

## Construction and Launching

The announcement that a comparatively obscure boat yard, located on the upper Mississippi, remote from the sea, had secured the contract for building an important naval vessel came as a distinct surprise, not only to eastern ship-builders but to many citizens of Iowa. That the Dubuque company meant business, there could be no doubt. Bonds were promptly filed for the "timely and successful completion of the boat", and the contract was signed on October 8, 1891, for a stipulated sum of \$113,500. Under the terms of the contract "she must be able to make not less than twenty-four knots an hour on her trial trip" under the supervision of the Navy Department. It was no secret that the contract price was probably less than the actual cost of construction would be, but since the government had offered a bonus of \$15,000 for each knot the boat was able to make in excess of the minimum requirement, it was hoped, by exceedingly careful construction, to make up this deficit by means of the bonus. Indeed, the contractor confidently expected "that she will make at least twenty-eight knots an hour on her trial trip," thus assuring her builders an ad-

ditional \$60,000. "Should she succeed in doing this, she will be the fastest torpedo-boat in the world."

Orders for material and supplies were placed at once and preparations were speedily made for commencing construction at the earliest possible moment. Plans were made and schedules arranged by Ernest M. Dickey, "the young and capable manager of the works", and by William Hopkins, superintendent of the yards who, having learned his trade on the Clyde, had ample experience in ship-building to qualify him for almost any undertaking. Lieutenant W. A. Windsor, Chief Engineer, and Lloyd Bankson, Assistant Naval Constructor of the United States Navy, were detailed by the Secretary of the Navy as resident inspectors to superintend the construction of the boat for the government. Much credit must be given these men for the superior qualities of the completed vessel, as they gave their work "unceasing care and attention". Every detail of the construction received their most scrupulous inspection.

Many details, in the aggregate requiring considerable time, had to be looked after before a single rivet could be driven into place in the hull of the boat; plans had to be checked; working drawings, patterns, and castings had to be made;

steel, iron, and other materials going into the boat had to be subjected to "rigid chemical and microscopic analysis" and inspected to see that all conformed to government specifications. Many unforeseen delays occurred, and from the very start it seemed as though fate had decreed that no speed record should be made in the construction of the *Ericsson*. Indeed, on the contrary, the construction work proved to be very difficult and slow, due mainly to many unfavorable circumstances rather than to any lack of ability or facilities at the Dubuque plant. At the start there was a long delay in securing the steel plates on account of the memorable strike and lockout at the Homestead steel mills. Finally, however, after everything was in readiness the keel was laid on July 21, 1892, more than nine months after the contract was let.

A local strike, and the "exceeding care in construction and adjustment of bearings found to be involved in meeting the speed requirements of 24 knots", further retarded construction. Another tedious and exacting task was the building and installing of the boilers and engines which, though relatively small, were designed to develop the enormous capacity of two thousand horse-power. "It is doubtful if a finer set of engines was ever built in this country" and no boat of the size of

the *Ericsson* had greater potential power. In order to generate the highest steam pressure with minimum weight and space the "Thornycroft" boiler was employed, royalty being paid the English patentee for the privilege of manufacturing the boilers in Dubuque. The principle upon which these boilers were constructed was not new, but the ratio of heating surface to size was carried to the limit. Each boiler contained over twelve thousand tubes, "both straight and coiled". It was said that they were capable of developing steam pressure upwards of six hundred pounds, which proved troublesome. The *Ericsson's* machinery failed repeatedly "when about to be brought to official speed tests for acceptance." On more than one occasion, after the boat had been placed in commission, serious injury to the crew and some loss of life was sustained due to the rupture of the boiler tubes and pipe-connections.

And so the work progressed throughout the years 1892 and 1893. During the severe winter of 1893-94, very little was done, and at times work ceased altogether. In the following spring, however, the building was prosecuted with renewed vigor, and at last, in April, the end was in sight. By the first of May it was realized that the time of the launching was close at hand. An im-

portant date in the annals of any vessel is the day when she is first baptized by the waves, and, by all tradition, this is particularly true of naval vessels. However, owing to the inability of the builders to fix, far in advance, the date upon which the launching would occur, government officials did not participate in the exercises, which were held at 3:30 o'clock on the afternoon of May 12, 1894.

From the standpoint of naval etiquette there was no celebration, for the rules of the Navy Department required that official launching ceremonies must be under direction of the Secretary and that he must designate who shall do the christening and invite the presence of the officers of the navy who shall participate. In spite of all such obstacles the people of Dubuque were determined that they should not be denied the "thrill that comes but once in a lifetime", and so got in touch, by telegraph, with the Secretary of the Navy, who gladly authorized an impromptu celebration and approved of arrangements made by the local committees. Speeches were delivered by Judge Fred O'Donnell and by M. M. Walker, who was president of the local Board of Trade.

Climaxing the notable event came the actual ceremony of christening the boat. It was, indeed, an inspiring spectacle. In the presence of expectant thousands who stood tense, awaiting the mo-

ment, rejoicing in the glories of a perfect May afternoon, United States Torpedo-boat No. 2 was christened. Miss Carrie Kiene, "the accomplished daughter of Peter Kiene, Jr., of Dubuque", stepped forward. Eloquently she proclaimed,

In spite of rock and tempest roar,  
In spite of false lights on the shore,  
Sail on! Nor fear to breast the sea,  
"Ericsson," I christen thee.

And over the bow of the boat she broke a bottle of American champagne. "At a given signal the cannon on an adjacent bluff pealed out in hoarse and deafening tones that awakened the echoes for miles up and down the glistening path of the Mississippi, Father of Waters; the moorings were loosened; and, like a bird springing from its nest to greet the beauty and gladness of a summer morning, the *Ericsson* started from repose and gracefully glided into the blue depths of the harbor."

The shores of the spacious harbor, the crests of the surrounding bluffs, the housetops in every direction "pulsed and quivered with humanity". It was estimated that more than ten thousand people viewed the baptism of the *Ericsson*, which was "quite as perfect in reality as it was impressive in effect. Over its rounded hull of steel the waters rushed, wrapping it in a gossamer veil of foam

and spray, which for a moment danced and shimmered in the sunlight, and then fell like a shower of glistening jewels upon the new-born queen of the American navy."

Following this delightful event, came the more prosaic task of completing the vessel. Much actual work yet remained to be done before she would be in condition to start on her journey to New York, where she was to receive her equipment and be placed in commission. June 10th was the date set when she was to get under way to the Gulf of Mexico, but it was actually fifteen days later before the boat was ready to leave Dubuque. It was impossible at this stage of her construction, without crew and with incompleted machinery, to make the early part of the journey under her own power. She was therefore taken in tow by the *Dolphin*, and, in order to facilitate her completion, a barge was attached upon which an improvised machine shop was set up, about twenty-five men being employed on the craft each day. It was thought that by the time Saint Louis was reached, she would be able to proceed to the Gulf alone.

Few boats on the river ever created so much interest. Enthusiastic and eager crowds greeted the boat at every river town. Having been so widely heralded by the press, everybody was anxious to see this new naval wonder. The journey from

Dubuque to Keokuk was a succession of gala occasions. While all admired her neat, trim appearance and her intricate machinery, the impression received by many was a bit disappointing. "They expected to see a craft as big as a man-of-war or as large as the *St. Paul* anyway, and when the little engine of destruction hove in sight and proved to be about the size of a tug boat, the spectators seemed to feel as though they had been swindled."

The last port visited in Iowa was Keokuk, a place where unusual interest is always exhibited in river affairs. On the afternoon of July 1st, when she entered the canal at Galland, the fact was telephoned to the city and, "in accordance with previous arrangements, the firebells gave a four-times-four signal which everybody understood". The more thoughtless, forgetting that it would take an hour and a half for the boat to get through the canal, made a rush for the river front and stayed there in a broiling sun until she arrived. Some old-timers remarked "that they had not seen such a crowd on the levee since the formal opening of the canal about twenty years ago". All day long the telephones at the lower lock, the bridge, the Diamond Jo Packet office, and other places on the river front were constantly ringing for persons who were anxious to know when the boat would arrive.

It was just 5:30 in the afternoon when the *Dolphin*, with the *Ericsson* and the barge in tow, came around the bend in the canal and was visible to the crowd at the lower lock. Thousands of people viewed her from the bluff and river bank and to every one "she was a distinct disappointment. On every hand was heard the expression, 'Oh! what a little thing!' The ladies were especially disappointed and spoke as though the *Ericsson's* diminutiveness was a personal offence". The crowd wanted to go aboard but, under strict orders from those in authority, the officers prohibited admission. Government employees were admitted, however, and a *Gate-City* reporter also was allowed to explore the craft.

To those who understood her full significance, she was heartily admired. "Economy of space has been carried to perfection in the *Ericsson*", wrote the local reporter, "not one cubic inch has gone to waste. The apartments are very cramped and life aboard her will be like living in a closet. All the apartments are below the water level and pure and cooling air will be supplied by fans, so that there will be some comfort after all. The workmanship of a watch could hardly be finer than on this craft, and it is a source of great pride to Iowans that this addition of the Navy was built in Iowa."

At about 6:30 the *Dolphin* and her tow departed for Saint Louis. Within a few minutes she sailed past the mouth of the Des Moines and, like a grown child, left her native State never to return, yet to distinguish herself and bring honor to the home folks who followed her career upon the high seas with no little pride and interest.

BEN HUR WILSON