TREES IN WASTE AREAS

How Farmers Are Aided by the Agricultural Department.

Co-operative Plans Arranged Between Planters in Desolate Western Regions and the Division of Forestry—The Fostering of Orchards on the Distant Prairies.

The value of trees as protectors and beautifiers of the land, not to speak of the profits they yield in timber, render the knowledge of how to plant and care for them indispensable to the agriculturist in every section of the country.

The Forestry Division of the Department of Agriculture, recognizing this, and also the fact that many farmers do not understand how to properly utilize and care for these noble products of nature, has undertaken to co-operate with prospective planters of wood lots, shelter belts, windbreaks, and other plantations of forest trees.

This method of co-operation consists in sending expert tree planters to examine the land, the owners of which have requested the aid of the department, for the purpose of making working plans and superintending the actual process of planting, etc., as far as may be found necessary.

The owner may thereby secure the aid of the Government by signing a written agreement, for which he has previously made application to the Agricultural Department, and which stipulates that, while he shall bear the expense of planting and caring for the trees, as well as furnishing the seeds and stock, he shall be entitled to the services of one of the agents of the Forestry Division, who will instruct him in all matters necessary for the proper conduct of the work.

He is notified when this agent may be expected to visit him, and later, the day and hour of his arrival. The department expert, accompanied by the applicant, goes over the ground of the proposed plantation or plantations, if there be more than one, and obtains all the available data that can be of assistance to him in making the plans. This personal examination is necessary on account of the effect of local conditions on tree growth. The following is some of these considerations which it is necessary to determine before making the plans:

First—In prairie regions, trees that succeed on bottom and beach land, frequently fail on upland.

Second—The position of the farm buildings and orchards must be known, in order to plant shelter-beds and wind-breaks most advantageously.

Third—The local soil and moisture conditions determine, in large measure, the best trees to plant, and the best place for the plantation.

Fourth—The purpose of the plantation must, in a degree, determine the kinds of trees to plant.

From the data obtained by this personal examination and consultation with the applicant, the planting plans are made and sent to the owner. These plans include a carefully prepared map of the whole or part of the farm visited, having the proposed wind-breaks, wood lots, shelter-belts, or other forest plantations platted upon it. The instructions incorporated in the planting plans amount to clearly worded specifications, giving the way to plant, and the number of each species required to complete the plantation. Sundry instructions are also included regarding the growing of forest trees, seedlings, care of nursery stock, special care of evergreens, and the preparation of the soil.

At the time the examination is made by the agent, the applicant signs the agreement at the first point indicated, thus expressing his desire to have planting plans prepared under the conditions stated therein. After these are prepared they are transmitted to the owner, and, if accepted by him, he signs the agreement inclosed with the plans, at the second point indicated, and returns it to the Division of Forestry. In instances where it it considered necessary, and when circumstances permit, visits are made to the co-operative plantations after the plans have been put into execution, and, in some cases, during the time of planting, but such visits are made at the expense of the Division of Forestry, unless specifically requested by the applicant.

Twelve Months' Experience.

This plan of co-operation, which has been in practice less than a year, has already produced the most satisfactory results in bringing the department into closer relations with landowners desiring to establish plantations of forest trees. Although applications have been received from all over the country, it is principally in the treeless regions of the West that the benefits of the plan have been rendered most appparent. "In fact," said an official of the Agricultural Department, "more than 90 per cent have come from Texas, Oklahoma, Kansas, Nebraska, and the Dakotas, regions where tree planting is most needed for protection to stock, orchards, and buildings, and for fuel, posts, and other farm purposes. The manner in which art has been enabled to supplant the processes of nature has never perhaps been so well exemplified as in the planting of trees in regions where natural conditions were antagonistic to their growth.

"Examples of this are to be seen in the localities adjacent to the great plains between the Rocky Mountains and the Mississippi River, where there is both an eastern and western limit of tree growth under natural conditions—that is, a place where trees give way to lower forms of vegetation. This limit is largely fixed by the amount and the season of rainfall, although before the period of settlement it was determined to a considerable extent by prairie fires. If we plant trees beyond this limit, it is evident that they will have to be handled differently from the way nature treats the trees which spring from seeds blown or otherwise carried upon prairie lands from distant woodlands. In the latter case the self-sown seeds frequently germinate, but in the struggle of the young trees for existence among the prairie grasses they invariably die. If they did not there would be no prairies. Therefore, when young trees are planted beyond the limits of natural tree growth they must be given some advantage over the indigenous vegetation, or they will die, for the same reason that trees starting from self-sown seeds die. Hence they must be protected.

"There is probably not a single inhabited region of this country in which some kinds of trees may not be made to grow when given adequate assistance in the way of culti ation and irrigation.

"In regions of extremely adverse conditions only the hardiest varieties exist, and then only as stunted, poorly developed specimens, even when the best effort is made to modify the existing conditions. On the other hand, in prairie regions adjacent to natural woodlands, many varieties of trees grow almost as well, when once established, as they do in the natural forest. The treeless West presents every intermediate condition between these two extremes, but in every case some adverse conditions, calling for more or less effort on the part of man, must be overcome. If this be successfully done, trees will grow; if it is not, they will die.

"The chief object of the co-operative tree-planting work of the Division of Forestry is to assist tree planters in overcoming these adverse conditions and to aid in the establishment of plantations of the greatest possible value to their owners.

"Nearly everywhere within the natural wooded areas trees grow with little or no care. Although these localities are especially favorable for tree growth, there are found, even in treeless land, places of limited area, in which many varieties will flourish.

"In many Western situations, where only the hardiest trees succeed at all, upon upland and exposed places, benchlands and lowlands, along creeks and rivers, where the valleys are naturally subirrigated, trees are plentiful. Such conditions are frequent in the valleys of the Platte, Arkansas, Cimarron, and other rivers of the plains.

"In many localities west of the ninety-ninth meridian, and even farther east, much depends upon the selection of the site for plantations of forest trees upon each individual farm. The question of the location of the farm buildings in relation to future plantations is also of critical importance.

"A typical example of the department's work is to be seen in the plantation of Joseph Lewis, which demonstrates what can be done in tree planting on the open prairie in a short space of time. The plantation is located in the southern part of Harper County, Kansas, in the valley of a small stream, called Silvan Creek. The soil is fertile, and is some six or eight feet in depth. Mr. Lewis settled on this land a little over twenty years ago. He immediately began to improve it, but his main forest plantations were not made until 1882.

"At this time a 30-acre plat was laid out for an orchard, and on the north, west, and south of this plat a wind-break was planted. On the north of the orchard a strip some twenty rods in width was sown with cottonwood. On the west a strip about fifteen rods wide was planted, at one end with soft maple, and at the other with black walnut, with other trees about six feet apart in one direction and eight feet in the other. The site of this plantation lopes gradually southward to the creek, which is the boundary to the planting on the south side. On the north side of the plantation the land is from five to ten feet higher than the south side, but is of the same kind of soil. It is remarkable to contrast the soft maple plantation on this farm with that made in a locality where favorable conditions were not obtained. What has been accomplished on this farm unfortunately cannot be done upon every farm in the West, because the soil and moisture conditions are more favorable here than in many places; but there are nevertheless, millions of acres upon which this successful tree growth can be duplicated."

Thus has the Agricultural Department closely identified itself with the welfare of the farmer, which beyond doubt is a first consideration in the healthy condition of a State.

EGGS IN COLD STORAGE.

How They Are Kept by the Million for Use in Winter.

(From the Kansas City Star.)

Half a million dollars is a large sum of money to be invested in so small and apparently insignificant a commodity as eggs, yet that represents approximately the value of the eggs being placed in the cold storage warehouses of Kansas City this spring. The season is now at its height, and before the close about 120,000 cases, containing thirty dozen eggs, will be laid away for next winter's use. This is a much larger quantity than was ever stored here before. Last spring about 80,000 cases were stored in Kansas City warehouses. The increase is remarkable for the reason that few dealers made any profit in their venture last season, while the majority lost $2 to $3 on every case stored. One explanation of the increase is that outside dealers and speculators are looking with more favor on Kansas City as a storing point and as a market where they can dispose of their holdings most satisfactorily.

There are many interesting details in egg handling which are but slightly known to the average consumer of poached eggs and omelets. Few people realize the number of different hands an egg passes through on its journey from the nest where it was laid in the farmyard of the country to the dining room where it is eaten in the city. The importance of eggs for use in the arts and their commercial importance outside of their value as a food product are interesting. Candling eggs is an important feature of the storage season. It is a simple process of holding an egg to the light in a dark room, for the purpose of determining its quality. Handlers, who store eggs, have learned by experience the necessity for eliminating all except the largest, cleanest, and freshest eggs from cases which are to be carried in storage for several months. Charles A. Moler, head candler at Armour's, has from ten to thirty men working under his direction throughout the season. The candling room is long and narrow, with benches fitted up around the wall. At short intervals electric lights are strung from the ceiling.

The room has no windows and the lights are so constructed that only a ray of light is admitted. Standing before the light a workman examines each egg by holding it up to the light. If the ray shines through the egg clearly it is all right as far as quality is concerned. Cleanliness and size are two important conditions to be reckoned, and eggs must meet all the requirements before they will be accepted for storage. The attention paid to candling has increased each season. A few years ago the only candling rooms in Kansas City were small enclosed spaces in the rear of commission houses, where only one man could work at a time. Now many men consider egg candling their regular trade, and experts are well paid for their care and efficiency. No one can tell whether they have slighted their work until next winter, when the eggs are taken out of storage. The overlooking of one decayed egg may cause the eggs of the whole case to decay, and one case of bad eggs would spoil dozens.

After the eggs have been candled and selected and packed in new white wood cases, they are placed in storage rooms where a temperature of 31 degrees Fahrenheit is maintained. They are held in that temperature until taken out next winter.

The Pluck of a Cadet.

(From the Chicago Times-Herald.)

Speaking of cowardice forces the desire to speak of the opposite trait. It is possible for soldiers to show pluck in other places than on the battlefield. It may be said that the young officer of whom this story has been told was as foolish as plucky, but the fact remains that rather than commit while a cadet a slight breach of discipline for which a simple explanation would have relieved him from punishment he suffered what was nothing short of torture and finally died as the result of his self-control.

It was June at the academy and it was the class of 1878, if memory serves well, that was just about to graduate. The post was crowded with visitors and dress parade was on. A member of the graduating class, Charles M. Carrow, stood in the front rank of the parade formation. The cadet adjutant had been commanded by the officers in charge to read the orders. The long grey line stood rigidly at attention while the adjutant rattled off order after order. Cadet Carrow, in the front rank, felt something alight upon his face. Then there was a sharp stinging sensation upon his cheek. To have raised his hands in ranks would have marred, even though slightly, that matchless cadet formation. Then he became conscious that the insect—for such he felt it to be—which had attacked his face was crawling into his ear. Still he did not raise his hand, but stood the torture of the tickling and the second subsequent stinging without raising his hand. The parade was dismissed and Carrow, though the insect had disappeared, was in such pain that he sought the hospital. There it was found that his ear had been seriously injured.

Less than a year afterward Second Lieut. C. M. Carrow died at Jefferson Barracks, Mo., from an infection of the brain directly traceable to the injury he had received when on parade at West Point.

IN RUSKIN'S BEDROOM.

A Picture by Severns in the Fine Arts Gallery.

(From the Boston Transcript.)

London, June 2.—A little sketch of John Ruskin's bedroom at Brantwood, made a few weeks ago by Mr. Arthur Severn, hangs at the gallery of the Fine Arts Society, among some seventy studies, sketches, and finished water-color paintings by Ruskin's artistic idol, J. W. W. Turner. The interest of Mr. Severn's drawing lies in its suggestion of the intense and continuous pleasure and inspiration that these wonderful works of Turner provided for their owner, the aged author of "Modern Painters." For these seventy pictures from the hand of one of England's greatest artists were a part of the treasures to which Ruskin held fast to the end of his life.

It is a simple, homelike room of which Mr. Severn gives one a glimpse. In the very bedstead you find a sort of reflection of the personality of the Seer of Lakeland. It is of dark heavy wood, with no adornment of carving, and, above all, no hint of the factory or mill in its construction. Some laborious artificer, you feel, must have given many patient days to the fashioning of this solid, cumbrous piece of furniture. Its narrow length is covered with fresh linen, and over all lies a thick, warm comforter of cheerful color. A heavily upholstered chair or two stand near the bed, while a fireplace is set into the grey wall on the other side of the corner. Over the bed and on both walls of the room hang the beloved Turners. In double rows they depend by cords from a thick gilt rod, at such a height that one can fancy the old man being able to study the lower line of them merely by turning his head on the pillow.

Thus did Ruskin learn to know and love these pictures as the dear friends they were to him. It is only by living with such works, perhaps, that one can receive their completest message. There is in London now a veteran collector of paintings who enjoys his treasures in just such a way. His pictures have fairly overrun his great house in Chelsea, and in every room you may see some new group of French or Dutch or Italian or early English works. Yet it is when you come to the upper chamber, the sleeping room of the white-haired genius of the place, that you may study the canvases dearest to the heart of their possessor. Hanging over the silken couch that stands against the wall are half a dozen small but scarcely surpassable landscapes of Corot and Millet and Daubigny and Rosseau. "Early in the morning," the charming old collector will tell you, "I open the blinds just enough to throw a faint light upon these little pictures. Then, from my couch here, I can really and intensely enjoy them."

Ruskin must have taken just such exquisite satisfaction in these wonderful Turner watercolors. Mr. Severn's sketch of this corner of the room is on a small scale, but you can identify in it at least one of the four pictures hanging beside the bed. It is a wild, dramatic, colorful rendering of the Pass of St. Gothard, as you may see by turning to the original, which hangs close by in this gallery of the Fine Art Society.

The "St. Gothard" was one of the five watercolor drawings made by Turner in 1845, two of them being commissioned by Ruskin himself and three by Mr. Munro of Novar. The artist was then sixty-eight years old, and his best powers were not always at command, but this "St. Gothard" and another Alpine sketch, "Goldau," of the same series, are master works. Of these two Ruskin himself wrote that they "were done passionately; and somewhat hastily, as drawing near the end."

"Nevertheless, I would not take all the rest of the collection put together for them. For the end had not come," he continues, "though it was near. His full, final, unshortened strength is in these; but put forth as for the last time—in the presence of the waiting fate. Summing his thoughts of many things—nay, in a sort, of all things. He is not showing his hand, in these, but his heart. * * * There is no conventionalism—no exhibition of art in them; absolute truth of passion, and truth of memory, and sincerity of endeavor. 'That litter of stones which I endeavored to represent,' he said to me himself of the 'St. Gothard,' which recalled to him so many earlier visions of the fierce Reuss and Ticino, and of the power that poured them from the clouds and clove the earth with rivers."

In 1878 Ruskin consented to an exhibition at these same rooms of the Fine Art Society in New Bond Street, of all his Turner watercolors and sketches. For that occasion, he contributed to a catalogue some voluminous notes, which have been reprinted for this repetition of the original show. Since the earlier date, Ruskin's collection of Turners has been somewhat depleted by his generous gifts to Oxford and Cambridge, but the seventy examples left include some of the best ones, and cover all the important periods of the artist's long and busy life.

In his analysis of these Turner drawings, Ruskin divided the artist's career into the school days and five following periods of mature activity. The school days, he considered, ended in 1800, when the young painter was twenty-five years old. Each decade, from 1800 to 1840, he assigns to a separate period, subdividing the years from 1820-30 into two epochs. The fifth period, from 1840-45, practically ended Turner's art career, for though he lived until 1851, the last six years saw him a mere wreck, in mind and body, of his former self. Of the school day period, Ruskin's collection boasts five drawings, beginning with "The Dover Mail," showing a coachload of sailors traversing the steep road that winds down to the port. Dover Castle, in all its vastness, dominates the central background, and over all is a sky of lovely blue and white. It is the work of a young and undeveloped genius. As you move slowly along the walls, following Turner's progress through splendid phases of light and color and form, you realize what must have been the power of these pictures over the mind and heart of their possessor. Ruskin's eloquent words concerning his treasures show how deep and full was his love for them.

SOURCES OF KID GLOVES.

Colts Contribute Materially to the Modern Hand Covers.

(From the Chicago Record.)

Barefooted boys and hens form a curious partnership in the making of a pair of fine gloves. Thousands of dozens of hens' eggs are used in curing the hides, and thousands of boys are employed to work the skins in clear water by treading on them for several hours. When a women buys a pair of gloves she speaks of her purchase as "kids." If the clerk who sold her the "kid" gloves knew the secrets of the glovemaking business he might surprise his fair customer by telling her that those beautiful, soft, smooth fitting "kid" gloves came from the shoulders and belly of a three weeks' old colt, whose neck was slit on the plains of Russia, and whose tender hide was shipped, with huge bundles of other colts' hides, to France, where they were made up into "kid" gloves; or, he might with equal regard to the truth tell her that those gloves in the other compartment once darted from tree to tree in South America on the back of a ring-tailed monkey. And, if he made the rounds of the store and could distinguish one skin from another, he could point out "kid" gloves made from the skins of kangaroos from Australia, lambs or sheep from Ohio or Spain or England, calves from India, muskrats from anywhere, musk oxen from China and other parts of Asia, rats, cats, and Newfoundland puppies. But the Russian colt, the four-footed baby from the plains where the Cossacks live, the colt from the steppes of Siberia, where horses are raised by the thousand, supplies the skins which are the favorites at present with the glovemakers. Experts say that the colt skin makes a better, stronger, finer glove than real kidskin.

But, after all, the real kid—the lively infant of the goats which live in France, Switzerland, Spain, and Italy—furnishes the choicest and most expensive gloves, and nearly 10,000,000 kids are sacrificed every year that women and men may cramp their hands in smooth, delicate hued gloves.

GREAT GUN MACHINERY

Wonderful Work Performed at the Washington Navy Yard.

Ordnance of Heavy Calibre Manufactured in Shops Equipped as Well if Not Better Than Any Other Place in the Universe—The Forces Employed and the Duties Performed.

American machinery is undoubtedly the best in the world, and the best American machinery can be seen at the great gun factory in the Navy Yard. Huge cranes capable of lifting a hundred tons and over, moving along tracks nearly as many feet above the visitors' heads as their own height, rows of immense lathes lining the floor area of the shop, with yet unfinished engines of destruction as their vis-a-vis; a continual din of clanging metal, steel arms which rise open-handed from somewhere and, laying hold of an active piece of mechanism, close over it and stop its motion, exhibit a remarkable picture of how far human ingenuity can transcend the limitations of human muscles, and withal import something very near intelligence to huge monsters of steel and iron.

The factory consists of the north and south gun shops, and the breech mechanism shop, and are all located in one building, forming consecutively the longest shop in the world, its total length being 937 feet. Although situated under one roof, they are distinct in their operations and class of manufactures.

The heaviest calibre ordnance, embracing 8-inch, 10-inch, 12-inch, and 13-inch guns is manufactured in the north gun shop. The lathes used in this shop are the largest in the world, and the process used in turning the great guns is said to be the quickest, as well as the most accurate in the world.

Guns of as large a calibre as 16-inch can be manufactured here, although such heavy ordnance is seldom called for. At present 13-inch guns principally are being turned out. A rifling machine 128 feet long is part of the equipment of this shop. There is also a shrinking pit for heating hoops and jackets used in the manufacture of the great guns. The mammoth 110-ton crane, the largest in existence, travels by steam along the top of the shop, lifting and dropping great ton weights as though they were straws. A cab, like that of a locomotive, in this crane, enables its driver to manipulate the huge machine with as delicate precision as a fine instrument. A gallery traversing either side of the shop is fitted with small machine tools, consisting of lathes, shapers, boring mills, milling machines, drill presses, etc., which are used in the manufacture of 4-inch and 5-inch breech mechanism. There are employed in the north gunshop fourteen skilled and ten unskilled workmen.

The south gunshop manufactures 4-inch, 5-inch, 6-inch, and 8-inch guns, and hoops and jackets for guns of all sizes. It is fitted out with lathes, rifling machines, and numerous small machine tools. It has two overhead electric cranes of 40 and 15 tons' capacity, which run the length of the three shops. There are in this shop fifty-five skilled and forty-eight unskilled employes.

The breech mechanism shop manufactures breech machanisms of all sizes, 4-inch, 5-inch, 6-inch, 8-inch, 10-inch, 12-inch, and 13-inch; also sights for all sizes of guns. It is equipped with lathes, boring mills, shapers, drill presses, milling machines, planers, and a number of miscellaneous machine tools, which are needed in the manufacture of this class of work.

The north and south shops are under the direct supervision of Joseph Lawrence, master machinist; Charles Robinson, master machinist; Thomas Hayes, quarterman, and C. E. Byrnes, George Cunningham, and John Rinehart, L. M.

The breech mechanism shop is under the supervision of W. J. Hough, master machinist, and A. A. Gossuch, John Vanhorn, T. B. Lear, J. M. Padgett, and Joseph Webb, L. M.

There are employed in the latter 186 skilled and forty-three unskilled workmen.

The Gun-Carriage Building.

The cast gun carriage, west gun carriage and erecting shops are situated in a quadrangular building, occupying an entire block, known as Smith's quadrangle. These shops and the south gun shop employ two shifts of men, and are in operation day and night, owing to the immense drain upon their resources occasioned by the rapid increase of navy and the necessity of completeing the armament of vessels as fast as built.

The cast gun carriage shop is equipped with two overhead electric cranes, boring mills (horizontal and vertical), planers, slotters, lathes, and shapers, of size and capacity best adapted to the class of work performed in this shop. The large detail parts of 4-inch, 6-inch, 8-inch, 10-inch, 12-inch, and 13-inch gun mounts are finished in this shop under the supervision of Charles M. Smithson, master machinist, and George M. Guffy, quarterman; M. Crowther, Byron Christman, and A. Brummitt, L. M. There are employed here 157 skilled and eighty unskilled workmen.

The west gun carriage shop is furnished with one 10-ton and one 25-ton electric cranes, together with the necessary machine tools. One portion of the shop is devoted to the detail work of large gun mounts, while in the portion traversed by its length, the small detail parts are completed. Miscellaneous work in large quantities, repair work, etc., are also done in this shop. It is under the direct supervision of S. B. Bates, master mechanic; A. B. Suit, quarterman, and John Ingalls, and Frank Barsett, landsmen. There are in the shop 223 skilled and thirty-four unskilled employes.

The erecting shop occupies the northern end of the quadrangle on both the main floor and gallery. On the lower floor are the slotters, drill presses, rifling machines, air compressors, hydraulic pumps, and bending machine, while on the gallery are located among other machine tools, the enormous lathes. The class of work done in this shop embraces principally the erection and testing of 8-inch, 10-inch, 12-inch, and 13-inch mounts. This shop is under the direction of George W. Dunn, quarterman. There are fifty-two skilled and fifteen unskilled employes.

Secondary Battery-Making.

The secondary mount shop has just recently been completed, and was designed for the manufacture of the class of work indicated by its name. Its machinery is operated entirely by four electric motors, aggregating seventy horsepower. Its equipment of machinery is of the latest design and it is, perhaps, the most improved plant of its kind in the world. The mounts of machine guns and secondary batteries are here manufactured, including 1-pounder and 6-pounder mounts of Maxim and other designs; torpedo tubes, together with the manufacture of the many smaller detail parts; shields, and miscellaneous work of all kinds. It has also a buffing room operated by an electric motor.

This shop is under the direction of Henry Wilson, M. M., and W. W. Chase, L. M. There are ninety skilled and forty-one unskilled employes.

There are in addition to the chief establishments mentioned, the tool shop, cartridge case shop, pattern shop, foundry, coppersmith shop, electric light plant, forge shop, boiler house, shell house, laboratory, and storehouses.

Prior to the remodeling of the shops in the Navy Yard and the installation of the vast amount of modern machinery that they now contain, the ordnance work was confined to a few shops located at the west side of the yard. Of these there now remain as work shops the shell house, laboratory, ammunition house, and a group of small buildings called the fulminite rocket, press, and fuse houses. The work carried on in these buildings as well as that in the new gun and mount shop is under the immediate supervision of a chief gunner attached to the Ordnance Department, and the force under him are known as employes of the gunner's division. These employes comprise ordnance men, riggers, laboratorians, leather workers, sailmakers, painters, and ordnance laborers, and a vast amount of work of an exceedingly miscellaneous character is produced that goes toward supplying the ships, navy yards, and stations of the United States.

In the Shellhouse.

The shellhouse force is constantly employed making gun, gun carriage, torpedo tube, and sponge covers, and other canvas work; revolver and cutlass belts, frogs, scabbards, fire and sponge buckets, gas check pads, wads for ammunition, and the bedecking and painting of ammunition boxes. In the laboratory are made fuses, night signals, blue lights, and rockets. All the "Very's" night signals used in the Navy are made here.

A portion of the shellhouse is used as a receiving and packing department. It is here that all manufactured goods are assorted, collected together, and prepared for shipment, all orders and requisitions filled, and the allowances for invoices of ships under construction and refitting noted and checked. Some idea of the amount of work done in the packing department may be had when it is considered that during the past nine months it amounted to over 45,000 boxed packages, having an aggregate weight of over 4,500,000 pounds. This weight, however, does not convey to the mind the amount of work of a clerical nature necessary to the prompt and accurate filling of the shipping orders and recording of articles manufactured. The leading men among the skilled artisans in their respective branches are Isaac Benham, of the shellhouse force; J. W. Thompson, of the laboratorians; George Dice, of the laborers and all outside force, and C. H. Reamey, of the painters. They are all under J. J. Walsh, chief gunner, United States Navy.

The ordnance chemical laboratory was established in 1890 for the purpose of enabling the ordnance department to better control the quality of not only the different materials entering into the construction of guns and gun carriages, but also the various supplies used in the different shops connected with the Ordnance Department. The scope of the work extends, therefore, beyond testing of iron, steel, metals, alloys, etc., to examination of oils, paints, waters, coal, and other material, besides investigations and experimental work. It is said to be the best equipped laboratory connected with any individual establishment in this country, and while principally performing such work as above mentioned, its outfit of physico-chemical and other chemical apparatus has been so enlarged by recent appropriations as to admit of considerably extended and varied work in different directions, such as microscopy, photo-micro-metallography, photometry, spectral analysis, etc.

Connected with the chemical laboratory is the physical testing department, a most valuable adjunct to the factory. A considerable quantity of specified material is rejected here for imperfection during the course of the year. It is evident that the chemical and physical testing establishments constitute a safeguard against imposition and possible accidents. Joseph P. Westerzon is in charge of the laboratory.

The main offices of the naval gun factory occupy a three-storied brick building near the shops. In this building are the offices of the superintendent of the factory, Commander E. C. Pendleton; the chief clerk, T. K. Sailer, and time clerk, J. B. K. Lee. On the third floor is the drafting room and blue print rooms under the direction of Lieut. F. J. Haeseler. The officers of the gun factory, in addition to those named, are Lieutenant Commander Kilburn, Lieutenant Commander McCrea, Lieuts. J. M. Robinson, A. Gleaves, W. L. Rogers, S. Morgan, B. D. Tisdale, and A. S. Sticht.

A SCOTCH BIBLE RENDITION.

The Scriptures to Be Published in a Queer Dialect.

(From the London Morning Leader.)

The Scriptures in Scotch! There is an uncanny ring about the suggestion, when we remember what the Scotch tongue is degenerating into these days. For it is no longer the rich dialect of Burns and Scott, to say nothing of the old Makkirs like Dunbar and Fergusson—stiffer reading to the M. A. of a Scotch university, nowadays, than Bacchylides—that prevails north of the Tweed; even Mr. Barrie's Scotch is but indifferently understood in the West and South countries; and Stevenson's Alan Breck speaks not Scotch at all but the quaint English of the Highlander. Stevenson is true to the character here, too, for the real Gael never speaks Scotch but "the English as she will have learned it." Neither do the gentry know the native tongue—Argyll was perhaps an exception, in that he knew it well, though he spoke it seldom—and the manufacturing and well-to-do classes affect to despise it, counting it among the things that are vulgar. Much that is best in the literature of the country is thus slipping from the ken of the people—from ignorance of their own tongue! Even the best words and idioms of Burns are fast ceasing to be current coin, or even to be understood.

All this may not appear strictly to the point, perhaps, but it has much to do with it. For the Scriptures in Scotch—to speak accurately, the New Testament, for the experiment is to extend only to that meantime—must be one of two things: They must be printed either in a dialect that is impure and unliterary, or in a dialect that is no longer familiar to the multitude. As we learn from the publisher, Mr. Alex Gardner, Paisley, the experiment is to be in the latter—in the Scotch of the early century, that is to say.

Interviewed on the point on behalf of "The Leader," Mr. Gardner said his Testament in braid Scotch—or braid Scots as the pedant has it—which is still only in MS., would not be in the Glasgow or Paisley Scotch of the present day, but would more resemble Burns. It would not be archaic, but neither would it be corrupt. "Here, for instance, is the Lord's Prayer," said Mr. Gardner:

"Faither o' us a', bidin' Aboon! Thy name be hollie! Lat Thy reign begin! Lat Thy wull be done, baith in Yirth and Heeven! Gie us ilka day oor needfu' foudin. And forgie us a' oor ill deeds, as we een forgae thae wha did us ill. And lat us no be siftit; but save us frae the Ill Ane! For the creon is Thine ain, and the micht and the glorie, for evir and evir, Amen."

"Presumably the author is a Scotsman?" Mr. Gardner was asked.

"He is a Scotsman, but a Scotsman resident in Canada, who has acquired his knowledge of Scotch from books only. He is a retired minister. Mr. Smith his name is, and he is over eighty years of age."

"And what do you take to be his purpose in thus translating the Scriptures?"

"Well, I suppose he is wanting to put on permanent record the results of his study of the old tongue, and has chosen the Scriptures as his medium. There is a keen love of everything Scotch by the expatriated native, and this is one example. It is quite possible, too, that the book may be more prized abroad than at home. Here it will be looked upon by many people as a curiosity."

"Do you really think the Scotch people will understand it, Mr. Gardner?"

"Those who know their Burns perfectly well; others may be puzzled by it."

"And English people?"

"I showed it to an English minister the other day and he was greatly tickled. His knowledge of the Scriptures aided him a little, but even at that he was beaten to read it intelligently."

"You don't count, then, on any great demand for a book of this kind?"

"Not in the sense that there is any desire for it," said Mr. Gardner. "There is no need for a Scotch Testament as for a Gaelic one; and you can guess whether it will ever be used or recognized by the churches. But it will be an interesting and curious book, and on that account may have some vogue." In answer to a further question Mr. Gardner mentioned that the publication would probably come out in the autumn.

PETS OF FAMOUS PEOPLE.

Creatures That Have Been Loved by Noted Men and Women.

(From the San Francisco Call.)

A volume might be written of famous people and their pets, and it would be interesting reading. Many books of biography have scattered along their pages tender reminiscences of an attachment to some dumb animal, from Boswell's "Johnson" and Cowper's "Letters" down to one of the latest works of the kind, "The Life and Correspondence of Charles Kingsley." Johnson's cat "Hodge," for which he used to go out to buy oysters "lest the servants, having that trouble, should take a dislike to the poor creature," and Cowper's hares, which used to amuse him in his dull, weary hours at Olney, are as well known as the two men themselves.

Charles Kingsley seems to have loved every living creature around him, and he taught his children to respect even the most loathsome insects. Mrs. Kingsley tells how a family of runaway toads made their home in a hole of the green bank at Eversley, and the scythe was never allowed to approach their retreat. He had two little friends in a pair of sand wasps which lived in a crack of the window in his drawing room, one of which he had saved from drowning in a basin of water, and every spring he would look out eagerly for them or their young, which came out of, or returned to, the same crack. He petted the white stable cat and the black house cat, and sat up with a sick dog during the last two nights of its suffering life. Wherever he went he was followed about the parish by his faithful little Dandy Dinmont, whose intelligent face was always to be seen at the lectures and school lessons, and was known to every cottager in the place, being almost as much esteemed by them as by the Kingsley children, whose attached friend he was for ten years.

Dogs, perhaps, have been pets with a greater number of famous persons than any other animal. Everyone will remember Sir Walter Scott's canine pets, of which he had more than a score. The most prized was the old Scotch hound Maida, his companion for many years, whose grave is near the gate at Abbotsford, with the monument and inscription that he designed for her. Then there were the two pet greyhounds, Douglas and Percy, which attended him everywhere. They had a privileged place in his library, one of the windows being left open in all weathers, so that they might pass in and out when they pleased.

Lord Byron had a famous dog, Boatswain, whose picture is still to be seen at Newstead Abbey; and Hood's dog, Dash, will be remembered as the one that Barry Cornwall said should have been named Rover. He accompanied Charles Lamb in many of his walks, nearly worrying the life out of the gentle essayist, who could hardly manage to keep in sight of his restless four-footed companion, and was in constant terror lest he should lose him.

Walter Savage Landor was another lover of dogs. He had a number of them—Parigi, which followed him in all his tramps; Gallio, given to him by the sculptor Story, whose place was to lie at his feet; and, most celebrated of all, Pomero, the little white Pomeranian dog that was sent to him from Fiesole to Bath, where he was then living. For twelve years Landor and his dog were always together, noticeable figures wherever they went, and Pomero was written about and talked about nearly as much as his master.

Mary Russell Mitford was surrounded by dogs from her childhood. To relate her history would be to tell theirs likewise, for they were inseparable. Their qualities, troubles, and general doings have an important place in her letters, and they have tender mention that might lead one to suppose them to be human members of the household. "All our pets are well," is her usual message in closing, and many of them come in for special mention, like "Marmion and Modoc and Moss Trooper, the hounds;" "Maria, with her black and glossy puppies;" "Mirenda, from Stratford-on-Avon;" "Mayflower, and Mid, and Lufia, from the North countrie," and Dash, who "sends his respects to Mrs. Browning's doves," and was so well beloved by his mistress that when she was in London homesick she wrote to her parents, "I am dying for my Dash and my flowers."

Wordsworth's companion on his morning rambles was a dog for whose death he sincerely mourned and to whose memory he paid an exquisite tribute in verse.

There have been other famous lovers of dogs. Sir Edwin Landseer was especially fond of them, and many of his pets he has made to live again on the immortal canvas.

Mrs. Browning was greatly attached to a silken-haired, hazel-eyed spaniel that Miss Mitford gave to her. Flushie lives in literature as the subject of one of his mistress' tenderest poems.

Goethe hated dogs; his pet was a live snake, which he kept in a chimney corner—a repulsive companion, one would think. The pet of Tiberius, the Roman Emperor, was also a snake; yet the two men were wholly unlike in every particular.

Jean Paul Richter's pets were a mouse, a squirrel, and a white spider. Hogarth, the painter, was fond of cats, and at his home at Chiswick he had a garden where he buried his favorites, placing little tablets to mark the spot and distinguish their individual sepulchers.

The cat has been a favorite with a number of well-known people. Pope made companions of several, and he showed the best side of his character to them. Drydon had also a stately favorite cat, with a temper as bitter as his own pen.

Gray, author of the beautiful "Elegy in a Country Churchyard," wrote an "Ode on the Death of a Favorite Cat, Drowned in a Tub of Gold Fishes." In this little poem he bewails the fate of the demure and almost historic Selina. Dante made a pet of a large black cat. Theophile Gautier had a white cat of great beauty named Don Pierrot de Navarre, of which he was extravagantly fond. This animal died of consumption. He had a regular physician and was fed on asses' milk, but he finally succumbed and the poet describes his death in moving terms.

Racing Against Fire.

(From the Kansas City Journal.)

William S. Night last night told a very strange story of a chair car in a Chicago Great Western Railroad train that was afire and full of passengers with the train at full speed. "It was one of the strangest things I ever experienced," said he, "and all the trainmen, including the superintendent of the road, were in a quandary to know the cause of the car's catching on fire. We were about seven miles from Des Moines when smoke was discovered curling out from under the middle of the first chair car. The fire was between the two floors of the car, and seemed to have spread toward both ends. It had not started near the wheels, for it was in the centre of the car, and that would do away with any theory of a hot box.

"Well, what to do was a little problem for the conductor of the train to solve. The fire could not be stopped without a hose and water power to throw the water back toward both ends of the car, and at that place in the fields there were no such conveniences. The fire had not yet eaten its way through the floor, so the passengers needed to have no fear. The engineer and conductor with a few passengers stood beside the car, undecided what to do. If the train remained there, the coach must have necessarily have burned up and would have 'laid out' the whole road.

"The conductor suddenly conceived a plan and immediately shouted: 'All aboard! Shove her through to Des Moines at full speed. Tommy,' he yelled to the engineer, and 'Tommy,' the large chubby engineer, covered with grease and oil, waddled down to his engine as fast as his short legs would carry him. The conductor pulled the cord. Tommy pulled the throttle wide open and such a wild ride as we did have! It was a race to see which was the faster, the fire or the locomotive. The locomotive won, and when we reached the yards at Des Moines the fire had almost eaten its way through the floor of the coach. It was quickly extinguished at the edge of the yards by means of a hose attached to a water main, and we drew into the depot on time."

THE PRESIDENT'S FLAG

Its Origin Dates Back to the Time of Washington.

That Particular Ensign Was Carried by His Bodyguard During the War of the Revolution—Consumed, With Other Trophies, in the Alexandria Museum Fire, in May, 1871.

With the recent passing of Flag Day has come the enquiry into the sources from which come some of the flags, and particularly the flag of the President of the United States. This recalls to many old citizens of Fairfax County, Virginia, memories of the first flag of the kind ever displayed. It was the flag of Washington's bodyguard, and existed scores of years after the war of the Revolution, having been burned by the fire which destroyed the Alexandria Museum in May, 1871. The museum was in the third story of the market building on Royal Street in Alexandria, and among its trophies, besides the flag of Washington's Life Guard, was a flag which had belonged to Paul Jones, a flag taken from the Hessians at Trenton, the flag of the Richmond Rifle Rangers, and the faded flag, red with a yellow centre, inscribed "IX Virginia Regiment, Alexandria Company."

Alexandria-Washington Lodge, F. and A. M., preserves in its new temple some of the relics saved from the museum fire, but the flags are not among them. The old flags were all consumed. The flag of Washington's Life Guard was somewhat pennant shaped, and exhibited a red union with two longitudinal stripes, one white and the other blue.

The original Life Guard was composed entirely of Fairfax men, for Alexandria was then Fairfax Court House, and owed its origin to Col. John Fitzgerald, an Alexandria merchant, who was specially distinguished on the field at Princeton and was most active afterward in hun