EXPLORER MACKENZIE.

The Hundredth Anniversary of His Overland Journey.

A Thing to be Remembered and Commem. zie and Other Adventurous Explorers -It is Suggested That Historical Paint-

Reward. One hundred years ago, (July 22, 1793), that tireless traveller and intrepid explorer, Alexander Mackenzie (afterwards Sir Alexander), completed the first overland journey north of the Gulf of Mexico, made by any European, to the Pacific ocean. Hearne, acting for the Hudson's Bay Company, had in 1771, traced the Coppermine river to its mouth on the Arctic ocean. Then the North-West Fur Company (1783) came into existence, Montreal being its business centre. That historic district had contributed scores of chivalrous explorers before; but none more devoted, more patriotic, more indefatigable, than Alexander Mackenzie. In the preface to his "Journal of a Voyage Through the North-West Continent of America" (published in 1801) Mackenzie life, by commercial views, to the country fort, on its return voyage. "As we round- came the railway explorations, the visit of north-west of Lake Superior, in North America, and being endowed by nature with an inquisitive mind and enterprising spirit, possessing also a constitution and frame of body equal to the most arduous undertakings, and being familiar with toilsome exertions in the prosecution of mercantile pursuits, I not only contemplated the practicability of penetrating across the continent of America, but was confident in the qualifications, as I was animated by the desire to undertake the perilous enterprise."

On the 9th of May, 1793, Mackenzie, having left Montreal and arrived at Fort Chipewyan the preceding October, proceeded on his Western expedition, following the Peace river, and reaching one of its branches, the Findlay; ultimately embarking on the Tatouche (now Fraser) river, believing it to be the main body, or a branch of the great Columbia. Advised by various Indian tribes that

THE RUSHING WATERS,

cataracts, and gorges were not only perilous, but rendered navigation an impossibility, he eventually retraced a portion of his route, and sixteen days afterwards, reached what he termed "the cheek of Vancouver's Cascade canal"-north-west from Bentinck The journey from Fort Chipewyan to the Cascade canal or Cascade Inlet, as it appears on recent charts, was accomplished | picture of brave men struggling to assert in about eleven weeks, phenomenal progress considering the terrible hardships endured, and the almost insurmountable difficulties overcome. The chronicler says :-We had no sooner landed than we took

possession of a rock, where there was not which admitted of our defending ourselves | widely-gaping crevasses; through swollen with advantage, in case we should be attackto Indian visitors) were the most trouble- had never before pulsated; beneath crashsome, but after doing their utmost to irritate us, they went away. They were, however, no sooner gone than a hat, a handkerchief and several other articles were missing." Then a second boat arrived "with seven stout, well looking men." Their Eng- entitles them to the love, the respect, lish vocabulary was limited to the monosyll- the admiration of the present generaable "no," chiefly employed in refusing to tion. Truly, there were giants in the dispose of otter and goat skins at anything | earth in those days; a marvellous race of like a reasonable price. The Indians of men; faithful unto death, to that which that day took what did not belong to them, duty dictates; a galaxy of memorable also demanded exorbitant prices for their characters, a group of Titans who feared wares. Can it be possible that eventually | naught save failure. Not alone Alexander they bequeathed to the whites some modi- Mackenzie; long ere his time, by land, cum of their rapacity? Be that as it may, and sea, and river, hardy pioneers had "Mackenzie did not tamely submit to the de- found a labour of love in the wilds of pletion of what, at best, was a primeval, Lakes Huron, Ontario, and Superior. The certainly a limited, wardrobe, and despite French pioneers under Champlain had asthe fact that the recent arrivals made ad- | cended the Ottawa ; Fathers Raymbault vance towards something approaching the and Joques had (1640) penetrated the north affectionate, he kept them at arm's length. shore of Lake Superior and reached Sault They, however, volunteered the information | Ste. Marie; Albanel had (1671) accomplished that "Macubah" (Vancouver) had been an overland expedition from Quebec to there, "and left his ship behind a point of Hudson Bay, and Noyon visited the Lake land in the channel, south-west of them." of the Woods; LaVen lrye (1731-39) had Mackenzie grimly chronicles, "The natives | reached the Saskatchewan, and his son, having left us. . . I directed the peo- | Chevalier LaVendrye, had penetrated withple to keep watch by two, in turn, and laid in the Rocky Mountain zone; LaSalle had myself down in my cloak." The morning pierced the interior of America to die by of the 22ad of July, 1793, was bright and beautiful; then and there, the man who had a few years before given his name to what is now an historic Northern river, stamped the sign-manual of British prowess on the shores of the great Pacific ocean. He thus records the event : -

"I now mixed up some vermillion in melted grease, and inscribed in large characters, on the south east face of the rock on which we had slept last night, this brief memorial:-"Alexander Mackenzie, from Canada, by land, the twenty-second of July, one thousand seven hundred and ninetythree."

In no degree enamoured of the peculiar denizens of this region, Sir Alexander, with caution not altogether foreign to the Scottish nature, decided that proximity to this particular Indian settlement would neither be conducive to health nor yet beneficial, from an economic standpoint; he accordingly directed the boats to proceed northeast three miles, landing at a point presenting a safe scientific frontier, should

ANY MARAUDING EXPEDITION

take place during the night. The natives, read Senator Masson's quotations from Fratimes happens, an infant child is abandoned however, appeared quite willing to steal, ser's "Journal" in "Le Bourgeois de la in the bush, there is nothing absurd in the but not so anxious to die, hence no attack | Compagnie de Nord-Ouest," the appalling | idea that it might be adopted by a female took place, the adventurers proceeding on dangers are immediately realized; narrow wild animal that had lost her young. their return trip. The next day they canyons, steep precipices, contracting the reached what is known as "Mackenzie's roaring waters, "turbulent, noisy, andawful Outlet" on the Salmon river. A guide who to behold," within a span of thirty feet, deserted evidently aimed at leading the ex- rapids, cascades, intercepting rocks-then plorer into an ambuscade, within a mile of portaging heavy loads, packs, canoes, crosswhat, by a stretch of imagination, might be | ing ravines, passing along the declivity of termed a village. Suddenly he was surpris- mountains, all combined to strike terror ed by two men running towards him into the hearts of the bravest. "Spuzzum" "with daggers in their hands and fury was reached, where now (1893) stands the in their aspect." He naively adds: Canadian Pacific railway station a few miles "from their hostile appearance, I could not east of Yale. doubt of their purpose." Certainly, this was a reasonable preposition, and quite in gazed at the scene, that there were those keeping with an intelligent diagnosis of the living who would witness the opening of a situation. Mackenzie presented his gun. great transcontinental railway through this Then followed what proved to be mere weird and apparently impassable country : pantomime, but might readily have been | that against the face of the rocks, 150 feet solemn tragedy; the Indians dropped their above the boisterous river, rails would be daggers, the white man let his gun laid and trestles brought into requisition, fall into his left hand, drawing his and the roar of the locomotive heard amid hanger, and the opposing forces approach- the crags and gorges and peaks of these ing one another. "One of them," says terribly impressive wilds, Poor Fraser; Mackenzie, "contrived to get behind me he did his work well, and starved for and grasped me in his arms. I soon dis- it. he had of plunging his dagger into ne, I | 1 ct be forgotton, for these men, Mackenzie does, and I hate her."

irate Scotchman was by this time bubbling orated-Details of the Exploit-Macken- and steaming in his veins; so he tells us, pieces afresh for an active use of them, if | to say, ings Should Tell the Story to Future | the occasion should require it." He then signs for someone to come down." Eventually, a Plenipotentiary Extraordinary, circulated a story to the effect others, each contributed something to the that the travellers, shortly before, murdered four of the tribe whom they met on the bay, Mackenzie deni-

labors, for they were crowned with success!" | VanHorne (1884), Sir Charles Tupper (1885), ingly insurmountable, the story too of an Rockies," perhaps without a thought of dation of her navy. More important were to the church services. a great man's victory over obstacles seem- millions of passengers have "crossed the event fraught with tremendous consequenc-

THE BRITISH EMPIRE

for the Dominion of Canada claims sover-

eignty over the greater portion of the American Continent, two oceans are connected by iron bands, and Great Britain controls the shortest and safest route to her possessions in the East. One intrepid spirit, inspiring these whom he directed, accomplished marvellous work, and to-day is the centenary of his masterful combat with and splendid victory over the combined forces of nature and the savage elements owning her sovereignty. To chronicle this historic journey with all its graphic incidents; to paint the man's supremacy; to describe hairbreadth escapes from flood, and hand-to-hand encounters with suspicious savages, is not the design of his brief record; suffice to show that perils were successfully encountered, obstacles surmounted, difficulties overcome. space for more than twice our number, and Across snow-packed, tree-strewn gorges; streams and cataracts, roaring above rocky The people in the first canoes (referring | beds ; through canyons where human life ing boulders and along ledges seemingly suspended in midair; forcing a pathway through trackless mazes of dense forests, these crusaders accomplished for the greater protion of the American continent that which THE HANDS OF ASSASSINS.

and the pious Friar Ribourde (1680), breviary in hand, had fallen beneath the war clubs of savages, for whose salvation he had surrendered courtly honours and preferlove and respect of future generations.

ened in the mind of Alexander Mackenize,

Little did Simon Fraser dream as he

engaged myself from him, and why he did | Then, too, David Thompson, after whom | me ! Tell me do you love me ?" not avail himself of the opportunity which another great river is named; he should | Clara: "No, I don't; but Agnes Murray

cannot conjecture. They certainly might | Fraser, and Thompson, are one in historical have overpowered me, and though I should importance. Thompson, in 1800, made an probably have killed one or two of them, I unsuccessful attempt to reach the coast, by must have fallen at last." At this juncture | way of a pass supposed to that since utilizreinforcements arrived from the exploring | ed by the Canadian Pacific railway. He boats, and a "stampede" on the part of was, however, not equal to the task of the redskins followed. The blood of the fighting hordes of Indians, so returned. In 1807, however, he went in the southerly direction, entered Howe's pass, and reached "I therefore told my men to prim their the Columbia and Kootenay lake. Needless

THE SUFFERINGS OF THOMPSON Years-The Explorers Received Scant advanced towards the village and "made and his men are described as terrible. A long line of explorers followed, Gabrielle Franchere, Ross Cox, Alexander Henry, D. W. Harman, John McLeod, Sir George ances which cost them very little loss or explaining that some evil genius had Simpson, Alexander Ross, and hosts of exertion. They used their torpedo boats to stock of information already furnished.

A son of John McLeod, Malcolm, at present resides in Ottawa; his father rendered ed this, produced proof-more of the musket | great service to the country, being an inorder than simple verbal testimony-and trepid explorer and a very able man. Mr. seeing his advantage, threatened to renew | Malcolm McLeod was an earnest advocate hostilities unless his linen and other pilfer- of the construction of the Canadian Pacific ed articles were restored, together with a railway, writing under the nom de plume reasonable amount of dried fish. Recon- of 'Brittanicus.' He is universally reciliation followed, the purloined articles | spected, but being reduced in circumstances, were returned, some purchases of salmon, is consequently without friends. Talk about and canoe poles made, and the adventurer "Republics" being ungrateful! Savage mildly intimates that he named the place or civilized, monarchical or despotic, govern-"Rascal's Village." On Saturday, the 24th ments, like individuals, too frequently of August, the expedition reached the forget to reward according to merit. Then ed the point," writes Mackenzie, and Sir Hector Langevin, the expedition of Mr. came in view of Fort Chipewyan, we threw Sandford Fleming (appointed chief engineer | son between her fleet and the splendid one out our flag, accompanied with a general dis- of the railway, 1872,) the expedition of of France; but charge of our firearms, while the men were | Adjutant-General Ross, the tour made by in such spirits, and made such active use of General Sir W. F. Butler, the perilous trip their paddles that we arrived before the made by Jarvis and Hannington, engineers, 2 men, whom we left here in the spring in 1874, and the various journeyings of could recover their senses to answer us. Lord Dufferin (1876-'77), the Marquis of Thus we landed at four in the afternoon, at Lorne and the Princess Louise (1881-1882), the place which we left on the 9th of May. | the expedition of Mr. Marcus Smith in con-. . . I received the reward of my nection with surveys (1877), Mr. W. C. This then, in brief, is the plain story of and Lord Lansdowne (1885). Since then Alexander Mackenzie; perhaps without having heard of Simon Fraser, or dreamed that such a splendid character as David Thompson ever existed. It matters little to the dead; but what a commentary upon the living! Mackenzie made Montreal famous; his very name reflected

INCRY ASED SPLENDOR upon her commerce, her industries, her business energy; it did more, for the Dominion of Canada profited by his indifatigable labour, and to-day points proudly to a great national work, which, without the Mackenzies, the Thompsons, and the Frasers, would be but an empty dream. Mackenzie was honoured with a knighthood; Fraser was offered one, but declined it because he was starving to death; honours were cheap, bread dear. Thompson, too, was allowed to go to his grave a pauper, and to-day no monument, no historic paint ing, nor national testimonial commemorates the chivalrous devotion of three great explorers to a country which has become one of the richest and most promising portions

of British North America. A chronicler sadly says: "Simon Fraser died at St. Andrews, above Montreal, at the age of 89, and leaving no provision for his family." And of David Thompson, "He lived to be 87, dying at Longueuil, opposite Montreal, on February 16th, 1857, it is sad to write, in extreme poverty," Simon Fraser left relatives, and a small, very small posion is now allowed some of them. Some months ago Mr. Sandford Fleming. C. M. G., whose admirable addresses have been listened to, and whose writings perused with pleasure by all interested in historic subjects appertaining to Canada, made a powerful appeal at the Canadian Institute, in Toronto, advocating "Canadian Historical Pictures," the learned gentleman especially referring to Sir Alexander Mackenzie's explorations, via Peace River to the Pacific coast. Apparently the appeal has been in vain. The last spike in the Pacific railway was driven in 1885; fortunes have been made and immense contributions given by scores of wealthy men towards various public institutions; but no sound of that which would make Canadians proud of their country, and anxious to emulate the deeds of early pioneers; no whisner that an historical institute is to be established and endowed; no announcement that public assistance will be given, and scenes transferred to canvas for preservation during generations to come.

A Girl in a Bear's Den.

A highly respectable Indian gentleman, a member of the Bombay Anthropological ments. It was ordained, however, that | Society-Mr. Sarat Chandra Mitra-has come Alexander Mackenize should become famous forward with an apparently well authentiin Western annals, rendering services to cated story of a girl who has been discovercivilization far in advance of any other in- ed in Jalpaiguri in the den of a bear. The dividual explorer. He brought a new world young person's habits were decidedly bearinto existence, opened a new field, inspired ish, for she tried to bite and scratch those a school of hardy enthusiasts, and, ere he who came near her, went down "on all passed to his long home, realized in a spirit fours" for locomotion, and "growled at of humility, yet with justifiable pride, that meals." The orphanage of the new Dispenhe had accomplished something worthy, sation Church in Calcutta could make nothsomething beneficial, something ennobling, ing of the ferocious foundling, who has something which would entitle him to the consequently been removed to Bas Aram, a refuge founded and supported by Brahmo One can well imagine the interest awak- gentlemen in that city. Nor is this all. A Bhagal Zemindar has captured in the jungle as Simon Fraser, fifteen years afterwards a wild boy, whose only approach to speech (1808), arrive lat Fort George, and was ad- is the utterance of chattering sounds like vised by the Indians to turn back or perish | those of a monkey. Col. Sleeman and the -the very point where Mackenize decided | Rev. Mr. Lewis, of the Secundra Church to retrace his steps, and thus reach the Mission, have vouched for similar stories. coast by another and shorter route. To Mr. Mitra is of opinion that when, as some-

Playing the Fool.

Some years ago there lived in a village near Glasgow an old man named Ritchie who, in spite of a deficiency in intellect was remarkable for making very apt and witty remarks.

On one occasion, he was just entering the gates of the drive leading up to the house of the squire of the village, who was giving a dinner party the same evening, when he was overtaken by one of the guests.

The gentleman immediately greeted the old man with the words: "Well, Ritchie, I suppose you are going up to the house to play the fool to-night?

"Nay, Mr. George," said Ritchie. "I was a-going; but now I may as well turn back, for I reckon master won't want two of us."

Why She Took Him.

Charlie (in raptures) "So you will marry

THE NAVY OF CHINA

The Ships She Could Furnish in Case of Complications with France.

The possibility that China may side with Siam in the latter country's dispute with France, has lent much interest to the question of her present naval capabilities. Nine years ago she was beaten by France with great ease, and one of her most important squadrons was completely used up by Admiral Courbet in the engagement of Min River. The French did not need to put out their full strength, but truimphed by appliwar ships, mowed down their crews with Hotchkiss revolving cannon, and captured many of the batteries along the river, destroying the cannon with gun cotton. Some forts they left intact, simply because they would not expose their own men to a heavy musketry fire. There and at Sheipoo the French caused a terrible slaughter with the most businesslike and economical use of their own forces; and the utter inferiority lighting of the building. of her own navy was most disheartening to the Middle Kingdom.

But during the last nine or ten years is a China has made a decided advance in her navy. She had, indeed, already begun to establish a strong naval force before the war of 1884. Of course there is no compari-

FOR DEFENSIVE PURPOSES,

at a long distance from the base of the latter country, and with the aid afforded by shalenormous addition to the weakness of Siam.

war vessels to China. Among the earliest by Jerry McCauley in New York, and other were a number of gunboats of 1,350 tons displacement, which were almost the fountected cruisers, the Chih-Yuan and Ching a very central locality. It is only Yuan, of 2,300 tons, which had a speed, very high for their day, of 181 knots, pro- but a great number of people are crowded cured by triple expansion engines, and a bunker capacity of 450 tons. The main battery of each consisted of three 81-inch Krupps and two 6-inch, protected by shields, and the secondary battery was of eight 6pounder rapid-fire Hotchkiss rifles and six Gatlings. They had each four torpedo tubes, their conning towers had three inches of armor, and they were electrically equipped. Other vessels built at Elswick, still later, are the Yang Woi and Tchao Yong, of 1,350 tons, 2,400 horse power speed of 16.2 knots, and 16.8 knots, and batteries of Armstrong

Stettin has also provided many modern steel war vessels for China. The Vulcan Building Company furnished two cruisers of about fifteen knots, carrying two 8-inch and eight 41-inch Armstrong guns. Much more famous were

THE ARMORCLADS

Ting Yuen and Chen Yuen, built at the Stettin Works. They were of 7,400 tons displacement, and had a speed of fifteen knots. Besides steel protective decks, they had water-line belts of 141 inches of compound armor and the main battery of each included four 12-inch Krupp guns, protected by an armoured breastwork, and two smaller Krupps, while each also carried eleven Hotchkiss cannon and tubes for tor-

other order to the Stettin Works for two ies. large coast-defence vessels.

sources of her own. Her yard at Foochow is indeed a most noticeable proof of the advance of the empire in modern naval science. It is situated on the Min River, and was originally established by a French officer in

THE SERVICE OF CHINA.

rapid-fire gans, with 12 lighter pieces, and 161 knots on trial.

Perhaps the similarity of names may have led to some duplication in this record of vessels, but at all events at a recent date China had six armoured vessels and twentysix unarmoured, built or building, of a distinctively modern character, without reckoning miscellaneous craft. She has suffered a great loss in the withdrawal of Admiral Lang, a Captain in the British navy, who had organized and drilled the Chinese navy, and greatly improved it. But, as it is, she could furnish much help to Siam in her fleet, apart from the question of land forces. Her factory also builds steel breech-loading rifles from ingots furnished and roughturned in England.

Love and Smoke.

She didn't like smoking—so I quit At her request for a little while-But, oh ! I minded it not a bit-I found my reward in her sweet smile

I've taken it up again once more, I saw no reason for stopping when She laughed at the tender love I swore And kept on flirting with other men.

THE WONDERFUL WEST.

Mormons Like "the Army" and Chinamen are Indispensable.

Bright and Dark Sides of Life in the Great

Western Cities. There is always something new and wonderful in the great West. The latest is that the Mormons in Utah have become addict-

ed to the Salvation Army! A Montreal gentleman, who has just returned from a trip to the Pacific coast made this discovery.

"The Latter Day Saints of Salt Lake City," he observed, " have always been at drawn swords with their Gentile neighbors, so it was a great surprise to me to hear that they had given to Staff-Capt. Blanche Cox, so well known in Montreal, the free use of their vast tabernacle, capable of seating 8,500 people comfortably, for a series of Salvation meetings. These meetings were most success'ul. The Mormons even went further for they paid quite a large sum for the

"A stranger staying in the hotel section of any great western city realizes that there

DARK SIDE OF LIFE

of which the ordinary church-goer, residing uptown, knows very little. The forces of evil, drink, gambling, immorality, vite dance halls, and other forms of vice are painfully prominent and as one looks at the crowds that throng the streets, he feels that in merely preaching to the church-going classes that are already interested in Chrislow or easily obstructed rivers, it is worth | tianity, the churches have hitherto been only considering. At all events, it would be an playing at religion. They are waking up to their responsibilities, however, for mis-British dockyards have furnished many sion halls, after the style of that founded such movements are spreading rapidly with the aim of reaching those who will not go

"Chinatown, in San Francisco, occupies

A FEW BLOCKS EACH WAY,

together in that small space. In spite of the outcry against the Celestials, it is difficult to see how they could do without them in British Columbia. They take the place of the house servants, which can hardly be had there at any price. Great care must be taken to train them rightly when they begin, for as they first learn they continue ever after, it is said. The story is told of a lady who taught a Chinamen how to make a cake. When breaking the eggs, the third one was found to be bad so she threw it away. The Chinamen learnt the lesson so well that ever afterwards he insisted on throwing away the third egg, in spite of all remonstrances! They do nearly all the ditching of British Columbia, and also

WORK AS FARM LABORERS.

Near Vancouver it is quite common for them to take a small piece of land, say five acres, and transform it from its natural state into a first-class market garden. The present immigration tax of \$50 per head meets with pretty general approval, for it does not prohibit their entrance, while it prevents the country from being overflowed by them, and at the same time yields the Government & handsome revenue.

THE SALMON CANNERIES

on the Fraser River are preparing for a great catch this year. The great 'Sockeye' run Another pair of armored vessels built by is not expected till August, and in the meanthe Vulcan Works were the King Yuan | time gangs of Chinamen are working hard and the Lai Yuan. Like those just men- preparing the tins. One of the canneries tioned, they are double-bottomed steel alone is able to handle over 30,000 fish each vessels, carrying compound armor, having day. There are bitter feuds on the river a maximum thickness of 91 inches. They | between the 'whites', the Italians, the Japs, carry two 81-inch Krupps, mounted en bar- | the Chinese, and the Indians, and there is bette in the bows, surrounded by an arm- some fear that there may be bloodshed ored breastwork, besides 6-inch Krupps, before the season is over. Nearly all the together with good secondary batteries and actual canning is done by Chinese, while the torpedo tubes. The Tsi Yuen, built at others man the boats. The Indians west of Stettin, is a 15-knot, 3,200-ton cruiser, the Rockies are fortunately an industrious, carrying two 81-inch and three 6-inch | self-supporting race, allied to the Toltecs Krupp guns, with Hotchkiss revolving and Aztecs of Mexico, and entirely differcannon and whitehead torpedoes. Still an- ent from those in the North-West Territor-

Moreover, China has also shipbuilding re- \ Whence do Snails Obtain Their Shells ?

According to Professor Huxley, the shell of the snail is built up of successive excretions of membraneus laminæ, in which granules of carbonate of lime are deposited, these granules gradually increasing in size by the addition of fresh calcareous matter, which the snail derives mainly from the Docks, machine shops, and rolling mills | plants on which it feeds. Snails are never have been added, and it is a busy scene of found on soils which produce no lime. The construction. At this point was built the | shell-forming organ of the snail is technicalarmored coast-defence vessel Ping Yuen of | ly called the mantle, being the delicate memabout 2,600 tons and 2,400 horse power. branous portion of its body beneath the She is only about as fast as our Mianton- | shell. Where the mantle is united to the omoh, but has a water-line belt of eight in- tough skin of the foot, it becomes greatly ches and a two-inch protective deck. She | swollen and forms a sort of collar, the edge has a 101 inch Krupp gun at the bows, in a of which may be seen curling round the 5-inch breastwork, two 6-inch guns amid- reflected " lip " of the shell when the snail ships, eight small rapid-fire guns, and four is crawling along. The extension of the torpedo tubes. Later ships there construct- | shell as its tenant grows is entirely effected ed are the Kong Hi and Kong Bui, two by this swollen margin of the mantle, which torpedo gun boats of about 1,000 tons. The carries the pigment cells, or glands, that Kuang Keng, Kuang Yi, Kuang Ping, and secrete the coloring matter forming bands Kuang Ting, completed at the Foochow Ar- or patterns on the shell. The rest of the senal, have each a length of 236 feet, a mantle is devoid of pigment glands, and beam of 271, a mean draught of 12, and a merely deposits layers of shelly matter on displacement of 1,030 tons. They have a the interior, thickening and strengthening 1-inch complete steel deck, a 2-inch conning | the habitation. In the same way injuries tower, carry three 4.72-inch Armstrong to the shell are repaired. If only the mouth of the shell be broken, the fractured have horizontal compound engines of 2,400 | portion is restored with all its proper colindicated borse power. One of them made ours and markings by the collar of the mantle; but if a portion of the spiral be destroyed, the breach is closed by opaque colorless matter deposited by the other parts of the mantle. It is a singular fact that even the baby snail begins its work of building before it is hatched. Even when in the egg the little creatures are found to have formed a thin shell.

Whence and Hence.

Whence come these vague suggestions of & thought, Seeming like memory though never caught? They flash across the soul and then away. Almost recalling what we cannot say.

A half-remembered something of the past, That soon behind forgetfulness is cast. The retrospective ray has hardly shown This spectre of the past ere it is gone.

These memories are not of this our sphere, They come from other realms, we know no Perhaps some star was our prenatal home, From whence on leaving it we hither come.

May be our spirits, through their ether flig at, Are flashed from world to world like rays of And by the laws of evolution, borne Onward and upward through the vet an