

VARIETIES.

AN IRON MAN.—Launceston, Tasmania, can boast of being the first town which has produced an iron man who can walk like his brethren in flesh without the aid of steam. The curious piece of mechanism we refer to is the invention of Mr. Hornburg, a mechanical engineer. The figure, which is dressed as a footman, is 2 feet 10 inches in height, and weighs 160 pounds. Its action arises from the power of a spring concealed in its inside, which enables it to walk with the greatest ease and wheel a man's perambulator before it. With the assistance of an ingenious piece of mechanism, an eccentric motion is obtained, which by the help of levers causes the legs to ascend and descend, similar to the walking movements of a human being. The automaton has been exhibited at the local Mechanics' Institute.—*Cotton, Wool and Iron.*

THE UNITED STATES ARMY.—It appears from the annual report issued by General Sherman that the fear of exceeding the limit of 25,000, fixed by law, or the difficulty of enlisting men, has kept the army below what the honour or the necessity of the country demands, and the General very earnestly advises that the limit be changed to 30,000 men, not with the expectation of reaching that number, but to approximate it, and make the army more efficient without material increase of cost. The experience of nations generally demonstrates that only 66 per cent. of an organized army can be had for actual field service, and, as experience has also proved that 25,000 soldiers are needed for the wants of the United States, a number is asked for which will produce that result. General Sherman states that at present the soldiers are overworked; the companies are too small for discipline or decent appearance, and he considers that the army has earned by actual service this amount of consideration from the country. He places the actual strength of the army at 1,588 line officers and 17,293 enlisted men—in all 18,881. Other detachments, not available for actual frontier duty, swell the total to 2,163 officers and 23,024 enlisted men. The General adds certain recommendations in the report with a view to securing greater efficiency in the troops.

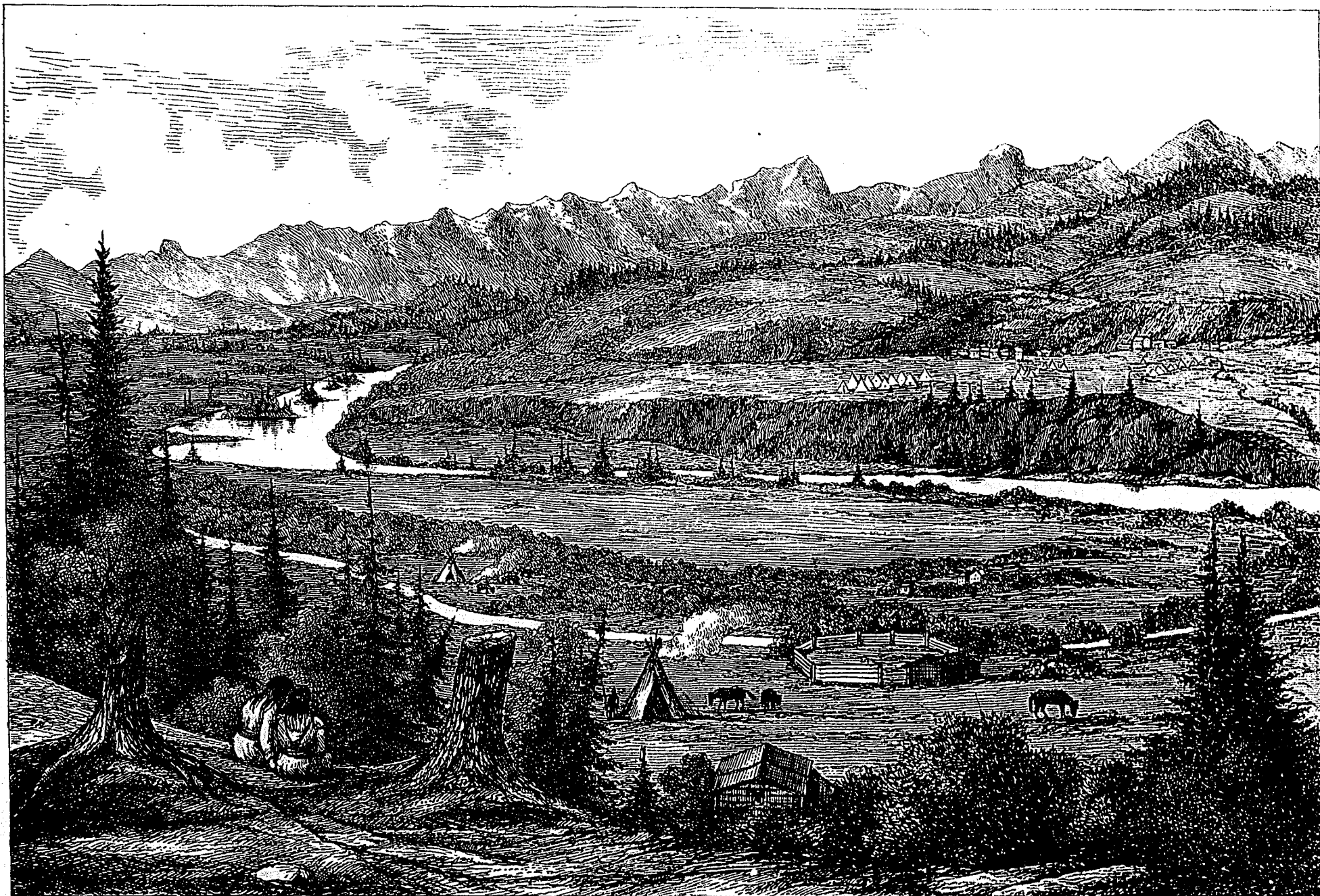
FOOD ADULTERATION.—Just at this time there is a commotion in Paris over the discovery that nearly every article of food which will admit of doctoring is adulterated. A series of analyses were made at the municipal laboratory, the results of which first drew attention to the matter. Of 62 samples of butter only 11 were found to be pure, 25 being described as "passable," and 26 as absolutely bad; of 31 samples

of flour only 18 were unadulterated; and pure ground coffee was the exception, not the rule. Pepper showed the vilest adulteration, "the sweepings of the large shops" being a frequent ingredient, and only one sample in three being what it pretended to be. This is bad enough on the Parisians, but it is well known that the system of adulterating food prevails in this country also. The article of powdered sugar is in many instances mixed with flour. To obtain the proof of this—which is familiar to housekeepers—it is only necessary to drop a spoonful of the so-called sugar into a glass of water, which it will soon whiten to the color of milk. But flour is a harmless ingredient. If nothing worse were put into our food we would at least escape the chances of being injured in health. A great deal has been said and written against the obnoxious practice with but little effect. It will never be suppressed until after the passage of such laws as can and will be rigorously enforced.

SOMETHING more than half a century ago, says a writer in the *Gentleman's Magazine*, there died at Cheltenham, at the age of nearly eighty years, an individual whose eccentricity consisted in the fact, not that he was everything in turn and nothing long, but that he was and that he did everything continually, and that what he did he did well. It is more difficult indeed to say what he did not do than what he did. He was tutor, *littérateur*, play-writer, topographer, farmer, agriculturist, land drainer, magistrate, sportsman, pugilist, dinner-out, clergyman, baronet, and canon of a cathedral; he was also an orator, and the founder of two London newspapers; and finally he had in him something of the soldier. So that, although he is now forgotten, even in that county of Essex to which he was really a great benefactor, Sir Henry Bate-Dudley must be pronounced one of the most extraordinary men whom the last or the present century has produced. With respect to his skill in the "noble art of self-defence," an Essex friend gives the following story—"Amongst his other accomplishments, he is said to have been a most skillful pugilist, and I remember a story told me a great many years ago by an old farmer at Bradwell. Whilst driving out one day with Lady Dudley in his carriage, he found fault with his coachman, and, on the man answering some what impudently, he said, 'Get down from the box, I'll give you a sound thrashing!' On proceeding to execute his threat, the coachman put himself into an attitude of defence, and they had a 'set-to' by the roadside. After a while Lady Dudley exclaimed, 'My dear, don't hurt the poor man!' when Sir Henry, having unexpectedly found his match, called out, 'Confound him, I would, but I can't, my dear!'"



THE NEW ARCHBISHOP OF CANTERBURY.



CAMP AND VILLAGE OF THE STONEY INDIANS ON THE BOW RIVER, MORLEYVILLE, 1882.