ships ready to sail at a moment's notice wards the threatened point, carry thither reinforcements and sucfor, which render it impregnable, either by famine or by force.

"It is true, that in any one of her distant Provinces, England could not contend single-handed, against its most powerful neighbor. But every where the most formidable Nation is to the rest the object of envy, and of hatred, hidden only by fear. Thus (if I may so speak) one of the most skilful branches of English industry, is the art to change into declared hostility the secret ill-will of surrounding Nations. This is an additional interest which the capital of her Commerce yields to her.

"As for the Nations which have no establishments on the frontiers of the English possessions, the sphere of their action is much more hmited than that of her influence. No one of them could support a contest with Great Britain, on a field equally distant from both mother countries; for no other nation has equal means to transport rapidly to a distance its arms and its defenders: Such is the superiority of Commercial power.

"It was under the Administration of Lord Chatham, in the very midst of the seven year's war, that we behold the commencement of all those great internal works useful to Commerce, which are now the admiration of every foreigner. Up to 1756 England had not a single line of artificial Navigation; she possessed, for communica-

tion by land, only a small number of roads, injudicio'isly cut, an kept up. Of a sudden, an individual conceives the idea to profi the general impulsion which industry had received, by cutting Canal to carry to Manchester the product of the mines. afterwards, a Town which thrives, and of which the exube wealth seeks every where productive outlets-Liverpool-aspire still higher designs; she is the first to form and to realize the pro of opening a navigable channel between the Irish Sea and the G man Ocean. Other channels, even more extended, are establish by degress: thus, within the short space of half a century, a dou row of Canals is formed, both for great and for small navigati for the purpose of uniting together opposite Seas; basins, separat by numberless chains of hills and mountains; opulent ports; indu trious Towns; fertile plains; and inexaustible mines: And the presents a development of more than 1000 leagues in length, up a portion of territory not equal to one-fourth of France!

"In order to distribute the water necessary for the daily life of the inhabitants, and the gas which produces a light so brilliant and sepure, that it seems, even in the darkest night, to be almost an anticipation of dawn—to fulfil this one object of general utility, pipe and conduits have been laid down, which even already form a ramification of above 400 leagues beneath the pavement of London.

"The communications in the open air are an object of equal solution, and of works even vaster still. The roads which alread existed are enlarged; are reconstructed with more art, and kept up with more care. New channels are thrown open to Commerce, and a system of roads is now being formed, of which the total length is at present more than 46,000 leagues in England alone.

"While these prodigies are taking place, basins and ports are constructed for shipping. Moles, Piers, Lighthouses, newly established increase the security of access, and the shelter of every anchorage upon a line of more than 600 leagues of coast. Thanks to these works, at this moment, in the three Kingdoms, 22,300 Merchan Vessels, manned by 160,000 men, and capable of carrying two millions of tons of merchandise, are scarcely sufficient for the exportation of the superfluity of interior circulation; for the tradalong the coast, and for the importation of those foreign product necessary to keep up a circulation so immense.

"Such is the progress, the origin of which dates only from the soven year's war; a progress, which the disastrous war against the

injudicio'isly cut, and illives the idea to profit by received, by cutting a of the mines. Shortly of which the exuberant Liverpool—aspires to and to realize the project Irish Sea and the Geratended, are established half a century, a double and for small navigation, Seas; basins, separated in opulent ports; industible mines: And this leagues in length, upon

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injudicio'isly cut, and ill sudden received new life, by the loss of these very Colonies; ives the idea to profit by a progress, which, above all, has advanced with gigantic strides received, by cutting a pring the wars, so bloody and so long, of the Republic, the Consuof the mines. Shortly the, and the Empire of France.

"It is thus that England was flourishing within, whilst her sacriices, without, seemed to hasten her ruin and prepare her fall;-it thus, that, even during peace, entering into a war of industry against all Nations, animated by its internal Commercial force, as living being is by its vital force, she has overthrown all her rivals the extremity of the New World, the same as in the heart of the old one. Once having gained the ascendancy in this contest, she casts aside her ancient armour, and throws down the ramparts raised by her Commercial prohibitions.* She opens her Ports to foreigners, and offers them an enterpôt for their merchandize.† She asks only one favor of her rivals in industry; that is, to descend, unarmed like her, into the Arena where her recent exploits render her certain of victory. What then has the British Administration done to produce, in so short a time, public works which alone have rendered possible the great results of which we have been tracing the picture? Nothing. It has allowed Commerce a free course, and has thought that it served it sufficiently in securing to it protection without, liberty within, and justice every where. It has allowed Manufactures, Proprietors, and Merchants, of great, of moderate, and of small capital, to confer with one another upon their mutual wants; upon the works which may be useful to them; and lastly, upon the means whereby themselves to undertake and to execute those works.

"These works, which thus procure to Commerce a new prosperity, had, at the same time, the advantage of adding to the value of landed property. To those territorial possessions which all human knowledge never will be able to extend beyond the boundaries which nature has given to them, it adds the possession of industry, unlimited in their variety, their greatness, and their wealth, like the genius from which they spring. Thus, during the short interval of sixty years, Commercial industry has created a property inseparable from the soil, to the extent of 500,000,000 upon Roads, of a

† By the law relating to entrepots London is destined to become the rende-

For the last three years, the British Parliament has been repealing in succession the most odious restrictions of the famous Laws known under the name of the Navigation Acts.

1,000,000,000 upon Rivers and Canals, and of another 1,000,00 upon the Maritime Ports and Sea Coast."

Such are the effects of Commercial power; and on Merci knowledge Commerce must in all Countries chiefly, and in a Country solely, depend. China, with two hundred and sixty lions, has not the foreign Commerce enjoyed by Holland, who barely three; and, but for Commerce, Holland might have remain a bog and England a forest. A Country without Manufactures Spain, for instance) can only export the surplus of her Agricult produce, and import of course no more than the value of that duce; for a Nation can buy just exactly to the same amount she can sell. Whereas, the skill and industry of a scientific Na Thus, a pound of cotton, of the value of 3s. creates wealth. imported into England, and exported in the shape of a web of fl ered muslin, worth £25, the difference of the two values is crea by, and is the wages of, Mechanical skill. In Britain, we have gradations of rank from the King to the laborer; and in every ra numerous members, keenly alive to the means to be employed the public good, and all sensible of the value of knowledge a mechanical improvement, and aware of the rank in public estin tion that the advancement of these must confer—when we see amo our men of Science the noble names of Worcester, Dundonald, C vendish, Boyle, and Seymour; and as the patrons of the Arts life, Bridgewater, Portland, Devonshire, and perhaps half the Pe age besides—when we see, in the middle ranks, a Davy, a Telfo a Rennie, a Smeaton, and a Brunell—we can easily see gre reason to hope, that the Arts will flourish under such professo backed by such patrons; but our hopes become a certainty when know that much, if not the greater part, of our Mechanical improve ment has sprung from the genius and intelligence of the worki mechanics of Great Britain-when we reflect, that a trade whi produces more money by one-half than our whole National Revent was called into existence little more than half a century ago by t genius of a man, who, till he attained the age of five-and-for filled the humble situation of a Village Barber—when we rememb that those stupenduous communications which at once so immense add to the wealth of the Country through which they pass, and that of the individuals who have constructed them, the Canals England, the lowest value set upon which is sixty millions, a st that we feel difficult even to imagine, owe their origin to fire geni

without Manufactures (like e shape of a web of flow. the two values is created

borer; and in every rank nfer-when we see among

nd of another 1,000,000,000 a millright; and when we consider that he whose improvements of the Steam Engine have amounted almost to the merit of the invention of it, and o has given to his Country, containing only power; and on Mercantile enty-one millions, a power, in Manufacturing alone, which one ries chiefly, and in a poor hundred and fifty millions could not attain without its aid, who has, vo hundred and sixty mil the rapidity and cheapness with which travelling and transport oyed by Holland, who haven be effected, done so much to alter the relations of society, and olland might have remained improve its resources; to add to its wealth, comfort, and happiss; who has almost realized Archimedes' Lever to turn the world; surplus of her Agricultura that this great and illustrious individual, whom I am proud to call han the value of that pro townsman, who has effected more than sages or heroes for the od of mankind, was a journeyman Watchmaker:-We must see, ustry of a scientific Nation a moment, that if means are taken to instruct people of their of the value of 3s. 6d. class in the principles of the Sciences which govern the Arts they practice, we increase a thousand fold the chances of future Brindleys, Arkwrights, and Watts, arising to add to the greatness of In Britain, we have the our Country, and to bestow benefits on the whole family of mankind.

means to be employed for The man who had the honor of first conceiving the idea of invalue of knowledge and structing the working classes, and of carrying the plan successfully ne rank in public estima into effect, was the late John Anderson, Professor of Natural Philosophy in the University of Glasgow.

orcester, Dundonald, Ca. Towards the end of the last century, he gave a course of Lec. e patrons of the Arts of tures to the working Mechanics of Glasgow, taking care to adopt nd perhaps half the Peer language strictly suited to the state of their acquirements; and, at anks, a Davy, a Telford his death, he bequeathed his Philosophical Apparatus and his fortune e can easily see great to found an Institution where Lectures were to be delivered on under such professors. Chemistry, Mechanics, and Natural Philosophy, to the working pme a certainty when we classes, calling their attention to any facts in these Sciences that bur Mechanical improve bore more immediately upon any of the Mechanical Trades. The elligence of the working result has been beneficial in the highest degree. The first Lcoturer flect, that a trade which who succeeded Professor Anderson, Doctor Birkbeck, carried the vhole National Revenue, plan to London, though he allowed upwards of twenty years to If a century ago by the clapse before the utility of such a measure struck him, and then age of five-and-forty, claimed it as his own. The result has long since been felt in Glasr-when we remember gow and its vicinity. Numberless improvements have been made in n at once so immensely the Mechanical Arts by the pupils of the Andersonian Institution: hich they pass, and to the most conspicious, if not the greatest, of which is the illumi-I them, the Canals of nating of the Town Clocks by Gas; the flame being ignited by a s sixty millions, a sum perforated pipe charged with Gas, along which the light is flashed eir örigin to the genius from the Street to the Belfrey, and by a cog fitted to one of the wheels of the Clock, the light is extinguished by a stop cock, precise moment that the sun rises. The inventor of this ing and useful contrivance is a Pastry Cook; and his mind wa turned to scientific pursuits by the Lectures of the Andersonic stitute, of which he was then a pupil, and now a patron.

The results of the Metropolitan Institute have been ama Similar Institutions have sprung up in every part of the King Mechanics' Magazines have been instituted as places at one the deposit and circulation of the Mechanical knowledge of viduals, which, but for them, might have perished with them: a society has been formed for the purpose of diffusing useful knowledge to the middle and lower orders. Here again we have combination of all classes in a great object of public good, we cannot fail, in the end, to enhance the power of the Nation, add to the happiness of the individuals composing it.

I have now only, in conclusion, to congratulate the people York, that the thirst of knowledge, which exhibited itself in Mother Country, has extended to the westernmost Capital of I Majesty's widely spread dominions; for where a love of knowled exists, knowledge must follow of course: for, though a man may disappointed in the attainment of the precise object of which he in pursuit, yet, the very effort made to attain it must have streng ened his mind by the exercise of his intellect, and put him in posession of new facts, which are in themselves knowledge; at though not conducive exactly to the object he had in view, will y certainly prove useful to him in the general attainment of Science.

It cannot be too often repeated, that knowledge is power; a the Nation that possesses the greatest quantity of knowledge, fro that very fact, is the most powerful: Let the founders of this Ins tution, therefore, go on in the laudable design they have begun persevere, and success is certain. propose by the establishment of a Mechanics' Institution.

In this country every industrious man, from the high rate of wages

shed by a stop cock, at the inventor of this ingenious committee beg briefly to lay before the public, the objects that they c; and his mind was firs es of the Andersonion In l now a patron.

the low price of provisions, can, even while laying by a part of tute have been amazing earnings, enjoy all the necessaries of life—all its comforts, and very part of the Kingdom may of its luxuries,—but from the highest luxury, and the most perted as places at once formenent and enduring, the luxury of knowledge, he is debarred. anical knowledge of indifficonfer on him this blessing, that the Mechanics' Institute is foundperished with them: And and it proposes to accomplish this end, by establishing a good liof diffusing useful know berry of works on useful knowledge, particularly as regards the Me-Here again we have the nic Arts, by lectures, conversations, and instructions in the rudiect of public good, which ments of physical science, and by procuring by degrees a philosophi-

nposing it.

ongratulate the people of But it is not alone the improvement of the working classes in know. ch exhibited itself in the loge, that is contemplated by the Committee, tho' that is their prinesternmost Capital of Hiscipal object.

power of the Nation, and apparatus, whereby these intentions may be carried more fully in-

to effect.

here a love of knowledge It has been found by experience, that whenever you introduce a taste for, though a man may be for information and intellectual enjoyment, you diminish a propensity ise object of which he is to follow grovelling, demoralizing, and sensual pleasures,—and tho ain it must have strength you were not to give one useful idea to one mechanic in the Province ect, and put him in pos by the means proposed; yet, you do no mean service to the public, selves knowledge; and, if you give him a rational and innocent recreation, which will prevent he had in view, will yethim flying to the Dram-Shop, for a stimulus to rouse him from the al attainment of Science langour of inactivity: under all these circumstances, the Committee nowledge is power; andappeal with confidence to the good sense and good feeling of the comtity of knowledge, from munity, for countenance and support.

e founders of this Insti-N. B. Donations of Cash, Books, Apparatus, Natural or Artificial sign they have begun; Curiosities will be thankfully received by any of the Officers of the Institution.

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