UNCLE SAM'S OLDEST LIVING SOLDIER

Laying close siege to the century mark, Uncle Sam's oldest soldier recently celebrated his ninety-seventh birthday in Washington. He is Major General Daniel H. Rucker, U. S. A., retired, born ninety-seven years ago—April 28, 1812. In the whole history of the military service of the United States there is no record to parallel his, declares O. F. Schuette in the Chicago Inter Ocean. Probably in all the world there is no soldier who can look back seventy-two years to the date of his first commission. For it was in 1837 that the future general received his first commission as a second lieutenant from President Andrew Jackson. He was then a man of 25—little dreaming that he had before him three-quarters of a century of life. If he lives three years longer, and with his present vigorous vitality there is no reason he should not, he will cross the century mark of life and celebrate the end of three-quarters of a century of membership on the military lists of the United States government.

Away back in the dawn of our national greatness, our school book histories tell of the war of 1812. Yet Daniel Rucker was two months old before the first shot of that war was fired. A year later came the first Creek Indian war. Five years later came the hostilities with the Seminoles in Florida. And then came outbreak after outbreak of Indian conflicts. It was in this Indian warfare away back in the '30s that he saw his first service. He won his first promotion for bravery in the Mexican war. Then again he participated in Indian warfare. He was 49 years old when Fort Sumter was fired on. When the Spanish war broke out he was 86 years of age. But he had retired from active service sixteen years before, with forty-five years of service to his credit.

It is a far cry from the clumsy, muzzle-loading flint lock to the noiseless, smokeless, rapid-fire rifle of today. And it is a further cry from the wooden frigates that formed the fleet of the United States and won those splendid naval victories on the great lakes, when he was a babe in 1812, to the marvelous squadron of fighting ships that sailed home from a triumphant trip around the world.

When General Rucker first joined the ranks of Uncle Sam's defenders there was no such thing as breech-loading muskets, no sixteen inch guns, no torpedoes, no mines, no lyddite shells. No warship was propelled by steam and all the fleets of the world were at the mercy of the wind and of the waves. Then came the Civil War and the first ironclads. General Rucker had passed the half century mark of his life when the first battle of armored ships was fought and the triumph of the Monitor in beating off the Merrimac and turning the tide of the Confederacy on the seas. Yet that was but a toy experiment of what was to follow. Progress was slow, and it was thirty years before the armored vessel of to-day really came into being. General Rucker was 87 years old when the navy of the United States—worthy successor of the plucky little fighters of 1812—sent to the bottom in two hemispheres the successors of the proud Spanish armada.

It is a long jump from the clumsy frigate, with its muzzle loading guns, its shaking sails and its limited range of action, to the Dreadnoughts of today, with their heavy armor, their speed, their powerful engines and their wonderful range; and there have been other marvels just as great in the progress of his profession. When he took his first commission, and rode 200 miles on horseback alone to his post, no one had thought of automobiles or airships or wireless telegraph, much less of their revolutionary use in actual warfare.

When General Rucker was born Abraham Lincoln was a 3-year-old babe in the backwoods of Kentucky. General Rucker was 10 years old, minus just one day, When General Grant saw the light of day, April 27, 1822. Only one President of the United States died before General Rucker was born—George Washington. He was 14 years old when John Adams and Thomas Jefferson died on that same Fourth of July in 1826. When James Monroe, the fourth ex-President to die, succumbed, on July 4, 1831, General Rucker was 19 years old. And out of the nation's twenty-six ex-Presidents General Rucker has survived all save one, Theodore Roosevelt.

General Rucker was but a boy when his parents moved from New Jersey to Michigan. It was there he got his first taste of army life, at a frontier Michigan army post. His father was averse to his joining the army, and his mother even more so; but the future general won out, and he applied for a commission as second lieutenant. There was plenty of work for Uncle Sam's soldiers in those days, with the boundless West just opening its wealth to the onward march of civilization. He was assigned to the First dragoons, then on duty at Fort Leavenworth. Lieutenant Rucker made his way overland by stage coach until he got to the nearest point which the stage coach service of those days could bring him to the Kansas outpost. He was then still 200 miles from his destination.

He had hardly settled down to the comparative ease of his frontier post before he was ordered into the heart of the Cherokee country, and for half a dozen years he was kept busy with his soldiers driving off marauding Indians, protecting settlers and emigrants' caravans and holding the hostile reds in check. He was still busy in this hazardous campaigning when the First dragoons were ordered off to Mexico as part of General Zachary Taylor's expedition. He took part in the battle of Buena Vista, and distinguished himself by an act of personal gallantry in the field. It was an act of bravery under the eye of a commanding officer, who recommended him for a brevet commission as major. When peace was declared Major Rucker's command was sent across the continent to Los Angeles.

The discovery of gold brought the rush of '49, and then there was more than plenty to do. It was a feverish time, and the soldiers of Uncle Sam had to hold in check the madness of the men that swarmed into the new El Dorado. Few of those who started across the mountains and the deserts that fenced off California knew of the hardships they must face. Each new arrival brought tales of horror from the trail. Lost and starving, the immigrants straggled off their paths, until sacrifice of life made terrible the days.

Finally Rucker was ordered east. He left San Francisco in a steamer for Panama, with Lieutenant Sherman—afterward General Sherman—as one of his companions. They made the trip across the isthmus of Panama by ponies and small boats and then sailed for Jamaica, where Sherman and Rucker paid a friendly call on General Santa Ana, whom they had worsted at Buena Vista. Major Rucker saw several years of comparatively peaceful service in the East and then he was again sent out to the frontier. This time his battlefields covered New Mexico, in constant warfare with the Apaches. While he was in this work the civil war broke out and he was ordered back to Washington.

In September, 1861, he was promoted to Colonel of volunteers and in May, 1863, President Lincoln made him Brigadier General of volunteers. In 1865 he was made Brevet Major General of volunteers and in 1866 he was mustered out of the volunteer ranks.

But he was made a Colonel and assistant quartermaster general of the regular service and served as such until February 13, 1882, when he was made Brigadier General and quartermaster general. At that time he had seen forty-five years of service and seventy-one years of life. He was then placed on the retired list as a Major General.

He is still hale and hearty and delights in walks in the beautiful portion of residential Washington, near his home; but he is leading a quiet life, and even the excitement of recalling the hard days of fighting is too much for his strength. With him lives his daughter, Miss Sarah Rucker. Another daughter, Mrs. Philip H. Sheridan, widow of the hero of Winchester, lives but a few blocks away, where she can see the statue of her husband that a grateful nation erected.

In all his years of service General Rucker was never wounded. What is more remarkable, in all the years of service and hardship he was never ill for a single day.

ATLANTIC GARDEN IN DANGER.

Old Relic of New York's Bowery Is Marked for Destruction.

The Atlantic garden, one of the few remaining buildings binding the Bowery of to-day to the old Bowery—the Bowery which saw the wealth and fashion of the town go nightly to the Thalia theater and slip into the garden next door for a bite and a sip between the acts—celebrated its fifty-first birthday Friday evening under a shadow. The shadow was cast by the Manhattan bridge, already looming large to the east and projecting itself nearer and nearer to the spot that still has the savor of the old days.

A rumor to the effect that the city, desirous of making a fitting approach to the great bridge, had already marked the garden for destruction, brought the oldtimers there in droves Friday night, the New York Sun says. They told stories of the old days, the days when if you wanted to hear German opera you had to journey to the Thalia, where Conried worked as a supe and where Mme. Geistinger drew her crowds. The old passageway between the theater and the garden is still there.

The garden was opened on May 8, 1858, by the father of the present Kramers, and part of it is the original Bull's Head tavern of the Revolution, one of Washington's many headquarters. It was the center of the German life of the town, and there Kramer first showed the great orchestra, the wonder of its time, which he bought from the grand duke of Baden. There, too, the German regiments of the Civil War made their headquarters and recruiting station, and there played all the famous bands of half a century ago. All this those at the long table recalled Friday night as they drained their schooners of Rhine wine and lit the candles one by one.

CLIMATE MADE IN FRANCE.

Means of Providing Paris Vegetables Weeks Ahead of Season.

The gardeners of Paris get their products on the market weeks before the regular season for them. This forcing of nature is described by Ernest Poole in Success Magazine.

The secret is simply this: The French maraichers have manufactured a climate to suit them. As one observes has said, "They have moved the climate of Monte Carlo up to the suburbs of Paris."

Some new prodigy of modern science, this? Not at all. Only enormous expense in money and in time. The gardens, whenever possible, are placed on land with a slope to the south, and are well protected by the walls on the north and east—walls built to reflect light as well as to give protection from the northeast winds.

The ground is practically covered with glass, not as in a greenhouse, but by glass frames in the open, "three-light" frames of uniform size, 12 by 4½ feet; and also by glass bells. These, too, are of a uniform size, about the shape of a chapel bell, a little less than 17 inches in diameter and from 14 to 15 inches high. The French call them cloches. You may often see over a thousand frames and over ten thousand glass bells in one two-acre plot in the suburbs of Paris.

A more recent innovation is the employment of hot-water pipes run under the soil, making of the earth a veritable steam-heated hotel, with this essential difference, that the hotel-keeper here is desperately eager, not to keep his guests, but to persuade them to leave on the earliest possible day.

FARMS AND FARMERS

Water for the Bees.

Give the bees plenty of water. They need a great deal and will fly a long distance to get it.

If there is no running stream or lake of pure water near it is well to place a pail of fresh water near the apairy every day.

Bees use water to dilute the heavy, thick honey left over from winter to make it suitable for the young larvae and also to make the cell wax pliable.

Bees should be protected from the wind on the north and west by a close-set hedge or high fence.

All the weeds should be kept down in front of the hives. Mow a plot 6 feet wide and then cut the weeds and grass close to the ground with a hoe.

An hour once a week spent on the care of the bees will bring larger returns for the effort than any other labor on the farm.

A newspaper man in Chicago, who lives a few miles out in the country, last year sold $225 worth of honey to three big hotels. He says he did not spend more than an hour a week looking after his bees during the season.—F. and D. Journal.

Feed for Chicks.

Feed chickens the first day or two upon a mixture of bread crumbs grated fine and hard-boiled egg chopped fine. Keep water before them in a small fountain, so they can drink but not get into it. In a few days feed upon rolled oats, finely cracked corn and any small seeds. Add a

for several seasons the land washes but little and the vines grow better and bear betterd. The cow peas make sufficient cover, so one does not get into the mud when pruning in wet weather in late winter or early spring. Whether grown in the orchard or vineyard the peas should usually be plowed under the following spring. In this way they protect the soil without losing any essential part of their fertilizing value.

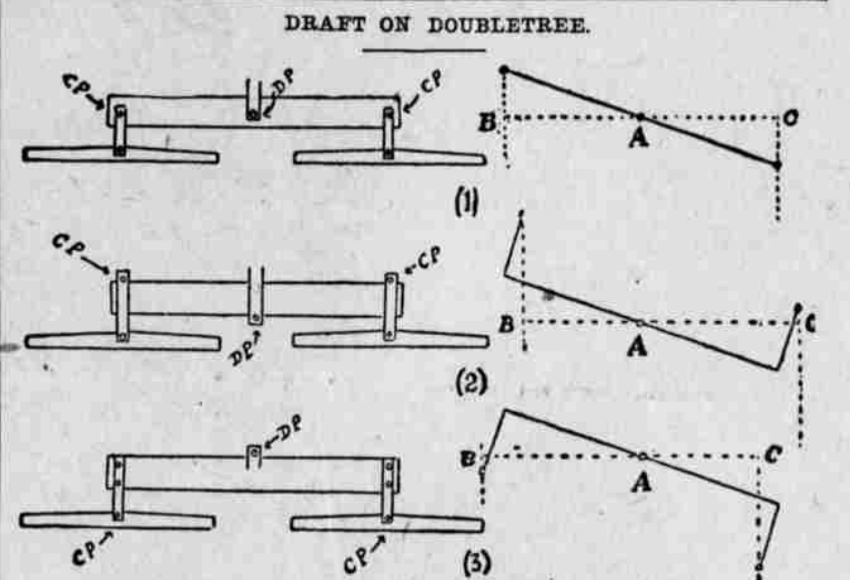
Alfalfa Planting.

It should not be forgotten that the spring is the proper time to prepare the alfalfa crop that is to be planted next fall. The ground which is expected to be used for this crop should not be planted to small grain; neither should corn precede alfalfa, because the ground will not be kept free of weeds and grass. The best preparatory crop for alfalfa is cow peas; then after the vines are removed or plowed under the ground should be well broken and kept clean of weeds and grass by surface cultivation until it is seeded in alfalfa the following fall. Peanuts may be grown instead of cow peas, if the crop is considered more desirable, as it is perhaps, but they must be kept well cultivated and especially allow no earth grass to grow in the crop.—Chicago Inter Ocean.

Value of a Small Stream.

An interesting example of the value of a small stream for light and power purposes may be found near Sacramento, Cal. A trout stream has been dammed up and the power in the form of electricity has been used for doing such light work as washing and ironing, also for cooking and lighting in the home of the owner. As the stream

DRAFT ON DOUBLETREE.



There is a difference of opinion regarding the pulling ability of each horse in a team. Some are of the opinion that the horse ahead is pulling the most, and vice versa.

The draft on each horse depends entirely on the relative lengths of the lever arms, and the lengths of the lever arms depend on the position of the clevis pins with respect to the draw pin. In upper diagram (1) the clevis pins and the draw pin are in a straight line, hence the lever arm is the perpendicular distance from the draw pin (A) to the line of draft of each horse. The lever arms in this case are A. B. and A. C., which are equal, no matter how much one horse is ahead of the other. One horse always pulls the same amount as the other.

In diagram (2) the clevis pins are behind the draw pin, and when one horse pulls ahead of the other his lever arm (A. C.) becomes longer and (A. B.) the lever arm of the one behind becomes shorter. In this case the horse ahead, having a large lever arm, has the advantage and pulls less than the one behind.

In diagram (3) the clevis pins are ahead of the draw pin, and when one horse pulls ahead his lever arm shortens and the lever arm of the one behind lengthens. The horse ahead, having the lever arm shorter, pulls more than the horse behind.

little beef scraps to the food. In the course of two weeks whole wheat can be given. This is the dry method of feeding, which is coming into vogue quite extensively. Here is another method of feeding: Mix dry two parts of corn meal, one part of finely ground wheat bran and one part of beef scraps. After they are thoroughly mixed add boiling water in sufficient quantity to make a stiff dough. Cover the vessel and let it cook. Feed the dough warm or cold, but never hot.—Denver Field and Farm.

Raising Pigs.

The cheapest way to put gains on young pigs is through the sow. She has a strong digestion and can turn coarse grains and pasture into easily digested milk. Careful experiments show that a pound of weight taken from the sow will make more than 1 pound of gain on the pigs, the flesh of the young animals containing more water. The sow should be fed to produce a high milk yield, and the pigs should be kept with her until they get to eating a full feed of grain and pasture.

Cow Peas for Vineyards.

Cow peas are a good crop for vineyards. The grapes are given thorough cultivation until late June, when the cow peas are sown. Before this practice was begun, says the Farmers and Drovers' Journal, it was a problem to hold the soil about the roots of the vines. After cropping with cow peas

is very small during the dry months, an old miner's ditch has been dammed to form a reservoir of 100,000 cubic feet capacity. The plant cost $1,500 and in a single year has done $700 worth of work.

Portable Canning Machine.

A machine by which the farmer can prepare and can his fruits, tomatoes, corn, beans, or any other farm produce which can be canned, in the fields or orchards in which the vegetable or fruit is growing, is described in Popular Mechanics. Mounted on a wheelbarrow arrangement, the machine can be pushed from one orchard to another or from a tomato patch to a cornfield as necessity requires. Water for the process is heated by a kerosene burner.

How to Set Fence Posts.

Any timber will last quite well if set in this way: Dig a square hole about a foot deep, throwing the dirt well back. Sharpen the post and drive well into the bottom, then put a flat stone against each side and a chunk against the post, the boards holding it the other way. This prevents their rotting off at the surface of the ground as they always do.

Value of Quality.

Extra large specimens of vegetables are all right for exhibition purposes and to win prizes with, but they are not what the average consumer wants and is willing to pay freight on. Quality, uniformity of size and smoothness are what the average man wants.