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The following Account of GUM ELASTIC, OR INDIAN RUBBER, is taken from THE BEE.

By Dr. ANDERSON, of Edinburgh.

On the uses that may be made of *Coutchouc*, *Elastic Gum*, or *Indian Rubber*, in Arts and Manufactures, with an account of the manner of obtaining and manufacturing it.

THE substance which forms the object of our present disquisition is called *Coutchouc*, by the natives of the country where it is spontaneously produced. It is denominated *elastic gum*, or *elastic resin*, by philosophers in Europe; but it is now generally known in the shops by the name of *Indian rubber*; a substance that few of our readers are not acquainted with. It is a firm, tough, pliable substance, greatly resembling some kinds of leather; but it possesses a degree of elasticity that cannot be equalled by any known substance in nature. It admits of being stretched out in every direction to an astonishing degree; and when the distending power is removed, it recovers its former shape and appearance. It neither can be dissolved in water, in ardent spirits, in acids, nor alkaline liquors, in the ordinary state of our atmosphere. Oils, in some measure, act upon it; but the vitriolic aether is the only complete solvent of it that is as yet known. It is inflammable, and burns with a clear steady flame, emitting then a slight smell, not at all disagreeable. When exposed to a cold air, it is more hard and rigid than under a milder temperature, but it neither becomes fluid, nor loses its elasticity, till it be exposed to a much more intense degree of heat than is ever experienced in any climate on the globe. It may, however, be melted by a very intense degree of heat; and then it assumes a thick viscid appearance, like some kinds of semi-fluid oils. And having once been reduced to that state, it cannot be again made to acquire its former consistence or elasticity.

This substance is now well known to be the inspissated juice of a tree. The natives in those regions where this tree abounds, extract the juice by making longitudinal incisions in the bark. It bleeds freely, and the juice, in a thick state of semi-fluidity, is collected into vessels placed to receive it at the bottom of the tree. It is then, by means of a brush, spread upon moulds prepared for the purpose, and suffered to dry in the sun, or before a fire, which, by evaporating the moisture, soon brings it to the state in which it is sent over to us. By adding successive layers above each other, it may be brought to any degree of thickness wanted; and by varying the form of the mould, it may be made to assume any shape or appearance you incline; which shape, as has been said, it will ever afterwards retain, if no distending force be applied to alter it.

From this simple detail of facts, it is easy to see, that the uses to which this substance might be applied in arts and manufactures are innumerable, and such as can be effected by no other known substance in nature. Yet so blind have mankind hitherto been to these advantages, that no attempts have been made in any accessible region where extensive manufactures could be established, either to cultivate the tree that produces it, or to induce the natives to send the juice in its fluid state to Europe, where it could be properly manufactured. All that has been done is, to suffer the natives to mould it into the form of a small kind of bottles, which is found to answer some purpose among themselves; and these, when brought to Europe, are applied to scarcely any other use than being cut to pieces for the purpose of effacing marks made upon paper by a black lead pencil, or that of idly amusing children by stretching it out, and observing how perfectly it again recovers its pristine form, after having been distended to a great length in any direction. We amuse ourselves with the phenomenon without profiting by it, as children used to be amused with the attraction of amber, before the phenomena of electricity were explained.

It is now time, that we should begin to make some use of this very valuable substance, which, probably, a hundred years hence, will administer in a variety of ways to the accommodation of our descendants. With that view, I shall here venture to point out a few of the useful purposes it may be made to answer; not doubting but the invention of men, whenever they can get the materials in their hands in abundance, will discover a variety of other important purposes it will serve, that have not as yet been dreamt of.

1st. This substance so much resembles leather, that it naturally occurs that it might be employed for the purpose of making boots. These would not only admit of being made in the neatest shape that could be imagined, but also, by being impervious to water, or the other corrosive liquors above named, would be sufficient to protect men from wet, though standing in water. For seamen, fishermen and others, who are by their business obliged to wade in water, such boots would be of the greatest utility. The feet and legs might thus be protected from the action of even acids or alkaline substances themselves, wherever that should become necessary.

2d. *Gloves* of this substance would be so soft and pliable, as to allow the fingers perfect ac-

tion, and in those kinds of businesses, that require artificers to put their hands among acids or corrosive liquors, they may become highly convenient.

3d. *Caps*. The uses that might be made of this substance for defending the head from wet, are infinitely various, and might prove highly beneficial. A thin covering of this substance might be made for travelling hats, which, without adding any sensible weight, would be perfectly impervious to wet of any kind. Every other kind of covering for the head, might be thus rendered water tight, merely by giving them a slight coat of *coutchouc*, which would in no sensible degree alter their other qualities. Bathing caps in particular, could thus be made extremely commodious, and at a small expence. This could be done, by covering with a coat of *coutchouc* an elastic stocking cap, which, merely by being pulled tight over the head, would embrace every part of it all round, so as to prevent the entrance of water. The stocking and the covering being equally elastic, they would contract and expand together without any sort of difficulty.

4th. *Umbrellas*.—Neck-pieces of silk, or other materials, cloaks or travelling coats of any sort, that should be judged proper, could thus be rendered perfectly water tight, without destroying their pliability in the smallest degree. It would only be necessary to cover them with a coat of this soft varnish after they were made, so as to close up the seams. Buckets too, all of canvas, or any other cheap substance, might be made water tight and incorruptible, by merely covering them with this matter. Vessels also for holding water and other liquors, that would not be liable to breakage, might thus be made of any size or shape at a small expence. In short, it would take too much room to attempt to enumerate half the uses that might be made of it in the household way.

5th. In the army and navy, its uses would be still more numerous and important. *Tents* are an article of very great expence: The canvas for them must be of the very best quality and closest texture; and after all, they are seldom proof against continued rain. At any rate, the vicissitudes of weather soon rot the canvas, and make a new supply in a short time necessary. Were these tents covered with a coat of this substance, the entrance of rain through it would not only be altogether precluded, but also, the very wetting of the canvas itself would be prevented, and of course its durability be augmented to a tenfold degree. On the same principle, the sails of a ship would not only be made to hold the wind in the most complete manner, but by being covered by a thin coat of it on both sides, the sail cloth itself could never be wetted, and of course, its durability be augmented, while its flexibility would not be diminished. Other uses to which it could be applied in the army and navy, are so numerous, as not to admit of being here specified. It is only necessary barely to mention, that on a military expedition, to have a vessel capable of containing fluids, which, when empty, admits of being wrapped up like a handkerchief and put into the pocket, might on some occasions be of inestimable value; and the same at sea.

(To be concluded in our next.)

The following *Passquinade* on the Abbe MAURY, it is said appeared in Rome.

“ROME is in mourning. O Pius the sixth, now that you are loading with favors a man, whom religion, learning, and his country equally disavow—deign then to listen to Pasquin, and acknowledge your error. As the organ of public opinion, I am more infallible than yourself—Born of an obscure family, Maury had the baseness to blush at his origin—educated from his youth upwards in the arts of intrigue and hypocrisy, he grew ambitious of the honors of the academy and the wealth of the church. According as either was prosperous he courted the atheistical Aembert or the jesuitical Beaumont. He preached up atheism and calumniated philosophy. Convinced of the weakness of his abilities, he removed his rivals from the sacred tribunal by the most infamous accusations—In the heat of brutality he has endeavored to seize by force the favors of unsuspecting beauty and innocence, and has been known to assume the character of an assassin to be received as a lover.—Decorated with literary titles, obtained by the basest apostacy, enriched by the wealth of a church he had treated with the blackest ingratitude, still his ambition was unsatisfied: always imitating the serpent, which to raise itself, must creep, he became the defender and patron of slavery, and hired out his pen to a despotic minister—this vile supporter of tyranny was invited by the disaffected clergy of France, to intrude himself among the representatives of a people who are determined to be free, &c.—Such is the portrait of the Abbe Maury.—O Pius, we pardon you, your effeminate luxury, your hypocritical pilgrimages, your insolent profusion and your antichristian policy—but who can, without indignation, see a traitorous Judas elevated to apostolical dignity, and the Roman purple disgraced by a Pope who is only deserving of the purple of the galley slaves.”

ON PRIDE.

From the *Massachusetts Spy*.

“As love of pleasure into pain betrays, So most grow infamous through love of praise.”

IT is rather whimsical, if the above aphorism is true, that the motive to action, with the means and acquisition, should so generally reverse each other. Distinction is the object of pride: Infamy its acquisition, when the means are not selected by virtue, nor directed by judgment. It is not difficult to read this truth in common characters—Those whimsical beings, who, through poverty, laziness, or misanthropy, get into the habits of peculiarity in manners and dress, by neglecting, or combating the general opinion and taste of the world, are not only denied its applauses, but meet its reproaches and contempt, and are no otherwise distinguished, than by their distance the wrong way from the favourites of mankind.—This is a broad subject. Perhaps it would be easy to trace all the crimes that disgrace human nature to this one powerful propensity, the love of distinction. This is the real cause why one half of the world is bowed down, and enslaved by the burden and tyranny of the other half—why the lofty towers and the splendid monuments of human glory, have been reared and decorated in one age, and broken down and totally swept away in the next. It will ever be the case, while we value no more the consciousness of merit, than the attributes of it stolen from the world, by false appearances and pretences, that true fame, like the decayed titles of a once valuable and honorable nobility, descended to a degenerate progeny, will depreciate, and lose its original stamp and principles, in the general plunder of envy, ambition, accident and knavery. And the error and evil consequences, in the one case, is a very exact resemblance of them in the other. In both cases, real worth has as little encouragement to expect, as it has of motive to obtain, the distinction of mankind. In a society where this object, so important to its glory and safety, has lost its power to inspire a benevolent, emulative and patriotic disposition, the weak and simple members of it have every thing to apprehend from the cunning and powerful.

Much has been written, and many severe things said, against pride: Yet it is perhaps as necessary a propensity as grows out of human nature. Because I have wounded my finger with my knife, I do not think proper to batter its edge—Neither should the moralist, in zealous revenge for the blood it has spilt, endeavor to eradicate pride from the heart. The object to which it is directed, should be selected by reason, so likewise should the means. And then, like the breeze that fills the sail, or the spur to a dull horse, it adds a stimulator as well as an impetus to progress and acquisition.

FROM THE (NEW-YORK) WEEKLY MUSEUM.

A CURIOUS FACT.

IN the month of June of the present year, a Pea-hen in the Alms-house garden, set on a number of eggs, but whenever she quitted the nest, the Peacock (as their manner is) would destroy some of them, until at length she had left but one. A large house-cat, which much frequented the garden, probably having observed now matters had been conducted, now paid more than ordinary attention, and took it upon her, whenever the hen left the nest, to take her place, and lay spread very broad on the egg, until the hen returned, when she would very orderly deliver up her charge to the natural owner; and so it was, that in the fullness of time, their

united vigilance and care, produced a fine Pea-chick. Now the end Puffs had in view, in this curious process of incubation, is submitted to the naturalist, whether the meant to contribute what she could towards the production, or, whether it was to guard the sacred deposits from the depredations of the wanton destroyer.

P. S. Miss, or more properly (since she has a young one) Mistress Puffs and the chicken are often seen together in the garden, while the hen at a distance seems apprehensive of no danger, but happy in the confidence of the friendly grimalkin.

P A R I S, May 2.

TWO conventional treaties are communicated this day from the minister of foreign affairs to the Assembly, and are decreed; the one with prince Lowensteinheim, the other with the reigning prince of Salm Salm. These two treaties, when ratified by the National Assembly will serve as an answer to all the host of slanders with which certain powers have affected to stigmatize a great nation, who have vindicated themselves into freedom, and who wish to oppose their enemies with no other weapons than reason and justice.

NATIONAL ASSEMBLY, May 12.

ON the motion of M. Dumas, it was decreed, that the formation of courts-martial should be left to the Generals who command the different armies.

M. Gaudet made some severe sarcastic remarks on the conduct of M. de la Fayette, and asked whether such a General should have the power of enacting military laws: His remarks, however, were not productive of any effect.

The Minister for the Interior Department said, that Paris was full of foreigners; and that he was greatly alarmed for the safety of the capital, suspecting that some dark designs were in agitation, which the present police could not discover.—Referred to the committee of twelve.

Decreed, “That the immense heap of papers and parchments which relate to the Nobility, and collected from various monasteries, &c. and deposited in the Church des Grands Augustins, shall be burned.”

M. Husley de Robecourt said, on the occasion, that the Assembly were a set of Goths—*An feu! an feu!* re-founded from all parts of the Hall, and the conflagration was accordingly decreed.

M. Carnot, jun. moved, “That the regiment of King’s Swiss Guards be no longer in the King’s service, but in the service of the Nation; that the National Guard of Honor be responsible to the Nation for the safety of the King’s person, and not liable to receive orders from the Officers of the Guards paid by the King.”—This motion was adjourned.

Decreed, That the Commanders in Chief shall have the privilege of appointing Commandants of Garrisons, &c. from among the Captains and Officers of superior rank, who, beside the emoluments attached to Commandants, shall still receive the pay, as Officers, according to their rank.”

L O N D O N, May 3.

Revolution in Poland.

This day being the first anniversary of the peaceful and dignified Revolution in Poland, (a Revolution which gave to that country a new, a nobler, and more secure existence among the Nations) a company, consisting of near sixty persons, dined at the Mitre-Tavern, Mitre-Court, Aldgate, in commemoration of an event which so happily demonstrated the increasing light and liberality of the age.