

way. Nothing that we have heretofore seen begins to make so emphatic a presentation of the monstrous fire-waste of the country and of its excuseless character.

As shown by this novel map, the States and Territories where fires have most raged, as to number and cost, in the last five years, are Maine, New Hampshire, Vermont, New York, Michigan, Minnesota, Dakota, Montana, Oregon, Nevada, Utah, Arizona, Colorado, Missouri, Arkansas, Tennessee, North Carolina, South Carolina, Georgia, Florida, Texas, Louisiana and Washington Territory.

Canada is left out of the account, because the figures of the census and the exhibit of the *Chronicle's* map pertain exclusively to the fire waste of the United States. Were the Canadian fire figures included, they would add to each year's aggregate the following sums: 1882, \$5,605,940; 1881, \$8,237,400; 1880, \$5,194,600; 1879, \$7,159,000, thus increasing by some \$26,500,000 the total for the four years. If we go further back, it is demonstrable by the *Chronicle's* tables—which, after all, are the only trustworthy data respecting fires in this country—that an actual record exists of fires whose aggregate cost to this country and Canada has been as follows for the past eight years: 1882, \$90,110,964; 1881, \$89,518,300; 1880, \$79,838,000; 1879, \$84,862,700; 1878, \$70,266,400; 1877, \$97,526,800; 1876, \$86,328,635. Here, then, is a total of \$672,226,999 transformed from tangible property into worthless ashes during the past eight years, not to mention the amount destroyed by unrecorded or overlooked fires, which at the lowest estimate must be \$28,000,000 or more in the eight years, thus rounded out the aggregate wastage to an even \$700,000,000, or nearly \$50,000,000 a year.

Words are thrown away in the endeavor to check this fearful destruction by inculcating caution on the part of property owners and conservatism on the part of underwriters. It would seem that nothing but the brand of fire itself will avail as the correction of popular recklessness and indifference; The man whom beggary has taught that a ruinous fire could have been easily prevented, is about the only member of any community who appears to know or care anything about limiting the ravage of fire. And so, we suppose, until everybody has been burned out of house and home and credit, everybody will remain reckless and crazy on this subject of the fire waste.—*Commercial Bulletin*.

THE TANNERS' LESSON.

It is now among the probabilities that a new era is dawning upon the leather trade, and a liquidation and adjustment of credits will put tanners practically on a better basis of supply commensurate with the demand, and profitable returns from their business.

They have had a severe trial. For years we have urged diminished production, and hung out cautionary signals. The supplies of both sole and upper leather have, for a long period been larger than required for the necessity of buyers. Active competition has kept up the raw material and put down the price of the finished article, and now the crash has come. The result is apparent in the wrecks which strew the ocean of trade.

It seems hardly feasible for one firm to attempt to do about all the business in their line. It has been tried three times within the past five years, and without success.

A Philadelphia firm of goatskin importers and dealers was the first notable instance. This was in 1878. They reached all over the world to control the raw material. They had a house in Mexico. They established another in Calcutta. Directly or indirectly, every bale of skins which came into the country paid them tribute. They had moneyed men and moneyed institutions at their back. The prices of raw skins and materials were enhanced, but overtrading and a large interest account proved too much for them. They failed with an indebtedness of a million of dollars, not a penny of which has been liquidated, and they carried to destruction a score of manufacturing firms.

The next to enter the field of mercantile adventure was a morocco manufacturing house in Newark. They had an entire banking institution behind them. They had the endorsements of substantial firms. They dictated terms to importers and manufacturers. Their business of millions of dollars yearly was not remunerative. Overproduction, a reckless system of credits with that terrible interest account, brought them down with a crash.

The great firm that failed in Boston last week did for many years a legitimate trade. They were clear-headed business men, who came up from small beginnings, and took advantage of the rising current until they found themselves on the topmost wave. Even there the hand of the steersman would not have faltered but for a complication of fortuitous circumstances unnecessary to explain here. The simple fact is that they did too large and too extended a business. It was all very well when the legitimate demand took off the stock, but when banking facilities were curtailed, when an extra struggle was necessary to keep tanneries at work, and the forcing process had to be applied to sales, then their operations were driven up to a colossal magnitude, and in attempting to control the hide and leather markets they lost control of their own business. Many of the notes on which they raised money were given for leather deliverable as wanted at a future time. By this system of kiting, several shoe houses were involved for large amounts, and have failed. Their notes took the place in the market of those of the tanners of the leather, they were discounted at the banks and now form a good share of the assets of the failed firm.

If this is to be an enduring lesson to warn our merchants of the result of inflation in business, and teach banks and bankers the danger of lending pecuniary aid to an extravagant extent to firms who are inclined to reckless operations, this misfortune which has overtaken a great tanning firm may prove a blessing to the rest of the trade. These institutions have got since the first of the present year at least \$4,000,000 of the notes of suspended houses in the shoe and leather trade on their hands, and they probably have about all they want of such paper. It is evident that these insolvencies have not grown out of the laws which govern commercial life, but from running contrary to them. They should not be used, in any sense, to depress the regular business of the country. Careful dealers have no fear of the future, and confidence may still rest secure under the practice of ordinary commercial sagacity.

All this disaster is traceable to one source, and that is the reckless *loaning of credits*. In connection with these trade disturbances, there are instances where firms, with a first-class business standing, having a handsome surplus in cash and owing but little for merchandise, have been completely and inextricably wrecked, because they have loaned their credit in the way of accommodation paper, which they have been unceremoniously called upon to meet. It is claimed, and possibly truthfully, that through all these failures there has been no charge of dishonesty of purpose. However true this may be, it does not render the situation any the less disastrous. Neither is it any more comforting, in a pecuniary sense, to the sufferers. Paper has been exchanged for fabulous amounts on which no solid business could rest. It has been a dealings in futures, as much as any bucket shop or stock gambling operator in the land could conduct.—*Shoe and Leather Reporter*.

THE AGE OF MACHINERY.

Fifty years ago Carlyle exclaimed that the age was mechanical, that individual effort amounted to little. If this was perceived half a century ago, the subsequent vast organization of the forces of a complex civilization makes it far more true now. The political economist who would marshal the forces affecting human society at the present time must not lose sight of machinery as a force affecting the welfare of nations. By the aid of new and improved machinery and steam, the production of many useful and indispensable articles has increased faster than the consumption; with the consequence of periodical gluts in the market. The world can probably produce more in a single year now than it was possible with the appliances of a generation ago for it to have produced in a decade. Nowhere, perhaps, has the increase in the power of production been more conspicuous than in agriculture. The historian who would arrive at correct conclusions of the growth of this Republic, of the forces that bind it together, must take into account the machinery of the farm, affecting the interdependence of the States. They are concentrating forces, promotive of the National Union. They are far-reaching in their influence. Their power is felt beyond the Atlantic. The statesmen of Great Britain recognize them as factors in the political problem of that realm.

The first patent for a reaping machine was granted in 1833, but it was not until 1845 that they began to be used, except in a

tentative way, Cyrus McCormac having built one hundred and fifty in that year. Since 1850 more than 300,000,000 reaping and mowing machines have been constructed in the United States, and the annual manufacture is about 175,000. Since 1865 large sums of money have been spent in the production of machines which would not only reap, but bind the grain. What has resulted from this last effort of invention? With the sickle, at the beginning of the century, a man could reap and bind one-third of an acre of wheat in a day. Now, a man with three horses, riding at ease upon his cushioned seat, can cut and bind from fifteen to twenty acres per day, with not a hand touching the grain. Besides these self-binding reapers, there is the California harvester, a machine propelled by horses or mules, cutting off the heads of the grain, mowing a swath twenty feet wide, the machine cutting, threshing, winnowing and feeding into bags—cutting fifty acres a day. Before these inventions were brought out the Western farmer during harvest, was at the mercy of a class of men known as "binders," who began in June, in the old border States, and moved northward as the grain ripened, making the farmers' necessity their opportunity, demanding and obtaining from three to five dollars a day, with board, materially reducing the profit of the crop to the farmer.

Equally as great improvements have been made in the cultivation and gathering of the other important crops. The old methods of corn planting and culture were both tedious and expensive. To-day the Western farmer rides behind his team, planting fifteen acres of corn, the rows running in both directions, or with his seeder sowing evenly twenty acres of wheat—every kernel planted at a proper depth, the seeder so graduated that each acre shall receive a given amount of seed. Under the old way a man could plant one acre of corn per day. Invention enables him to increase his acreage twenty fold. We are to bear in mind that only in the United States, and to a lesser degree in England, is such machinery employed in agriculture. It is this use of machinery which is producing wealth among the farming community of the Western States, unparalleled in any other age or nation.—*N. Y. Shipping List*.

—Having had some enquiries on the subject of electric light companies and shares, we print the following upon the subject of electric lighting from the *Money Market Review* of July 14th. Electric light shares have been flat. The following are the closing quotations and the week's changes:

Copy.	Paid up.	Closing prices.	Rise	Fall
Anglo American Brush	£10	6½ to 6½	..	½
Anglo American Brush	7	8½ to 8½	..	½
Hammond Brush & Ferranti system...	2 10s.	2½ to 2½	..	1
Hammond Brush & Ferranti system...	5	5 to 5½	..	1½
Great Western Brush system	2 10s.	¾ to ¾	..	..
Eastern Brush system	5	..	..	..
Midland Brush system	2 10s.	..	..	..
Scotch Brush system	2 10s.	½ to ½	..	..
Australasian Brush & Ferranti system	8	½ to ¾	..	..
Metropolitan Brush system	3	½ to ¾	..	..
South African Brush system	2 10s.	¾ to 1½	..	..
Maxim, Weston electric	1	½ to ½	..	..
Pilsen, Joel & Co.	2	½ to ¾	..	..
R'lway & electric appliances	13s 6d.	..	..	..
Faure's accumulator	£10	8½ to 4½	..	..
Indian & Oriental	2	½ to ¾	..	..
Swan United	2 10s.	1½ to 2	..	½

ADVERTISING BY TELEGRAPH.

A new "wrinkle" adopted by the wide-awake people across the ocean is described by a correspondent in the *Electrical World* of New York. Even now, under the abiding rate, many firms in England use the wires for bringing their goods into notice. When the six-penny telegram rate does come into force in Britain, which the Government has been driven into at the cost of some \$900,000 estimated loss of revenue the first year, one threatened