SELECTIONS.

THE SHOE OF THE HORSE.—There is one other circumstance connected with the toe of the hind shoe deserving of notice, I mean that part with which a horse inflicts upon himself the injury called an "over-reach," and which is erroneously supposed to be the *front* of the shoe at the toe, whereas it is invariably caused by the *back* edge of the web at the toe, which in an old shoe becomes as sharp as a knife, and often cuts out a piece from the soft parts immediately above the heel of the fore foot as clean as any knife could have done it. To avoid this accident, the back edge of the web all round the toe should be filed away, until it presents a blunt rounded surface, which, if it should fail in preventing the over-reach altogether, will at least preserve the parts from being wounded. The plan I have always adopted to avoid "cutting," has been to apply a boot covered with pipe-clay to the injured leg, and then to trot the horse some little distance; the result has been the transfer of a portion of pipe-clay to the offending part of the opposite shoe, thereby indicating the necessity of its removal. The small extent, and little suspected situation of such a part, is sometimes truly surprising. I once, in a case of inveterate cutting, found the pipe-clay adhering to the *outside toe*. In this case the poor horse had been subjected to shoes of every conceivable shape and deformity, without, of course, any other result than the torture arising from the twisting and straining consequent upon uneven bearing: but the moment the offending part was discovered and removed, the cutting ceased; even bearing was then restored to the foot, and the horse thereby placed in comfort. Cutting with the fore foot is almost always to be prevented by one-sided nailing, and keeping the shoes a little within the edge of the crust on the inner side; but this is generally overdone, by placing the shoe so much within as to deprive the crust of its requisite support.

JAMES SMITHSON.—James Smithson, a Londoner born, and claiming to be the son of a distinguished nobleman, gave his life exclusively to intellectual pursuits, and especially to researches in physical and experimental sciences. Supplied with larger means than his wants required, and steadily practising a strict scheme of personal economy, he amassed a considerable fortune. He died at Genoa in 1829, and by his will bequeathed his accumulated property to this Union—a country, notwithstanding his change of abode, he had never visited, whose citizens he never associated with, but in whose inevitable future he saw the most solid ground on which to cast the anchor of his fame. This legacy for some time the subject of litigation in the British court of chancery, was finally secured, brought over, and received into the treasury of the United States on the 1st of September, 1838. Its exact amount, when deposited, was five hundred and fifteen thousand one hundred and sixty-nine dollars. The legacy was accompanied by a declaration of its design, and the execution of that design has been assumed, as well by an acceptance of the money as by several open and formal avowals by our Government. It was "to found an institution at Washington, for the increase and diffusion of knowledge among men;" to found, not an academy, not a college, not a university, but something less technical and precise, something whose import and circuit should be bolder and more comprehensive—an institution, not merely for disseminating, spreading, teaching knowledge, but also the foremost for creating, originating, increasing it. Where? In the city whose name recalls the wisest, purest, and noblest spirit of the freest, newest, and broadest land. And among whom? Not a chosen or designated class—not the followers of a particular sage or sect—not the favourites of fortune nor the lifted of rank—but among MEN—men of every condition, of every school, of every faith, of every nativity! *Men!* It was with a purpose thus elevated and expansive, thus as well distinct as undiscriminating, that James Smithson committed his wealth to the guardianship of the American Republic.—*Amr. Paper.*

DAGUERREOTYPE.—Daguerreotype is the result of the action of light. It consists in having a plating of burnished silver prepared with iodine on a copper sheet, so placed that the rays of light reflected from the object to be drawn, will fall upon it. For this purpose, the plate is put in a *camera lucida*, and afterwards submitted to the action of the vapors of mercury, when a complete representation of the object is given. According to the intensity of the light, so will be the action on the plate, for a good representation, requiring a longer or a shorter time in carrying on the process. A smooth skin being highly reflective, looks well always on a daguerreotype. Freckles on the face, being irreflective, exhibit always dark marks. The shading of the room where the likeness is taken has also a wonderful effect in making a striking representation. If it was black, the impression of black clothes could not be taken.

PAPER GLASS.—Prof. Schœnbein of Basle, who invented the gun cotton, has lately, to a certain point, discovered Malleable Glass! He renders paper paste (paper machè) transparent by causing it to undergo a certain metamorphosis which he calls *Catalytic*, for want of an intelligible term. He makes of this new paper panes of glass, vases, bottles, etc., perfectly impermeable to water—and which may be dropped on the ground without breaking—and are perfectly transparent. He also renders paper impermeable, and perfectly suitable for bank notes.

TO MAKE KITCHEN VEGETABLES TENDER.—To a gallon of pease or beans, either green or dry, add a teaspoonful of saleratus, while cooking, and they will boil tender much quicker, and be of a brighter colour.

MID-DAY IN JERUSALEM.—Not a human being is visible except the Turkish sentries. It is mid-summer, but no words, and no experience of other places, can convey an idea of the canicular heat of Jerusalem. Bengal, Egypt, even Nubia, are nothing to it. In these countries there are rivers, trees, shades, and breezes; but Jerusalem at mid-day in mid-summer, is a city of stone, in a land of iron, with a sky of brass. The wild glare and savage lustre of the landscape are themselves awful. We have all read of the man who had lost his shadow—this is a shadowless world.—*Tancred.*

CHRISTIAN MISSIONS.—Though less than half a century, since the era of modern missionary effort began, it is estimated that there have in this period been furnished to heathen nations, some two thousand missionaries from various Protestant countries, besides several thousand trained native preachers and teachers. As results, upwards of two hundred thousand have become members of Christian churches, and much greater numbers brought under the influence of religious schools; while in the same period, the Bible and religious tracts and volumes have been very extensively distributed in upwards of a hundred different languages; thus waking up the spirit of inquiry among many millions. In connection with these missionary labours, the moral condition and wants of the world have been fully developed; the interests of science, commerce, and social intercourse throughout the human family, eminently promoted, civil liberty extended, and the way opened for the general diffusion of knowledge and piety.

"THE UNKINDEST CUT OF ALL."—A jeweller of this city, who shall be nameless, was lately applied to by a "nice looking" man, to make a gold ring for him, having in it a blade, very delicate and keen, concealed except on a narrow scrutiny, and opening with a spring. A bargain was made to furnish it for thirty dollars. On the appointed day the purchaser appeared, paid the stipulated price, (which was fobbed very complacently,) and, with an air of high satisfaction, put it on his finger. The jeweller, of course, *very innocently*, asked "what he wanted to do with such an article," to which the reply was, "to cut pockets open with." "Ah," replied the jeweller, doubtless in amazement, "how *can* you do such things with such an instrument, and not to be detected?" The performer replied, that his art consisted in diverting the attention of people from everything that looked like a design upon them—that he rubbed his forehead, adjusted his hat, &c., and that discovery came too late. He then bade him good morning, and went his way. Shortly after, the jeweller, as he walked round his counter, was accosted by his clerk—"Why, what is the matter with your pantaloons? How came you to tear them so?" "Nothing," was the answer, "that I know of. Where?" "Why, just look!" When, lo! his pocket was found to have been cut by the "artist," with his new instrument, and his pocket-book gone, with not only the thirty dollars, just paid, but four hundred besides. Verdict of the public—"Served him right.—*Am. paper.*

STEAM IN FARMING OPERATIONS.—The leading article of the London Agricultural Gazette of May 8th, is on the employment of steam in farming, considering it a more docile and less costly power than either man or horse. Every 100 acres of ploughing involves the passing over 1000 lineal miles, by consumers of food. They calculate the saving by steam on every ploughing at $1 per acre, or $100,000,000 on as many acres.

A PICTURE.—The Parisian exquisite had everything that is deemed necessary to please; such as a little hat without a brim—a ribbon for a cravat—an embroidered shirt—a coat of immoderately small size, with skirts three inches and a-half long—a vest that reached to the middle of his thighs—and pantaloons large enough to cover the column in the Place Vendome, and that to commemorate the Revolution.

WOOD VINEGAR.—This acid, made by the roasting of wood, and distillation of the condensed smoke, is used very extensively in manufactures and medicine. In medicine, it is used unpurified under the name of creasote, and possesses wonderful qualities for preserving water and meat in a fresh state for a long time. It is this which gives the peculiar flavour to smoked hams, salmon, etc, and which will communicate its taste to a whole barrel of meat, if the barrel be simply smoked before the meat is salted down. Three Russian ships circumnavigated the globe, and not one of the crew died, all were healthy, and their meat as good at the end of three years as on the day when they sailed. The secret was, that all their meat and water casks were charred. It is employed in a purified state to dissolve iron for the purpose of making what is called black liquor, which is used very extensively in the printing of calicoes as a mordant, also in the dying of cotton yarn. It is used plentifully in making the acetate of lead, and under the name of pyroligneous acid it is applied to many uses, and especially is an excellent wash in surgery.

CLEANING KID GLOVES.—Some one may desire to know how to clean kid gloves. The *modus operandi* is to fold a clean towel three or four times, and spread the gloves on it quite smooth; then dip a piece of clean flannel into some new milk, and rub on it plenty of brown soap: with this rub the gloves downwards, holding the top of the glove firmly with the left hand. When the gloves, if they be white, look of a dingy yellow, they are clean; or if coloured, when they look dark and soiled, lay them to dry, and they will soon look almost equal to new. They will be soft, glossy, and elastic. By adopting this economical method of restoring soiled gloves, ladies will be induced to purchase the best articles, as the better the quality of the gloves the nearer will they approach to their primitive delicacy.