SOLDIER-HEALTH.

A little volume, containing some very useful information on the above subject, has just been issued by Dr. W. W. Hall, of this city. Its chief object is stated to be the prevention rather than the treatment of disease. We will present some of the leading ideas contained in it together with other information deserving attention.

In our variable climate, it is necessary for soldiers to have clothes that will afford judicious protection against excessive heats and sudden chills. The head and neck should always be covered when exposed to the burning sun, to prevent sun-stroke, and the body should be sufficiently covered during night, and in rainy weather, to prevent chills.

Cleanliness of the person and of the clothes are necessary to health. When in the field, on active duty, soldiers are in the habit of sleeping with their wearing apparel on, so as to be in readiness to repel an attack or to march at a moment's warning. In such cases it is very difficult to keep the clothes clean, but a very good plan to pursue, is to employ ten or fifteen minutes daily in taking off the entire clothing, hanging the different parts on tent poles or the posts of a fence, and switching them well with a ramrod or a switch cut from a neighboring tree. This will tend to prevent the increase and development of noxious vermin. Bathing daily, either in a stream or only with a sponge, is likewise essential to health.

After a march, or when marching, the face and particularly the eyes, should be wiped with a moist cloth or sponge to remove the dust. The face should never be washed with cold water when heated, either upon or after a march, as by suddenly checking perspiration inflammation of the eyes is very likely to result.

Soldiers are exhorted not to sit or recline upon the damp grass when tired. To enjoy a few minutes' rest on a severe march, it is better to lie down than to sit, but the blanket, or greatcoat should always be employed for reclining upon. When warm with rapid exercise, either in hot or cold weather, a thirsty soldier should drink very cautiously. A French officer once dropped down dead after taking a hurried drink of cold water, in weather when snow was upon the ground. He was perspiring freely, being on a rapid march.

When sleeping at night, no matter how warm the weather may be, the body should be protected with a blanket, or some equally efficient covering. Dysentery most frequently breaks out in camps during nights in which heavy dew falls after a very hot day.

When a camp is situated near a marsh or stagnant pool, the backs of the tents should be arranged towards them ; but if possible, when in a marshy country, the camping or bivouacking ground should be chosen in a strip of forest or brushwood interposed between it and the marsh. Small brushwood and leaves make an excellent bed with an india-rubber cloth blanket spread over it, a knapsack for a pillow and a greatcoat for a coverlet.

After an exhausting effort, a cup of tea or coffee is recommended. Eating heartily after a weary march or a fatiguing struggle, is forbidden ; also eating heartily before going into a battle, and also immediately preceding lying down to sleep. Supper should always be early, but when prevented from obtaining it until a late hour, the quantity partaken should be very moderate. Better go to bed supperless than gorged with food.

It is a common practice in the army for soldiers to to have their canteens filled with whisky or brandy, of which they usually partake rather too freely when on a march and on guard during night. Atkinson, the English traveler in Tartary and Siberia, states that cold tea is more exhilarating when traveling than ardent spirits, according to his experience. Weak wine is used by the French soldiers, and in situations where the water is bad, coffee or some other pleasant and palatable beverage is positively necessary.—Nothing tends to dispirit men more than water or food which they loathe. Before and after mounting guard, a cup of warm coffee would be a blessing by day and night, but such luxuries are not regularly provided in the common regulations of an army.

It is rather remarkable that with the improvements made in the implements of war, the provisioning of armies goes on in the old-fashioned manner. Milk and butter are unknown in army rations.

Fevers, diarrhea and dysentery are the most prevalent diseases in armies. The first is generally preceded by costiveness. To prevent this, the bowels should be kept in proper condition A very small piece of rhubarb chewed and swallowed daily, or every second day, is a good preventive of costiveness, and it is generally used in European armies for this purpose. When a soldier is attacked with diarrhea, he should bind a handkerchief or piece of flannel round his bowels, and, if possible, lie perfectly still. Dysentery is usually attended with severe pain ; the surgeon of the regiment should at once be informed of every case of sickness among the men over whom he is placed as the guardian of their health.

The Comet as it Appeared to the Eyes of a Common Man.

I first saw it on Sunday evening, 30th ult., 9 P. M. It was then about 40° above the north-west horizon. Both nucleus and tail presented a dull, hazy, whitish appearance.

Our next view of the heavenly visitor was on the evening of the 2d inst., at 9 P. M. It was then a a little past the zenith, moving in a north-west path. We kept company with the comet for an hour and a half, assisted by a good telescope, and had a fine time.

At intervals during this observation the comet presented a most brilliant and extraordinary appearance. The nucleus and tail would shine out with great distinctness and fervor for a brief period, and then the glow of light seemed to subside, and the whole body would assume a hazy, dull, diminished look. During some of the intervals of greatest brilliancy the nucleus had a bluish tinge, and appeared like a flaming ball of fire. The tail extended back in regular fan shape, and very bright, for a comparatively short distance, and from the center of this bright fan arose another tail, of less width, and less brilliancy, but of astonishing length, extending more than half across the heavens.

Sometimes the head of the comet would be buried in a cloud, from which arose a most glorious pillar of light, reminding us of the divine record of that miraculous signal by which the great God led onward the triumphant hosts of Israel.

Again, the nucleus would emerge from the cloud, leaving the brightest portion of the tail obscured. We then had the appearance of an independent patch or body of light, irregular in form, rather hazy, and nearly as large as a three-quarter moon.

Seen through the telescope, we observed at all times, near the head of the comet, a small but distinct ball of glowing fire. It was not so large as a star of the second magnitude, nor so clear, nor so steady. A halo or illuminated atmosphere of the same stuff as the tail, seemed to project in advance of the ball, to a distance, say fifteen times its diameter.

The tail, viewed through the glass, seemed to be composed of infinitesimal specks of fire, which had a contracting and expanding movement toward and from the center, and also a sidewise, swaying motion.

The comet stood at about 45° above the horizon at 10.30 P. M., when a deep curtain of clouds was drawn between us and the object of our wondering gaze. Your correspondent thereupon took the hint, and went to bed. NOT AN ASTRONOMER.

THE RIGHT OF SECESSION.—We learn from the *National Intelligencer* that in ratifying the Constitution of the Southern Confederacy, Virginia has reserved to herself the right to secede whenever she chooses so to do. Robert E. Scott, Esq., a leading politician opposed the reservation on the grouud that he "*had seen enough of secession*," and wanted a permanent thing this time. The general prevalence of the doctrine of State Rights at the South will not allow the existence of any government supreme to State authority, unless, indeed, the Federal government shall succeed in maintaining itself against usurpation—which it is very likely to do.

ALUMINUM IN GREENLAND.—The Edinburgh *Courant* states that two Danish vessels have sailed from Leith for Greenland, for procuring cargoes of cryolite—the mineral from which aluminum is obtained in largest quantities. Several very valuable minerals are obtained from Greenland. Plumbago is abundant in these regions ; but the cryolite is the most important of Greenland's products, because aluminum is daily increasing in favor, as a most beautiful metal, capable of superseding silver for many purposes.

Manufacturing News.

The Ames Company, at Chicopee, Mass., are running night and day, finishing off government work, and employ a force of 500 men—200 more than ever before employed in that establishment. Emerson Gaylord, of the same place, has also 150 men in his employ at work on military accouterments and mail bags.

The Arms Company, at Chicopee Falls, Mass., have nearly rebuilt their shops which were destroyed by fire last winter, and are now getting in their new machinery, preparatory to driving a more extensive business than ever before.

A company has been organized for the manufacture of type-setting machines, invented by Chas. W. Felt, of Salem, Mass.

The proprietors of the Fitchburg (Mass.) Woolen Mill are about to enlarge their building by putting on an addition of 42½ feet in length. They are forced to do this in order to meet the increasing demand for their goods. They are now making cadet grays and army blues, which are especially sought for at this time for military purposes.

Messrs. Elijah W. Upton and James M. Caller are about to rebuild the Southwick Tannery, in South Danvers, Mass., which was partially destroyed by fire in February, 1860. It is calculated that an outlay of $7,500 will put the tannery and outbuildings in complete order.

The removal of the duck looms from the mill at Duckville (Palmer), Mass., to make room for looms for weaving finer cloth has been stopped, and workmen are replacing those already removed. The war makes a large demand for sailcloth.

TARGET PRACTICE.—The curvature of the earth, or depression at any given point with reference to the horizon of another given place as a starting point, increases as the squares of the distances from the starting point. The curvature at the end of one mile is 8 inches *very nearly*. Then the depression at different distances will be as follows :—

	In.	*In.*	*Feet.*
At 1 miles it will be $1^2 \times 8 =$		8 =	$\frac{2}{3}$
At 2 miles it will be $2^2 \times 8 =$		32 =	$2\frac{2}{3}$
At 3 miles it will be $3^2 \times 8 =$		72 =	6
At 4 miles it will be $4^2 \times 8 =$		128 =	$10\frac{2}{3}$
At 5 miles it will be $5^2 \times 8 =$		200 =	$16\frac{2}{3}$
At 6 miles it will be $6\frac{2}{3} \times 8 =$		288 =	$16\frac{2}{3}$

And so on, increasing in proportion to the squares of the distances.

Giffard's Injector.

Some of our English cotemporaries say :—

The principle of Giffard's injecter appears to have been known upwards of a century ago. In 1753, Mr. Richard Savery, of Birmingham, published a book in which he gave a plan and description of an apparatus for raising water by steam. A conical nozzle, discharging a jet of steam, was shown within another similar nozzle, as in the injector, the water being thus drawn up through, and discharged through the annular passage. Among other copies of Savery's book, one is now preserved at Messrs. Elkinton & Mason's, Birmingham.

We have no idea that it ever entered Savery's noddle to feed a column of water into a boiler with a jet of steam from the same boiler. This thing is trumped up by those who would like to enjoy the benefits of Giffard's invention without paying for it. When an invention becomes valuable, it is astonishing to find how many are ready to testify that it is an old and well-known contrivance.

A Safe Man to Insure.

By a steamboat explosion on a Western river, a passenger was thrown unhurt into the water, and at once struck out for the shore, blowing like a porpoise. He reached the bank almost exhausted, and was caught by a bystander, and drawn out panting.

"Well, old fellow," said his friend, "had a pretty hard time, eh?"

"Ye-yes, pretty hard, considerin'. Wasn't doin' it for myself, though ; was a workin' for one o' them insurance companies in New York. Got a policy on my life, and I wanted to save 'em. I didn't care."

IN the war of 1812, every soldier was advised to carry a string, to be tied round a bleeding limb and be twisted tight by a stick or ramrod until a surgeon could be found.

Very little tea is imported into Germany.