THE press of San Francisco in the last month or two has with one accord published in words of the highest commendation accounts of a recently perfected San Francisco invention. It remains for the OVERLAND with its more diffused circulation and more permanent place on library shelves to make its record of this "new thing under the sun."

Ever since Jacquard of Paris, over a hundred years ago, invented the means of making beautiful patterns in machine woven goods,—for which grateful France has erected a monument to his memory,—there has been but small improvement in the methods of weaving. Shuttles by millions have been flying to and fro, each with its little supply of thread on the bobbin, soon exhausted and requiring to be renewed at the expense of a stopping of the loom.

An expert attendant by the old system could attend only four or five looms at a time, and these hundreds of stops a day reduced the running time of a loom in a given number of hours some forty per
cent. There was always too a waste of say eight or ten per cent of the cost of weaving, in the loss of yarn when the bobbin became nearly empty, and this waste amounts to a vast sum of money every day.

These recognized disadvantages have been the subject of an immense amount of thought and effort on the part of inventors, but the conditions were such that all the attempts to make an improvement on the shuttle and bobbin came to naught, and ever since Kay invented the fly shuttle a hundred and fifty years ago it has remained practically the same. The problem came to be thought of as like the discovery of perpetual motion or the transmutation of metals.

But Mr. Robert H. H. Hunt of San Francisco did not lose his faith that some solution could be found. The son of a cotton weaver, he was familiar with the subject and he has spent thirty years in experiments in this single direction. At last the answer came to him, gradually and with little steps of improvement, until he has perfected an attachment which can be applied to any loom at small cost, and which makes it possible to run a loom practically continuously.

There is no bobbin in the new contrivance, and the shuttle is replaced by a carrier with jaws at each end which catch the thread from little "feeders," measure it off exactly by an ingenious device, cut it off, and insert every inch of the thread in the cloth with the ends securely lodged in the selvage. The feeders are supplied by great spools or bobbins of thread containing a practically unlimited amount, which can be renewed without stopping the loom. The result is a cloth free from faults occasioned by splicings of the weft, fine as gossamer or heavy as carpet indifferently, woven with one or a dozen threads at a shot, changing color as desired by a simple supply of more feeders, and produced at a saving of labor and cost estimated at from twenty to fifty per cent of that of the best looms previously in existence. One man can attend to twenty or thirty of them, instead of four or six as in the old way.

This attachment, which may be con-

END VIEW OF LOOM, WITH ATTACHMENT.
tained in an ordinary hat, can be added to any loom in use and at a cost which it is estimated will be repaid by the saving in a week's run.

Thus American ingenuity supplies American industry with advantages better than a protective tariff, and more than equalizes the difference in wages over the cheapest in the world. The inventor of this machine even expects the looms to weave so smoothly that the operator may start them at night and go to bed,—and particularly so in weaving linen cloth, where the threads are not so apt to break. In case of a broken thread the loom will ring a bell and stop. This catastrophe is much less likely to happen with the new device than the shuttle; for the carrier is so much slenderer that the shed of the warp is opened but a fraction of the amount heretofore required, thus greatly reducing the strain.

The saving and profits of the new invention, when figured as applied to all the one million looms in America and the fourteen million in Europe, exceed the average comprehension.

It is now in practical working and may be seen any day together with its beautiful product by applying at No. 24 Montgomery Street, the office of the Hunt Loom and Fabric Company, a strong corporation of which Samuel J. Hendy is President; D. M. Seaton, Vice-President and Manager; and John A. Ledden, Secretary, all well known business men of San Francisco.

S. G. Wilson.