

Harker, of San Jose, to appreciate, and several of the other gentlemen, I cannot recall their names, but a better whole souled lot of men is hard to find in one community. After the preliminaries had been gone through, we then turned our attention to electing new members, and think we secured 29 live members. Our worthy President was re-elected, Mr. Oren Scotten of Detroit, also Secretary Peer, and officers just about as formerly, the only changes being made to fill vacancies caused by deaths. On Saturday we turned our attention to the world renowned riverside, where two Canadians hold the sway of orange growing, Crawford and Johnson, who each have about 100 acres in orange groves, so those who wish to do a little figuring can get pretty nearly their annual income from orange groves. Near their places is the renowned Magnolia Ave., eight miles in length with six rows of trees, mostly pepper trees, and Eucalyptus and palm trees to stay the monotony. At Riverside we went into one of the packing warehouses and there saw them sending away whole train loads of oranges and lemons, and we saw no one doing any other work but handling oranges. We were told at Riverside that there were four trees 30 years old, which gave about \$500 worth of oranges per year. We saw the great farm of Lucky Baldwin, which contains 48,000 acres, one orange grove of 600 acres, and the balance farming pasture, and horses and cattle all in pasture, thus reversing things from the east—they turn their animals out in winter and feed them in summer—just reverse of here. And it is no wonder they raise such great horses in California, when the colts are born in January and lots of grass for their dams, and mothers milk is like oranges, abundant. We then went to Duarte, about 20 miles from Los Angeles, and did we not surprise our party by getting a


basket of grand Washington Novels, from an old friend of mine who left Windsor 9 years ago, and is now an orange king. One thing I should mention, that is, that most of the oranges this year got touched with the frost, so they all exclaimed you cannot judge them by this year, but those we got from Duarte had escaped, and such oranges we had never tasted before, ripened right on the tree.

S. BUTTERFIELD.

(Continued.)

### FRESH BLOOD.

BY H. S. BABCOCK.

FTEN there is difficulty in procuring fresh blood to renovate a worn-out race, through that the introduction of fresh blood from an alien source will destroy its thoroughbred character. Such a fear is commendable in those who are unskillful in breeding, for the introduction of antagonistic qualities may be a matter too difficult for them to manage, but that a skillful breeder should fear to do this is very strange. We have breeds that seem to be rapidly degenerating and bid fair to run out, unless fresh blood be introduced, and it is folly to let the fear of antagonistic qualities prevent the preservation of the race.

A skillful breeder finds no insuperable difficulty in getting rid of antagonistic qualities and characteristics. When he has a race of fowls where fresh blood is imperatively demanded, he does not make a fetish of "pure blood" to the destruction of his fowls, he casts about to find the breed or variety the most nearly related to his, the one that will introduce the smallest number of antagonistic characteristics. There is never any great difficulty in securing a breed of this character.

When this has been done he makes

at least three matings—first a pen of his favorite breed, second a pen of females of his breed mated to a male of the foreign blood, and third a pen of foreign blood headed by a male of his breed. From the progeny of the first pen he saves, of course the most typical specimens, from the second he saves at least one male and a number of females that most closely resemble his favorite breed, and from the third pen he does the same.

The next season the half-bred male is mated to some thoroughbred females, and the half-bred females to a thoroughbred male, and a pen of thoroughbreds is also kept along. At the end of this season he has chicks that are three-quarters of the desired blood from the matings where foreign blood has been introduced, and thoroughbred chickens from his pen or pens of such. Then three-quarter bred chickens are again mated with thoroughbreds and their progeny will be seven-eighths of the desired blood, sufficient to produce chickens to all intents and purposes thoroughbred when mated with thoroughbreds, for chickens in which there is but one-sixteenth of foreign blood can not be distinguished by any test known to breeders from those which have not this trace of alien blood.

By such a course the race that appeared moribund will be saved, and the dreaded antagonistic characteristics will be bred out, new life, new vigor, will be infused and the fowl be restored to its old time position.

It takes some trouble and a few years of time to do this, but in the care of a valuable breed "the game is worth the candle." I could name some breeds where just such a process as this must be resorted to or they will perish from the face of the earth. It would not be advisable for me to name them, because their owners would think, or might think, I was attempting to injure the