these chambers that the principal mining

ing Bri in Kansas and Mining ock in New York.

In few justices has the work of con-centration business into fewer hands and the esequent abandonment of small plants be more marked than in the demestic as manufacture. This is brought out in p investigations now going on for the th census, which shows that, shows falling off of over 50 per cent within his period. Twenty per cent of this drease has taken pince since 1830. Most f it is doubtless attributable to the rmation of the salt trust, which virtusy controls the business of the count. Ten of the idle plants reported in 18 had an aggregate capital of nearly

Salmanufacture, as pointed out by chief stattleian for manufactures, S. N. D. Nora, is one of the large group of industrie which lie on the border line, either bet een manufacturing and mining, as in thi case, or between manufacturing and ag-culture, as in the case of slaghtering an meat packing, or of canning fruits an vegetables. The products of these cade manufacturing industries greatly arell the value of the manufactured prod-ut as reported by the census, and it till be the endeavor of the division of sanufactures of the 12th census, in pre-enting the complete statistics, so to sep-state and classify them that all of these

order-line industries can be grouped and eliminated by those who desire to do so. The reports show a capital of \$27,123,364 invested in the manufacture of sait in the 159 establishments reporting for the country. This sum represents the value of land, buildings, machinery, tools and implements, and the live capital utilized, but does not include the capital stock of but does not include the capital stock of any of the manufacturing corporations engaged in this industry. The value of the products is returned at \$7,966,897, to produce which involved an outlay of \$459,-748 for salaries of officials, clerks, etc.; \$1,911,140 for wages; \$760,509 for miscel-laneous expenses, including rent, taxes, etc.; and \$3,355,922 for materials used, mill supplies freight and fue.

supplies, freight and fuel.

Salt itself is a mineral, but it is not clear whether the process by which it is obtained should be regarded as manufacturing or as a method of mining. Rock salt is undoubtedly a mining product, but as it is considered in connection with salt manufacture by artificial heat or by solar evaporation, it is included in the present evaporation, it is included in the present report. Sait is the only mineral product which enters directly into consumption as food, and while a considerable quantity is used for other purposes, by far the larger portion is consumed as food, either directly or indirectly.

Process of Manufacture.

The history of the manufacture of salt in this country covers the entire period subsequent to the early settlement by the English. The first sait was produced in Virginia prior to 1620, and in the various reports of the Federal census mention is made of not less than 22 states in which salt has at some period been produced in considerable quantities. The early process consisted in the production from water, either by exposure to evaporation under the sun's rays, or sometimes by boiling in pans or kettles until the dis-solved salt was deposited. About the close of the 18th century the manufacture was begun from brine obtained from nat-ural salt springs, following the same crude process used in the manufacture of salt

process used in the manufacture of sait from sea water,
At the present time, however, comparatively little sait is made from sea water,
of brine from natural springs, and some of that so obtained is evaporated by artificial heat. Nearly all the evaporated sait is now obtained by sinking wells to the sait body, pumping fresh water into the wells, and withdrawing the bring after the sait wells. wells, and withdrawing the brine after it has become well saturated. Practically all the product from natural salt water, by solar evaporation, is made along the shores of San Francisco Bay in California and Great Salt Lake, Utah. With these two exceptions the evaporated product is almost entirely obtained from deep wells,

manufacture by artificial heat is made in kettles, open pans, vacuum pans and grainers, the heat being applied either directly or by steam. In blocks where kettles or open pans are used, the heat is usually applied directly and the brine is boiled in grainers and vacuum pans by steam heat. The grainer process is exsentially American; the brine in this process is evaporated from rectangular vats about 12 inches deep, in which are suspended colis of pipe carrying elther live or exhaust steam

The brine is usually kept agitated me chanically, so that the salt which is formed on top will be broken up and precipitated. In some instances the salt is removed from the bottom of the pan by mechanical scrapers; in others, hand labor is employed. The grainer process seems to be the most popular method in the United States and most of the finer grades of table and dairy salt are pro-duced either by this or by the vaccureduced either by this or by the vacuum Solar salt is made in vats or ponds,

covered and uncovered. At Syracuse, N. Y., the ponds are supplied with movable covers. No covers are used in Utah or California, as the operations in those states continue only during the dry sea-

Rock salt is mined and prepared for use the States of New York, Kansas, Louisiana and California. It is now produced in greater quantities than solar sait. Four different units of measure are cunployed in the industry. At the solar sait works, Syracuse, N. Y., and at some of the sait blocks along the Ohlo River in Ohlo and West Virginia, the bushel of 56 pounds is used as the unit. At the rock salt mines in New York State and at Avery Island rock salt mines in Louisiana the long ton of 2240 pounds is used as the unit, while the short ion of 2000 pounds is the usual unit at the rock salt mines in Kansas and at the solar works along the shores of San Francisco Bay

and Great Salt Lake. In the half century from 1859 to 1900 the capital increased from \$2,640,885 to \$27,123,-\$64, while the value of products increased from \$2,222,745 to \$7,966,897. At the census of 1800 there were 250 establishments, while only 150 are shown at the census of 1900, a decrease of 60.2 per cent. During the last 20 years the development of the industry has been most rapid, the capital having increased from \$8,225,740 to \$27,123,364, a gain of 229.7 per cert. The products in the same period increased from \$4,829,566 to \$7,966,897, or 65 per cent, while the number of establishments decreased from 263 to 159, a loss of 40.7 per cent. The de-crease in the number of establishments is due to the abandonment of many small plants along the Atlantic Coast and in some of the interior districts where salt was manufactured from brine springs; also to the consolidation of a number of large establishments, particularly in New York, Ohio, Michigan, Kansas, Utah and

From 1890 to 1899 the number of establishments decreased from 200 to 155, or 20.5 per cent. The capital increased from \$13,-457,749 to \$27,123,384, or 101.8 per cent, and of this increase the greatest gain was shown in the item of live capital which increased from \$2,190,201 to \$5,747,465, or

162.4 per cent. The cost of materials increased from \$1,826,770 in 1890 to \$3,335,922 in 1899, or \$2.6 per cent. The cost of the burrels, boxes cartons, bags, cooperage stock and cloth for sacks purchased, amounting in 1839 to \$1,837,122, formed the most important fac

tor in the cost of materials. Decrease in Solar Saltmaking. The decrease in the manufacture of sosalt as compared with the growth of

CLOSURE F SALT WORKS

while in 1880 the output was 803,555 barrels, forming 15.2 per cent of all sait produced, in 1850 the product was 30,574 barrels, forming but 6 per cent of the total production. The production of rock salt, on the other hand, increased from 62,400 barrels in 1890, when it formed but 1 per cent of the total sait production, to 2,542.

The plants.

Was considered a very low figure. It is now sold for from 25 to 30 cents a burrel of five bushels, or about one-tenth of the early price.

Saltmaking from brine other than seators of the list occurrence was for the eighth census, it is stated that sait works were said to have been erected on Big Beaver Creek, in Western Pennsylvania, in 1764, but no reference was made by the boiling process shows a made by the boiling process shows a steady increase for each decade. The in-crease from 1889 to 1899 was 6,728,051 bar-

rels, or 134.9 per cent.

The 24 establishments in California used the solar process almost entirely, there being but two open pans and one vacuum pan in the state, while there were 474 covers or ponds, having an area of 62,062,990 square feet or 565 per cent of the total square feet, or 56.5 per cent of the total area in the United States. Utah shows for the solar process five establishments, with an area of 38,610.728 square feet for while the production of salt throughout the course has increased continuously for the course has a course for the course for the

made to the success of the enterprise. In New York the first sait made by white men was produced in 1788. The state maintained control of the Onondaga sait reservation, furnishing the brine to those who paid for it. The state built and repaired the settling tanks from which the brine was delivered to the lessees. The law regulating the manufacture of brine on the Onondaga reservation was amend-ed a number of times after enactment, At first a cents per bushel was charged on all salt made, and each lessee was required ing process but one kettle. The relation of climate to the manufacture of solar salt is clearly seen from the statistics of California and Utah. Because of the dryness of their climate, these states offer it was advanced to 12½ cents, in order to

HUMPHRY WARD AND HER WORK.



SHE IS A VERY STATELY WOMAN, A SCHOLAR AND A PHILAN-THROPIST AS WELL.

LONDON.-Mrs. Humphry Ward, who is about to come before the American ablic again with another big serial story, has been dividing her time lately between her dramatization of "Eleanor" and various sociological interests of the Passimore Edwards Settlements, which grew out of her novel, "Robert Eismere," just as the "People's Palace," down in Whitechapel, grew out of Sir Waiter Bessunt's novel, "All Sorts and Conditions of Men."

As befits a niece of Matthew Arnold, Mrs. Ward is the most serious-min of women. You hear of her one day undertaking a few reforms in modern religion, another day giving her benediction to an institution that provides poor wom. en with trained materalty nurses, and then again doing something or other to improve the minds of the young men at the settlement.

But, doubtless, every lady would be serious if she knew as much as Mrs Ward. She spent her girlhood in classic Oxford, where her father prepared young men for college. She passed most of her three under the magnificent roof of the Rodician Library-the book-lover's nearest approach to the ideal home for books. She married a learned young Oxford tutor, and helped him in writing learned essays. She made such a specialty of Spanish that she came to be recognized as an authority on the subject. Scholarly researches were her chosen recreation

Negotiations with Mrs. Ward in behalf of a magazine on one occasion gave me a definite idea, however, that life in a world of books had not interfered in the least with an uncommon business ability. She had a high idea of the market value of her literary products, and drove a hard bargain, calling in her husband as a sort of witness and backer.

She is a stately woman with a large, impressive dignity. Her hair, turning white, is drawn back from her foreignd, regardless of the frivalities feminine fashions. My most vivid impression of the conversation, aside from the business in hand, was the sudden chill that prevailed when I unfortunately hap pened to speak of Cecil Rhodes, whose imperialistic name, apparently, filled Mr. and Mrs. Ward with horror.

Mrs. Humphry Ward's husband, whose peculiarity in spelling the last syllable of his name without an "e," has brought many a proofrender to grief, is a person of considerable consequence in the literary world. "Ward's English Posts" made his name known, but in London he is better placed as one of the chief editorial and critical writers for the Times. He is a big. handsome man, whose

admiration for his wife's abilities amounts almost to awe. They live in a fairly big house on a corner of fashionable Grosvenor Place. It is dingy enough outside, but its interior makes an ideal setting for its distinguished mistress. Hare books and old paintings line the walls, and even the fur-

exceptional advantages for the develop- raise revenue for the construction of the ment of the solar process, and of the cannis of the state.
163.221,330 square feet of covers or ponds duced to 6 cents in 18 in the United States, these two states 1846, which rate was contain 100,672,528 square feet, or 30.6 per cent of the total. Nevada, with three establishments, uses the solar process entirely. In New York the ponds for evap-oration by solar heat are provided with movable covers; by this means the rains are kept from the brine, and the process is considerably accelerated. This state had 38 establishments, and while the solar process still showed an area of 8,175,948 square feet for the 32,255 covers or pends, the evaporating apparatus consisted of 92 grainers, 41 open pans, 238 kettles and nine vacuum pans. The remaining states represent less than 1 per cent of the mare feet area in covers or ponds, and ractically use the boiling process en-

In the last decade manufacturers have made great progress in the production of the finer grades of salt, particularly those for table and dairy use, and for the preservation of fish and meats. Much of the increase shown in production was due to the development of the large meat-packing establishments and, in a lesser degree, to the development of the dairy industry. The extensive use of the chlorination pro cess of extracting gold and silver from ores has required large amounts of the lower grades of salt.

Less Salt Being Imported. The extent to which salt of domestic production has supplianted that of foreign manufacture is seen by the statem that in 1880 imported salt formed 26.4 per cent of the domestic consumption; in 1890 it had fallen to 14.7 per cent; while in 1899 it was only 8.3 per cent. The total domes-tic consumption in 1880 was 2,627,252,560 pounds; in 1890 it was 3,406,564,880 pounds, and 4,600,782,200 pounds in 1839. The population of the United States was 50,159,200 in 1830; 62,979,766 in 1830, and 76,149,386 in

The first attempt at saltmaking is re-corded in Beverly's "History of Virginia." in which it is stated that as early as 1620 "a salt work was set up at Cape Charles on the Eastern Shore." What success at-

1900. From these figures it is even that the per capita consumption in these three

tended this effort is not stated.
Prince's "Chronological History of New England" states that an attempt to manufacture salt was made at Plymouth, in this state, in 1624, but was not successful. Prior to the Revolutionary War, salt was not manufactured in the colonies in large quantities, and it is probable that the quantities, and it is probable that the supply was procured from England or from other foreign sources. The com-mencement of hostilities cut off importa-tions, and a system (extensive for that period) of making salt by boiling sea wa-ter was developed around New Bedford ter was developed around New Bedford and on Cape Cod. This industry continued until after the War of 1812, when importation was resumed and the works were allowed to fall into decay. Foreign salt was sold in the American markets

canals of the state. The duty was reduced to 6 cents in 1834, and to'1 cent in 1846, which rate was continued until the state sold its title to the lands, in 1898, a little over 100 years after assuming con-

Many years ago a considerable amount of sait was made in Massachusetts from sea water, but this industry has almost entirely disappeared. The total amount made in Massachusetts in 1899 was 260 barrels. There was only one establishment engaged in the manufacture at the lith census, and the state was not reported separately. In 1880 the production amounted to 1915 barrels, not quite double the production of 1839. In 1870 it amounted to 4569 barrels, and in 1869 to 6705 barrels. At Avery Island, La., in 1731, an unsuccessful attempt was made to make sait from brine. The first salt furnace in what is now West Virginia was built in 1797, on the Kanawha River, near the present City of Charleston, and in the following year the first salt was produced in Ohio at what is now known as the Old Scioto works.

Crude Methods in Kansas,

The first salt made in Kansas was obtained from marshes, which are scattered over the central part of the state. The pioneer travelers, hunters and traders were led by buffalo paths to these marshes, which are the salty remains of decomposed saline strata; they are large, shallow lakes, which dry up almost tirely in the Summer, leaving a thin white scale of salt deposited over a large area of grassless territory. Along the banks of these marshes sait works were constructed, similar to those described as used by the ancients. Stone arches were erected about the kettles in which the brine was evaporated, and chimneys built in order to economize fuel and heat as much as possible. Until 1888 these crude the per capita consumption in these three factories were the only ones in Kansas, years was, respectively, 52.3, 54.1 and 60.4 As late as 1870, salt obtained in this way was worth as much as 10 cents a pound

equivalent to \$28 per barrel. In 1887 the state experienced a period of great activity in the development of coal mining and other industries. In the search for petroleum or gas large bodies of rock salt were struck. The people who owned the wells in which the salt was found were much disappointed at finding neither coal oil nor gas in large quantities, and did not at once appreciate the real value of the discovery, but an important industry was soon built up, and some of this salt, particularly the dairy and table brands, now finds its way into

the markets of the Eastern States.
From the bottom of the shaft the min is laid off somewhat similarly to the streets, 25 feet in width, running east and west, and the cross-streets, or the same width, running north and south. From these cross-streets rooms or chambers are driven, having a width of 60 feet, there lar salt as compared with the growth of salt was sold in the American markets being pillars 50 feet in thickness left another. The rate in the vicinity are the salt industry is seen in the fact that at that time for 50 cents per bushel, which standing between the chambers. It is in

operations are carried on.

The rock salt is at first undercut with mining or channeling machines, operated by compressed air; holes are made in the salt with air drills, and dynamite, exsait with air drills, and dynamite, ex-ploded by electricity, brings the sait down to the floor of the mine. The loose sait is loaded on cars, each holding about two tons, conveyed to the shaft by under-ground railroads, and holsted to the top of a five-story mill building directly over the mouth of the shaft. It is dumped auto-matically from the mine cars into crushers over dumps, and passes by gravity down through different-sized crushers to the screenroom below, where, by screens of various sizes, it is separated into nine different grades. Thence it is conveyed to large bins, from which it is loaded into

The Kanawha "Licks."

The early attempts at making salt in West Virginia were on the Kanawha River, and the Kanawha "licks" were known to have been used by the Indians, and were the gathering places for buffa-lo, elk, deer, and other wild animals before the advent of the white man. The carliest settlement in this region was made in 1774 by Welter Kelly and family at the mouth of the creek bearing his name. They were all killed by Indians. Later, in 1785, when life in that section had become a little more secure, Joseph Ruffner, an enterprising farmer from the Shenandoah Valley of Virginia, purchased about five acres of land at the mouth of Campbell's Creek from one John Dickin-Campbell's Creek from one John Dickin-son's representations as to the valuable salt springs on the property. Ruffner also purchased 800 acres, extending from a point on the Elk River to the Kanawha, and embracing the present site of Charles-ton. Joseph Ruffner did not live to see his design for making salt effected, but in transmitting the property to his sons, David and Joseph he enjoined them to David and Joseph, he enjoined them to carry out his plans for building extensive salt works. All that the elder Ruffner had accomplished was the leasing of the "licks" to one Elisha Brooks, with the right to manufacture salt. Brooks in 1707 erected the first sait furnace in Kan-awha County, which was also the first one west of the Alleghany Mountains. It consisted of two dozen small kettles set in a double row, with a flue beneath, a chimney at one end and a fire bed at the other.

In order to obtain a supply of brine Brooks sank two or three "gums" into the mire and quicksand of the lick and dipped up the brine with a bucket and sweep. In this crude way he manufac-tured about 150 pounds of sait a day, which he sold at from 8 to 10 cents a pound. No attempt was made to purify the salt from the bittern and other impurities, either organic or inorganic. This sait soon acquired a reputation for its strong, pungent taste and superior qualities for curing meat, etc. The presence of iron gave the salt a reddish tinge, and it became widely and favorably known as "that strong red salt from the Kan-awha 'licks."

In 1806 the two brothers Ruffner, in In 1806 the two brothers Ruffner, in-spired by the growing needs of an in-creasing population, began to look for the source of the brine springs in the hope of finding a larger and better sup-ply. They began by sinking a "gum," consisting of a holiow sycamore tree, which reached what they supposed was bed rock at 13 feet. The quantity of brine bed rock at 13 feet. The quantity of brine was small but of a strong quality. Enthe rock. This was done by means of a long drill with a 2½-inch chisel bit at-tached at the upper end to a spring pole, and the pole to a rope. Boring by this means was slow, difficult and tedlous, but on November 1, 1807, at 17 feet in the rock, they struck a larger flow of strong brine. Continuing the work, at 28 feet a still larger and stronger flow was obtained. On January 15, 1808, at 40 feet in the rock, they found a stream large and ough for all their purposes and

But they had no pipes in which to bring the strong brine to the top of the ground undiluted by the surface seepage. These were finally provided by whitting out two half-tubes from long strips of wood, fitting the edges carefully together and wrapping the whole from end to end with small twine. The brine came up free and strong from below, the "gum" floor was made water tight, and from the "gum" the brine was raised to the surface by bucket and sweep, This is sald to be the first rock-bored salt well west of the Alleghany Mountains, if not in the United States; it required a year and a half to complete it. The success is the surprising feature.

Meanwhile their furnace, a reproduction of Brooks' on a larger plan, was under construction and was completed in time for the brine. On February 8, 1808, the Ruffner brothers secured their first output, and immediately cut the former price of salt one-half, seiling it at the unprecedently low figure of 4 cents per pound The neighbors, who had watched the progress and result of the Ruffner struggle, began boring on their own lands with more or less success, and in 1817 there were about 13 furnaces and 15 or 20 wells in operation. Improvements in mechanical methods of raising the brine were adopted, the bucket and sweep giv ing way to the winch, and the winch in 1828 to steam. Coal, too, began to be used for fuel, David Ruffner being the enterprising pioneer in this as in the bor-ing. In 1831 William Morris invented an ingenious but simple tool for boring salt wells, which is today used in boring oil and gas wells. It was the tool known as "slip" or "jar." Morris' invention was never patented, and, like the hydraulic ram, has not been improved upo

Salt Harvesting in Utah.

In 1899 Utah produced 235,671 barrels equivalent to 1.178,356 bushels, nearly all of which was made by solar evaporation. In the making of salt by solar evapora tion the pumps are started each year about the month of March, the brine being pumped into large reservoirs, each cov ering from 10 to 20 acres. As the brine becomes stronger it is drawn off into other reservoirs or sloughs covering from three to 15 acres. Sloughs are made with a hard clay bottom and with a levee thrown up three or four feet high around the sides to retain the brine and at the same time fur-nish a ditch on the outside to carry off fresh water. The sloughs are replenished from time to time during the Summer, the reservoirs being kept stocked until September or October, by which time sait is deposited to the depth of from three to six inches. Harvesting then begins with wheelbarrows and tramway, the sait being stacked on the banks in large plies shaped something like a haystack, but not so high. A crust which answers every purpose of a shingle roof forms on each pile. This is the crude salt ready for murket. It is hauled to the mills for re-fining purposes or is shipped in this crude state to the sliver mills working under

the chlorination process.

The latest improved machinery in the mills consists of revolving cylinders, roller burrs and a series of sieves. The sait is hauled to a crusher, whence it is carried by hoppers to the heated cylinders, which deliver it perfectly dried to the roller burrs; thence it goes to the sieves. It is purified by means of a suction blower as it passes over the sieves. The impurities are lighter than the salt, and as it passes over the sleves the suction is set with just enough strength to take off the impurities and allow the salt to pass on to the bins, the different grades being weyed to the proper bins by a series of hoppers.

Rats Destroying Salmon.

ASTORIA, Dec. 30. — Superintendent Honchen, of the Washington State hatch-ery, at Chinook, has discovered an en-tirely new enemy of the young salmon. For a number of mornings he noticed that there were many salmon in the troughs dead with their heads missing. One night he sat up to try to learn the cause of it, and found that a number of rats jumped on the edge of the troughs and actually went fishing. The rats would reach in the water, grab a young salmon by the head, lite it off and start after another. The rate in the vicinity are be-

WE return our sincerest thanks to our numerous clients and the public in general for past favors and wish them all a prosperous New Year.

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WITH WHOOP, HURRAH!

NICARAGUA BILL TO GO THROUGH THE HOUSE.

French Company's Greed Is a Bar to Success of the Panama Project.

There are several reasons, telegraphs Henry Loomis, to the Boston Herald, why the Nicaragua Canal bill is likely to pass the House of Representatives very soon after the reassembling of Congress in January. In the first place, the Congressmen who are most flercely in favor of an isthmian canal also favor the Nicaragua route. In the second place, the sentiment of the people of the country has been educated in favor of that route, partly by the failure of the French company which began the work of digging the Isthmus of Panama, partly by the scan-dals connected with the company, which has been supplanted by the present or-ganization, and partly by the old belief, which had good foundation, and which has not ceased to control the public mind, that the engineering difficulties at Panama were insurmountable. This public sentiment has been adroitly taken advantage of at the present time by those who have been promoting the Nicaragua

scheme. It is true that the old Maritime Com pany, whose agitations in Washington kept the Nicaragua scheme alive during the time when public interest in the canal had waned, has gone out of existence Nevertheless, the results of its agitation are still felt, and the Nicaragua Canal project is almost immovably fixed in the minds of those Senators and Representathe Morgan and Hepburn bills, The keen ness of the interest in the project is, of course, manifested by only a few, these few have been engaged in the Nic aragua propaganda for several years. The great mass of members of Congress know hardly anything of the relative merits of the two routes, and are not likely to take

pains to learn them. The report of the Walker commission one of the most voluminous documents that the Government has ever been called apon to print. The maps alone are numer elaborate, and ought to be published on a very grand scale if they are to be intelligently and understandingly read. The amount of testimony is very large, and the correspondence between the commission and others, and especially between it and the Panama people, is very important. The engineering discussions are difficult for the layman to understand; so that, on the whole, the letter-press and the maps will not appeal to the average Congressm who will solve his difficulties by voting in accordance with what he thinks will be the inclination of his constituents. He will get his information from those who supporting the side which he and who have taken the pains to inform themselves.

Naturally there are selfish interests covered up in this scheme; as there are in almost every proposition involving the expenditure of large sums of money; these selfish interests are on both sides, or on all three sides—the Nicaragua route, the Panama route, and the railroads who are opposed to any canal whatever. The in-terests of the last two, the Panama Canal and the railroads, are easily understood. There are other than canal and patriotic

interests involved in the Nicaragua route also. A considerable number of American citizens, some of them intensely patriotic and enthusiastic, such as many officers of the Navy, and others purely speculative and adventurous, have already invested considerable sums of money in work at Nicaragua. Most of the work, however, has been destroyed, or gone to pieces the diggings have filled up, the harbor at Greytown is choked with sand, and the tools and implements of the old com-

As soon as the Nicaragua bill passes, these old investors will ask the Govern-ment to reimburse them for their work, and they will make the attempt to secure payment out of the funds appropriated for the securing of a right of way across the isthmus. It will probably be found also that most of the territory which is to be condemned, provided we make the agreement auticipated with make the agreement auticipated with Nicaragua, is owned by American citi-zens. The Eyre-Cragin concession will be one of the interests or properties looming up and demanding purchase by the Gos

These are troubles that will probably be met properly by the executive depart-ment of the Government, and, if they are sent back to Congress for solution, experience teaches us that they will be dealt with decisively and quickly. Con-gress thus far has shown no disposition o pay for any old material along the Nicaragua route, or to compensate previ-ous speculators for their filled-up diggings. Nevertheless, all these varied in-terests have friends in Congress, and terests have friends in Congress, and they are united behind the Nicaragua bill because it is from the passage of that bill and the selection of that route only that they can hope for reimbursement. Therefore, the Panama people face naturally against a strong opposition, and this opposition has been greatly strength-ened by the attitude and conduct of the Panama Company, as it has been represented by M. Hutin, who has just re-signed its presidency.

It is perfectly true, as everybody is now

offered to sell the Panama route to this admission of other than first-class mat-dovernment for \$40,000,000, the report of ter to mails for these parts of Alaska, the Walker Commission would have been For this reason, distinction in classes has a proffer of the company's property such as this Government could afford to ac-cept—that is, an offer to sell for a sum which, added to the sum to be expended for the completion of the canal, would make the total less than the presump-

tive cost of a canal at Nicaragua.

Now, it seems that the French people have come to the conclusion that they had better take anything that this Govern-ment will pay for the Panama route, but the new proposition will be received by people who have acquired an unfortunate attitude of mind toward the Frenchmen, by people who say that they are tired of Hutin and his association and that these Hutin and his association, and that these are doubtless succeeded by persons who are no different.

are no different.

No one who thinks of the proposed canal doubts for a moment that its construction, unless put entirely under the control of Army engineers, will be attended with a saturnalla of robbery, and an enormous legacy of disgrace will be left to the country. We arrow there left to the country. We are not even safe, as the Carter case has shown, in the hands of the Army engineers. Still, in their hands, honesty of work and honesty in expenditure are reasonably certain. If the canal, however, is built by the favorites of the politicians, that is, built by ordinary contractors, the country will not soon get over blushing at the corruption that will attend the work and that will be eventually exposed.

Quotations of Mining Stocks. SPOKANE, Dec. 30,-The closing quotations

of mining stocks today were:

| Bid. Ask. | Bid. Ask. |
| Amer. Boy 4% 5% Prin. Maud 2% 3
| Blacktall ... 10% 11% Quilp ... 23% 2%
| Crystal ... 7 | Bamb. Car ... 64 00%
| Deer Trail 2% 2% Republic ... 3% 40%
| Gold Ledge ... 1% 1% Reservation ... 3 3%
| L. P. Surp ... 5% Sallivan ... 80% 9%
| Mtn. Lion ... 24 28 | Tem Thumb. 17 IS
| Morn. Glory ... 1% 2% Trade Pollar. ... 4½
| Morrison ... 3 6 | L. Dreyfus ... 4½ f mining stocks today were:

SAN FRANCISCO, Dec. 30.-Official closing

quotations of mining stocks: Alta 30 04 Mexican

NEW YORK, Dec. 30 .- Mining stocks today Adams Con\$0 20 Little Chief \$0.10

Steece Ib Phoenix
Stunswick Con Ib Phoenix
Comstock Tunnel 6 Potosi
Con Cal & Va I 65 Savage
Deadwood Term. 50 Sterra Nevada Horn Silver 1 in Small Hopes
Iron Silver 60 Standard

60 Standard BOSTON, Dec. 20.-Closing quotations

Adventure \$ 19 75 Deceola \$ 50 50 Allousez 34 60 Parrott 50 0s Amalgamated 68 37 Quincy 140 99 Baltie 35 50 Santa Fe Cop 3 56 Bingham 23 75 Tamarack 255 00 Col & Hallouse 25 50 00 Col & Hallouse 25 Ali & Hecia. 590 00 Trimountain contennal 12 50 Trinity Sopper Range 52 50 United States commission Coal 40 25 Utah Franklin 15 09 Victoria ste Boyale 20 50 Winona fohawk 30 87 Wolverines

Mail Will Go From Seattle. SEATTLE, Dec. 30.-In compliance with an order received today from the Post-office Department at Washington, D. C., mail of all classes addressed to the Atlin and Yukon districts will bereafter be made up and forwarded from the postoffice. A previous order forbade the

MEN Largest Practice on the Pacific Coast

Many Men Treated for a Weakness Which Never Existed.

Which Never Existed.

In the largest proportion of cases of lost vitality, the prematureness and the train of symptoms known as "weakness" certain morbid conditions of the urethra and prosent gland damaged by early dissipation, too often repeated and too long-continued excitement, so react on the organs that a condition of diminished vitality and function is induced. Our knowledge of the morbid changes in the organs themselves is quite clear and full, but how these changes operate on the nerves and spinal cord center are mysteries to the medical profession. Whatever the morbid-change may be, however, the effects are apparent to the embarrassed sufferer; these treables being symptomatic of the above-mentioned well-defined morbid conditions, it seems that even the unprofessional patient must understand that stomach drugging will not cure, but efforts directed toward repairing the damaged tract will restore. In practice such is the case, as the treatment on these lines never fails to accomplish the desired result. Colored chart of the organs sent on application.

PORTLAND OFFICE: 250% Alder Street, Cor. Third.

very favorable to the Panama route. But been made at the Scattle office, only the French company hesitated, and its first-class mail having been forwarded president over here did not dare to make since the close of navigation on the Yukon.

Petition for Clemency.

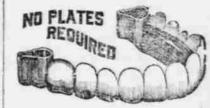
SEATTLE, Dec. 29.-A petition will be resented tomorrow to Governor Mo-Bride praying for executive elemency in the case of murderer William Scaton, under sentence to be hanged next Fri-Insanity is the cause assigned in the petition.

No More Dread or the Dental Chair

TEE? . EXTRACTED AND FILLED ABSOLUTELY WITHOUT PAIN by our late scientific method applied to die gums. No sleep-producing agents or cocaine.

These are the only dental parlors in Portland having PATENTED APPLI-ANCES and ingredients to extract, fill and apply gold crowns and porcelain crowns undetectable from natural teefs, and warranted for 10 years, WITHOUT THE LEAST PAIN. All work done by GRADUATED DENTISTS of from 12 to 20 years' experience, and each depart-ment in charge of a specialist. Give us a call, and you will find us to do exactly as we advertise. We will tell you in advance exactly what your work will cost by a FREE EXAMINATION.

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BRANCH OFFICE:





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Shoes built to wear well in rough and wet weather, are what you need this time of year. The storm shoe we sell at \$3.50 is a foot protector in the worst kind of weather. It keeps out rain or snow and saves your health,

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AN ELEGANT TOILET LUXURY.

Used by people of refinement saying, that, if the French company had san Francisco Office, 997 Market St. for over a quarter of a century.