

lactic acids, are resulting products, which have a tendency to impair digestion, and are among the most active causes of dyspepsia.

The new process consists in the *mechanical use of carbonic acid gas* to "lighten" the dough. The *modus operandi* is as follows: the flour, water, and salt, are put together in a horizontal "mixer," and by means of a revolving shaft, with arms, worked into a consistent paste. The dough is then discharged through a trap in the bottom of the mixer into a hopper, whence by ingenious mechanism it is forced into a close vessel, or receiver, called the "Carbonizer." This is an egg-shaped vessel holding about two barrels of flour, and made to resist a high pressure. It has a vertical shaft through the center, with arms, for the purpose of thoroughly kneading or incorporating the carbonic acid gas into the dough mass. The gas is generated by the decomposition of carbonate of lime (marble dust) with sulphuric acid, passed through water into a gasometer, and thence supplied to the "Carbonizer" by means of the usual air or gas pump. At a pressure of one hundred and seventy-five pounds to the inch at which the machine is worked, the dough becomes thoroughly "light," and is discharged by the pressure through faucets into pans, when it is immediately put into the ovens. The whole process, from the inception to the drawing of the baked loaves, occupies a little over one hour. In the language of Prof. St. John, of the College of Physicians and Surgeons, New York: "The process is simple, cleanly, and uniform in its results, involving the use of no substance respecting whose wholesomeness a question can be raised. It saves all the constituents of the flour, while the process of raising bread by fermentation inevitably sacrifices some of them."

This Company having successfully entered upon its second year, and largely increased its facilities for the manufacturing by the addition of a duplicate set of machinery, presents greater pecuniary inducement to use a delicious article of Graham and rye bread, which is now being made by the same process, in addition to their unequaled pure and wholesome wheat bread for which they received the unqualified approbation of the medical and scientific fraternity. Office and manufactory 575 Mission Street near Second.

WIRE ROPE MANUFACTORY.

This enterprise was established by A. S. Halliday & Co., and has been in successful operation for several years. The consumers of wire rope are principally the mining and ferry interests of this State and Oregon, it being chiefly used for hoisting, pump, derrick, ferry, and bridge ropes. The longest wire rope made at this manufactory, without splice or joint, was more than one-third of a mile, and three inches in circumference. These works also manufacture considerable copper and brass wire rope for sash cords, lightning conductors, etc., and iron wire stays for shipping. The manufactory is located at the foot of Taylor Street, North Beach.

CALIFORNIA WIRE WORKS.

H. T. Graves' Wire Goods Manufactory, 412 Clay Street, was established in 1852, as the Dennis Wire Works, and is one of the oldest manufacturing establishments in San Francisco. It is fully adapted to the manufacture of every article that wire is used for, and in its consumption every style and size of wire is called in use, from the finest wire cloth to the inch-square coal screens made of three-eighth inch wire.

SOAP MANUFACTORIES.

The Eureka Soap Company is now in successful operation. The quality of the article is said by good judges to be equal to any imported, and is meeting the approval of the public. It can be used either for fresh or salt water. The Company commenced busi-

ness in May, 1862, and now furnish about 30,000 pounds of soap per month. The salesroom and manufactory are located at 207 Sacramento Street.

PORTMANN'S SOAP.

This very superior article of home manufacture, by J. H. C. Portmann, is turned out in large quantities at his works on Mission Creek. Every variety of soap now in use can be had at this manufactory, to meet the demands of a generous public.

PICKLES AND PRESERVES.

These very important articles for table use have called out a large capital for their manufacture for home consumption. One of the most extensive of these establishments is that of Messrs. Cutting & Co., which commenced business in 1853, and now located at 115 Commercial Street. They employ from thirty to forty hands constantly. About 400,000 pounds of pickles and as many pounds of vegetables and fruits are put up annually by this firm. Cider, vinegar, etc., form an important item in their business.

BELLOWS MANUFACTORY.

C. Van Ness, Smith's Bellows Manufactory, California Street, below Davis, was established in 1859. These bellows are improved in construction, and stronger than those formerly imported, and have "blowed" themselves into general use; so that they now supply the demand for the whole Pacific coast, to the exclusion of the imported article.

The Fluctuations of Trade.

The following table has been prepared for the purpose of showing the changeable character of our business community. Only the leading branches of trade have been included, but these may be regarded as a fair indication of the whole. The yearly changes among the small dealers will not fall short of forty per cent. per annum:

REMARKS.	No. 1861.	No. 1862.	Declined business.	Remaining in business.	No. 1863.
Apothecaries.....	49	51	13	38	58
Assayers.....	7	6	1	5	14
Attorneys.....	315	328	46	282	343
Auctioneers.....	21	18	6	12	18
Bakeries.....	67	59	28	31	49
Bankers.....	18	18		18	19
Baths.....	15	15	1	14	16
Billiard Table Makers.....	8	7	2	5	6
Boarding Houses, Etc.....	340	444	227	217	441
Breweries.....	24	23	4	13	26
Brokers.....	217	216	46	170	305
Butchers and Markets.....	230	211	132	79	264
Cabinet Makers.....	33	31	22	9	28
Carpenters.....	109	93	61	32	79
Cigar Dealers and Makers.....	178	165	78	87	158
Clothing and Tailors.....	296	290	92	198	304
Dress Makers.....	81	93	58	35	99
Dry Goods.....	139	120	41	79	112
Fruits.....	105	122	74	48	117
Furniture.....	52	56	26	30	49
Groceries.....	421	453	118	305	460
Gunsmiths.....	15	13	2	11	11
Hardware.....	34	34	6	28	37
Hair Dressers.....	102	96	38	58	115
Hatters.....	21	24	16	8	25
Liquors, Etc.....	1,041	1,241	400	831	1,315
Lumber.....	35	38	6	32	32
Merchants, Commission.....	186	162	31	131	149
Milliners.....	74	51	36	15	96
Milliners.....	84	67	27	40	50
Painters.....	202	209	38	171	227
Printing Offices.....	19	20	2	18	19
Produce.....	78	86	25	61	84
Restaurants.....	86	89	36	53	90
Stoves and Tinware.....	66	76	22	54	60
Upholsterers, Etc.....	27	37	14	23	35
Watchmakers, Jewelers.....	108	160	50	110	161
Wood & Coal.....	87	88	35	53	84
Total.....	4,991	5,300	1,880	3,420	5,556