## THE PHYSICISTS' DAUGHTER EXCERPT

By Mary Anna Evans

Justine Byrne knew the sounds of a manufacturing plant so well that she felt something was wrong before she'd traveled ten steps down the boat manufacturing line. Far above the shrieking of saws, she heard shrieking human voices. Accompanying the thunder of sledgehammers, she heard the pattering sound of human feet on the concrete floor. And high overhead, she heard a rhythmic clanging that just wasn't right.

Looking up, she saw a tremendous wooden assembly, probably part of the hull of a PT boat, dangling from the hoist of a gantry crane. The metal beams supporting the crane were supposed to stand still, vertical and strong, but they weren't doing that. They were swaying so hard that their load swung like a pendulum, and Justine knew that this couldn't go on for long. The crane wasn't made to move like that. Justine knew that even steel will fail when stressed beyond its design limits.

Her instincts said to run toward the failing equipment and help, but she had taken just a step toward the swaying crane when it collapsed, taking its load to the factory floor where a cluster of three workers stood. Justine saw it take them down.

Trying to walk upstream through the crowd of people fleeing a disaster that had already happened, she raised her voice, hoping someone would hear her over the din. "Somebody get a floor crane. We'll need it to get those people free of the wreckage."

She couldn't tell if anybody heard her, so she kept pushing against the crowd, one step at a time. She knew where to find a portable floor crane, mounted on wheels and stored in a nearby corner. If she got to it, maybe she could get somebody to help her move it to the scene of the accident. Through a gap in the throng, she could see it dead ahead. Its blue-painted steel beam

called out to her. After a few more struggling steps, she had her hand on it, ready to roll it to people who needed help.

Then a voice sounded over the loudspeaker that Sam-the-Timekeeper used to make announcements.

Sam's voice was calm but insistent. He might be only a timekeeper, but he had an air of command about him. "Everybody to their work stations—unless your station is in the immediate vicinity of the accident, in which case we're gonna need you to gather outside the east entrance. We've got a rescue crew on its way."

Justine was absolutely in the vicinity of the accident, and her work station was nowhere near where she stood. She needed to do what Sam said and get moving, but still she lingered, one hand on the blue floor crane.

Justine couldn't see two of the injured workers. That was a bad thing, since it meant they were probably underneath the pile of busted-up debris. The third worker had pulled herself to a sitting position, but her leg was trapped under the collapsed crane's steel beam.

Five men appeared, running toward the pile of splintered wood and mangled metal. One of them carried a first aid kit and the others carried hand tools, but she could that they were going to need way more than that to get everybody free. She could also see that the first aid kit was woefully inadequate.

Justine knew one of the men slightly, a burly red-haired custodian named Martin, and she waved both hands to flag him down. Gripping the floor crane's supporting beam, she called out, "You'll need this."

Martin skidded to a stop and grabbed one of his companions by the arm. "Help me move this." He directed a tense nod at Justine, saying simply, "Thanks. You saved us the time we would've spent looking for it," then he turned his back on her and got to work.

As they wheeled the crane away, Justine walked toward the door to her worksite in the Carbon Division section of the plant. Her legs went unexpectedly wobbly beneath her, so she paused to watch the rescuers at work. They were getting the blue crane into position to lift

wreckage off the sitting woman's leg. From this angle, she could see the other two workers, and bile rose in her throat at the sight of their still bodies, pinned to the floor. There was almost no blood, just a few crimson drips and spatters on the smooth gray concrete beneath them. Justine almost wished for a more obvious marker of calamity to mark the spot.

Broken bodies and death were the very thing Justine and the other factory workers were working to avoid. Everyone on the home front wanted to bring the soldiers home whole and in one piece. Nobody wanted their young, strong bodies to lie limp and still on beaches or in jungles or at the bottom of the sea. Justine saw her job as a real, palpable thing that she could do to end the war. She knew it was dangerous. She knew that there had been industrial accidents at Higgins plants before. She knew that there would be more, because entropy dogged all human endeavors, but this was the first time that her day-to-day danger had been rubbed in her face.

Justine ordered her wobbly legs to take her back to her work station. She was needed there. She was needed to help stop a war that was consuming the whole world.