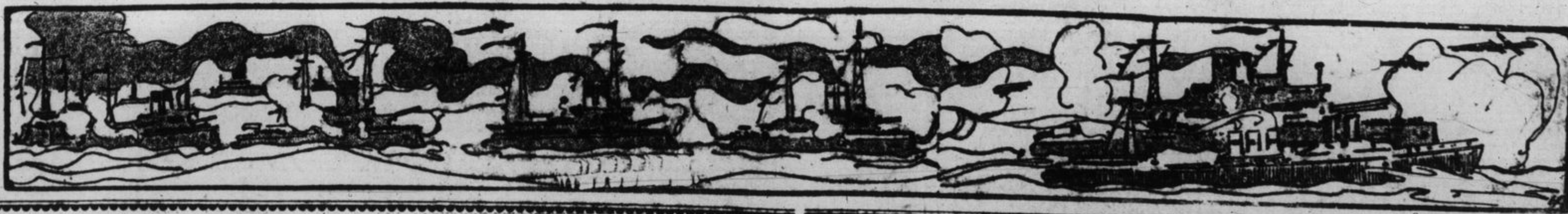


THE VICTORY AT SEA

By ADMIRAL WILLIAM SOWDEN SIMS



Why We Began the Work

During the two years preceding the war, Captain Reginald R. Belknap commanded the mine-laying squadron of the Atlantic Fleet; although his force was small, consisting principally of two antiquated warships, the Baltimore and the San Francisco, Captain Belknap performed his duties conscientiously and ably, and his little squadron therefore gave us an excellent foundation on which to build. Before the World War, the business of mine-laying had been unpopular in the American Navy as well as in the British; such an occupation, as Sir Eric Geddes once said, had been regarded as something like that of "rat catching"; as hostilities went on, however, and the mine developed great value as an anti-submarine weapon, this branch of the service began to receive more respectful attention. Captain Belknap's work, however, merely provided the nucleus out of which the great American mine force was developed. The "active front" of our mine-laying squadron was found in the North Sea; but the initial headquarters lay in a dozen shipyards and several hundred manufacturing plants in the United States.

We began this work with practically nothing; we had to obtain ships and transform them into mine-layers, to enlist and to train their crews; to manufacture at least 100,000 mines to create bases both in the United States and Scotland; to transport all of our supplies more than 3,000 miles of wintry sea, part of the course lying in the submarine zone; and we had to do all this before the real business of planting could begin. The mere fact that the Navy made contracts for 100,000 of these new mines, before it had had the opportunity of thoroughly testing the design, under service conditions shows the great faith of the Navy Department in this new invention. More than 500 contractors and sub-contractors, located in places as far west as the Mississippi River, undertook the work of filling this great order. Wire rope mills, steel factories, foundries, machine shops, electrical works, and even candy makers engaged in this great operation; all had their troubles with labor unions, with the railroads, and with the weather—the latter was the terrible winter of 1917-18; but, in a few months, train loads of mine cases—great globes of steel and other essential parts, began to arrive at Norfolk, Virginia. This port was the place where the mine parts were loaded on ships and sent abroad. The plant which was ultimately constructed at this point was able to handle 1,000 mines a day; the industry was not a popular one in the neighborhood, particularly after the Halifax explosion had proved the destructive powers of the materials in which it dealt. Yet in a few months this establishment had handled 25,000,000 pounds of TNT. The explosive was melted in steel kettles until it reached about the density of heavy pudding. With the aid of automatic devices it was then poured into the mine cases, 300 pounds to a case, and thence moved on a mechanical conveyor to the end of the pier. Twenty-four cargo vessels, for the most part taken from the Great Lakes, carried these cargoes to the western coast of Scotland. Beginning in February, 1918, two or three of these ships sailed every eight days from Norfolk, armed against submarines and manned by naval crews. The fact that these vessels were slow made them an easy prey for the under-water enemy; one, indeed, was sunk, with the loss of forty-one men; regrettable as was this mishap, it represented the only serious loss of the whole expedition.

The other vital points were Newport, Rhode Island, where the six mine-layers were assembled; and Fort William and Kyle of Loch Alish

on the western coast of Scotland, which were the disembarking points for the ships transporting the explosives. Captain Belknap's men were very proud of their mine-layers and in many details they represented an improvement over anything which had been hitherto employed in such a service. At this point I wish to express my very great appreciation of the loyal and devoted services rendered by Captain Belknap. An organizer of rare ability, this officer deserves well of the nation for the conspicuous part which he played in the development of the North Sea Mine Barrage from start to finish. Originally, these mine-layers had been coast-wise ves-

Navy had selected as bases the parts of Inverness and Invergordon, on Moray Firth, Scotland, harbors which were reasonably near the water in which the mines were to be laid. From Invergordon, the Highland Railway crosses Scotland to Loch Alish, and from Inverness the Caledonian Canal runs to Fort William. These two transportation lines—the Highland Railway and the Caledonian Canal—served as connecting links in our communications. If we wish a complete picture of our operation, we must call in all parts of the country working day and night making the numerous parts of these instruments of des-

Captain Belnap, describing his first morning at his new Scottish base. "I arose and looked out. What a glorious sight! Green slopes in all freshness, radiant with bloom and yellow gorse, the rocky shore mirrored in the Firth, which stretched, smooth and cool, wide away to the east and south, and in the distance snow-capped Ben Wyvis. Lying off the entrance to Munloch Bay, we had a view along the sloping shores into the interior of Black Isle, of noted fertility. Farther out were Avoch, a white-washed fishing village, and the ancient town of Fort-rose, with its ruined Twelfth Century cathedral. Across the Firth lay Culloden House,

learning the American steps. Amateur theatricals, in which both the men from the warships and the Scottish girls took part, cheered many a crew after its return from the mine-fields. Baseball was introduced for the first time into the country of William Wallace and Robert Burns. Great crowds gathered to witness the matches between the several ships; the Scotch quickly learned the fine points and really developed into "fans," while the small boys of Inverness and Invergordon were soon playing the game with as much enthusiasm and cleverness as our own youngsters at home. In general, the behavior of our men was excellent and made the most favorable impression. These two mine assembly bases at Inverness and Invergordon will ever remain a monumental tribute to the loyal and energetic devotion to duty of Captain Orin G. Murfin, U. S. Navy, who designed, and built them,

hand; these Americans had come this long distance to do their part in laying the mighty barrage which was to add one more serious obstacle to the illegal German submarine campaign. Though the operation was a joint one of the American and British navies, our part was much the larger. The proposal was to construct this explosive impediment from the Orkney Islands to the coast of Norway in the vicinity of Udsire Light, a distance of about 230 nautical miles. Of this great area about 150 miles, extending from the Orkneys to 3 degrees east longitude, was the American field, and the eastern section, which extended fifty nautical miles to Norway, was taken over by the British. Since an operation of this magnitude required the supervision of an officer of high rank, Rear-Admiral Joseph Strauss, with extended experience in the ordnance field of the Navy, came over in March, 1918, and took command. The

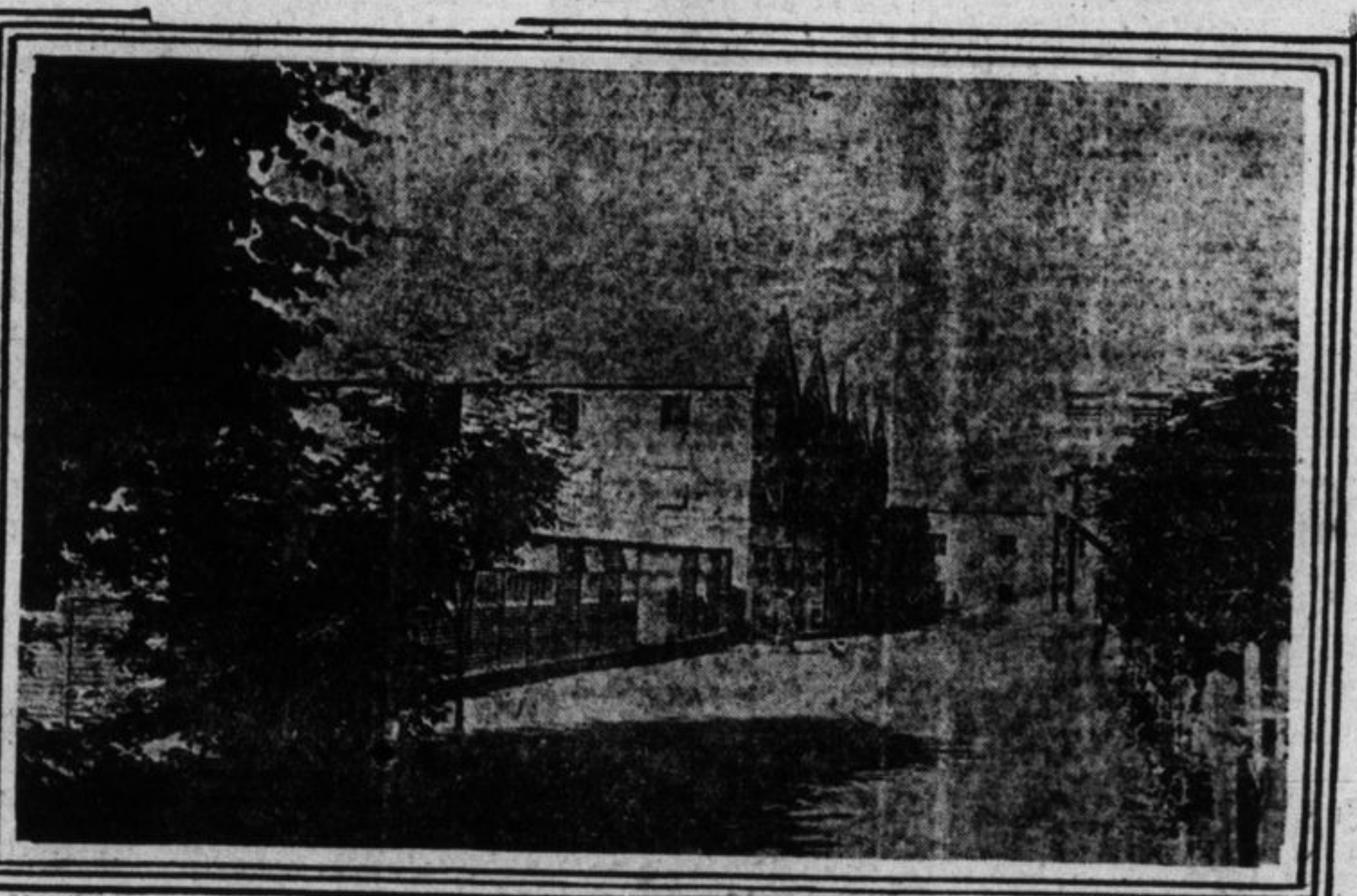
took its regular turn in acting as a "screen" in these excursions—was standing a considerable distance to the south, prepared to make things lively for any German surface vessels which attempted to interfere with the operation.

(To be continued)

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A RAINY DAY AT THE SCOTTISH BASE
There was a time when mine laying was not recognized as a very creditable occupation for a sailor; some one compared this business with "rat-catching." But the war showed that high explosives under the water were a particularly useful anti-submarine device, and these jacksies grew fond of their work and very proud of it.



ONE OF THE BASES IN SCOTLAND.

The old Highland towns of Inverness and Invergordon became the headquarters of several thousand Yankee barrage makers. These are among the most beautiful and romantic places in Scotland. The Highlanders gave our men the most cordial reception and the small boys even learned to play baseball.

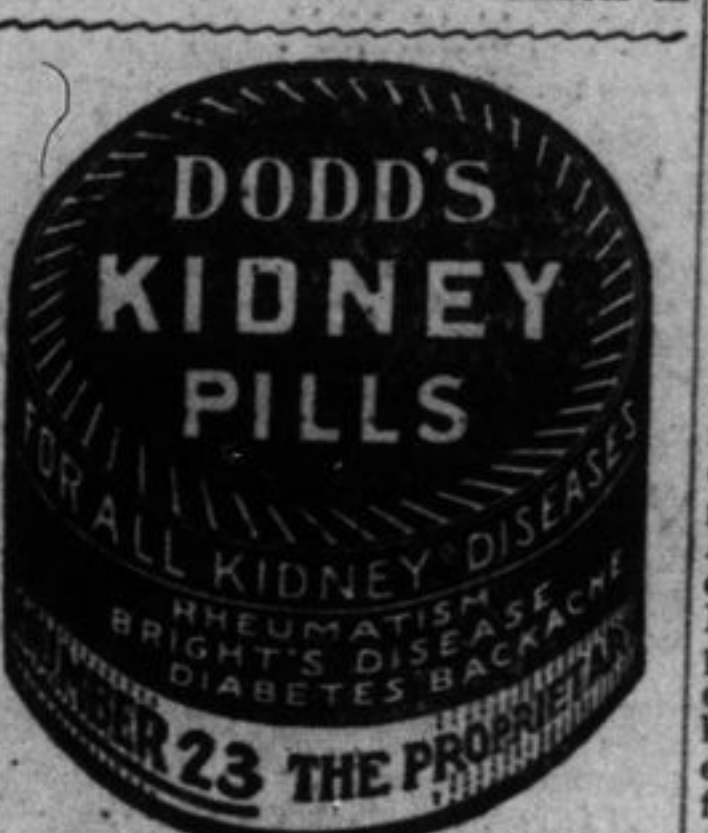
struction and their attendant mechanisms; then thousands of freight cars carrying them to the assembling plant at Norfolk, Virginia; then another small army of workmen at this point mixing their paste explosives, heating it to a boiling point and pouring the concoction into the spherical steel cases; then other groups of men moving the partially prepared mines to the docks, and loading them on the cargo ships; then these ships quietly putting to sea, and, after a voyage of ten days or two weeks, as quietly slipping into the Scottish town of Fort William and Kyle; then trains of freight cars and canal boats taking the cargo across Scotland to Inverness and Invergordon, where the mines were completed and placed in the immense storehouses at the bases and loaded on the mine-layers as the necessity arose. Thus, when the organization was once established on a working basis, we had an unbroken flow of mines from the American factories to the stormy waters of the North Sea.

Famous Towns
The town in which our officers and men found themselves in late May, 1918, are among the most famous in Scottish history and legend. Almost every foot of land is associated with memories of Macbeth, Mary Queen of Scots, Cromwell and the Pretender. The national anthem awoke me, says

where Bonnie Prince Charlie slept before the battle. Substantial, but softened in outline by the morning haze, the Royal Burgh of Inverness covered the banks and heights along the Ness River, gleaming in the bright sunshine. And how peaceful everywhere! The Canandaigua and the Sonoma lay near by, the Canonics farther out, but no movement, no signal, no beat of the engine, no throbbing pumps. The reception which the natives gave our men was as delightful as the natural beauty of the location. For miles around the Scotch turned out to look things pleasant for their Yankee guests. The American naval forces stationed at the mining bases in those two towns numbered about 3,000 officers and men, and the task of providing relaxations, in the heart of the Highlands, far removed from theatres and moving picture houses, had been a community for miles and not been for the cordial co-operation of the people. The spirit manifested during our entire stay was evidenced on the Fourth of July, when all the shops and business places closed in honor of American Independence Day and the whole community for miles around joined our sailors in the celebration. The officers spent such periods of relaxation as were permitted them on the excellent golf links and tennis courts in the adjoining country; for the men dances were provided almost every evening, the Scottish lassies showing great adaptability in

originally the bases were intended to handle 1,200 mines, but in reality Captain Murfin successfully handled as many as 20,000 at one time. It was here also that each secret firing device was assembled and installed, very largely by reserve personnel. As many as 12,000 mines were assembled in one day, which speaks very eloquently for the foresightedness with which Captain Murfin planned his bases.

The Serious Work.
But, of course, baseball and dancing were not the serious business in



British commander was Rear-Admiral Clinton-Baker, R.N.

The mines were laid in a series of thirteen expeditions, or "excursions," as our men somewhat cheerfully called them. The ten mine-layers participated in each "excursion," all together laying about 5,400 mines at every trip. Each trip to the field of action was practically a duplicate of the others; a description of one will, therefore, serve for all. After days, and sometimes after weeks of preparation the squadron, usually on a dark or misty night, showing no lights or signals, would weigh anchor, slip by the rocky palisades of Moray Firth, and stealthily creep out to sea. As the ships passed through the nets and other obstructions and reached open waters, the speed increased, the gunners took their stations at their batteries, and suddenly from a dark horizon came a group of low, rapid moving vessels; these were the British destroyers from the Grand Fleet which had been sent to escort the expedition and protect it from submarines. The absolute silence of the whole proceeding was impressive; not one of the destroyers showed a signal or a light; not one of the mine-layers gave the slightest sign of recognition; all these details had been arranged in advance, and everything now worked with complete precision. The swishing of the water on the sides and the slow churning of the propellers were the only sounds that could possibly betray the ships to their hidden enemies. After the ships had steamed a few more miles, the dawn began to break; and now a still more inspiring sight met our men. A squadron of battleships, with scout cruisers and destroyers, suddenly appeared over the horizon. This glorious armada likewise swept on, apparently paying not the slightest attention to our ships. They steamed steadily southward, and in an hour or so had entirely disappeared. The observer would hardly have guessed that this squadron from Admiral Beatty's fleet at Scapa Flow had anything to do with the American and British mine-layers. Its business, however, was to establish a wall of steel and shotted guns between these forces and the German battle fleet at Kiel. At one time it was believed that the mine forces on the northern barrage would prove a tempting bait to the German dreadnaughts; and that, indeed, it might induce the Germans to risk a second general engagement on the high sea. At any rate, a fleet of converted excursion steamers, laying mines in the North Sea, could hardly be left exposed to the attacks of German raiders; our men had the satisfaction of knowing that while engaged in their engrossing if unenviable task, a fleet of British or American battleships—for Admiral Rodman's forces



Could Not Sleep

Mr. Earnest Clark, Police Officer, 338 King St., Kingston, Ont., writes:

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