Of the fatal accidents, one was caused by the victim, a sawmill worker, being caught by a revolving shaft and fatally injured; the second fatality arose from a workman employed on a gold-dredge being caught between the belting and an elevator roller; the third fatal accident occurred to a man employed about a drag-line winch, the victim being caught between a transmission belt and an engine pulley; and the final fatality was caused by shafting driving a rock-crushing mill, the victim being caught by his clothing. In each of the four cases here reported the victim was alone when he met his death and therefore the precise circumstances attending these accidents can never be known; but it is at least certain that each victim was engaged, at the moment of the accident, on some task adjacent to running machinery which it was highly dangerous to engage in whilst the machinery was in motion. Improvement of the existing safety arrangements has been effected in each case.

In the category of non-fatal machinery accidents many of the victims suffered injuries to fingers, hands, and arms. Of these, five cases involved the loss of an entire hand at wrist. The problems associated with the prevention of fingers and hands being injured by rollers, cutters, conveyors, punches, &c., are often complex and admit of no fully effective solution. The Department made inquiries this year overseas into the present state of the application of the photo-electric cell ray to machine guards, and would have been prepared to approve the use of the photo-electric ray had experience elsewhere been satisfactory. This method, whilst seeming to hold out attractive possibilities, has not yet proved itself the equal of other methods of guarding.

In the following table is given an analysis of the fatal and non-fatal machinery accidents which occurred during the year, indicating the principal machines and industries :---

	Industries.										Totals.					
Description of Machines.			Woodworking.	Textile.	Refrigeration.	Printing.	Metal-working and Engineering.	Laundry.	Butchery.	Confectionery and Bakery.	Boxmaking.	Other Industries.	Total Accidents (Machinery).	Fatal.	Non-fatal.	
Circular saws				18		1		2	ļ					21	1	20
Planers				5				ĩ	••	•••		•••	• •	6		6
Shapers				7										7		7
Power pres							2	8				2	3	15		15
Guillotines								3						3		3
Laundry machinery								2					2		2	
Cranes and												1	1	1		1
Lifts							1						1	2		2
Belting	••			1				1					3	5	1	4
Shafting				1						1		1	ŏ	8	1	7
Gearing						2	1	2	1		2		2	10		10
Mincers and other cutting-machines					1	2				3			2	8		8
Other	••	••		3	3	2	1	6		1	5	1	15	37	1	36
Total accidents			35	4	7	5	23	3	5	7	4	32	125	4	121	

Machine and Industry Analysis of Accidents, 1947-48