



48<sup>TH</sup> INTERNATIONAL EXHIBITION OF INVENTIONS GENEVA

26 TO 30 APRIL 2023

UNDER THE PATRONAGE OF THE SWISS FEDERAL GOVERNMENT, OF THE STATE, THE CITY OF GENEVA AND OF THE WORLD INTELLECTUAL PROPERTY ORGANIZATION WIPO

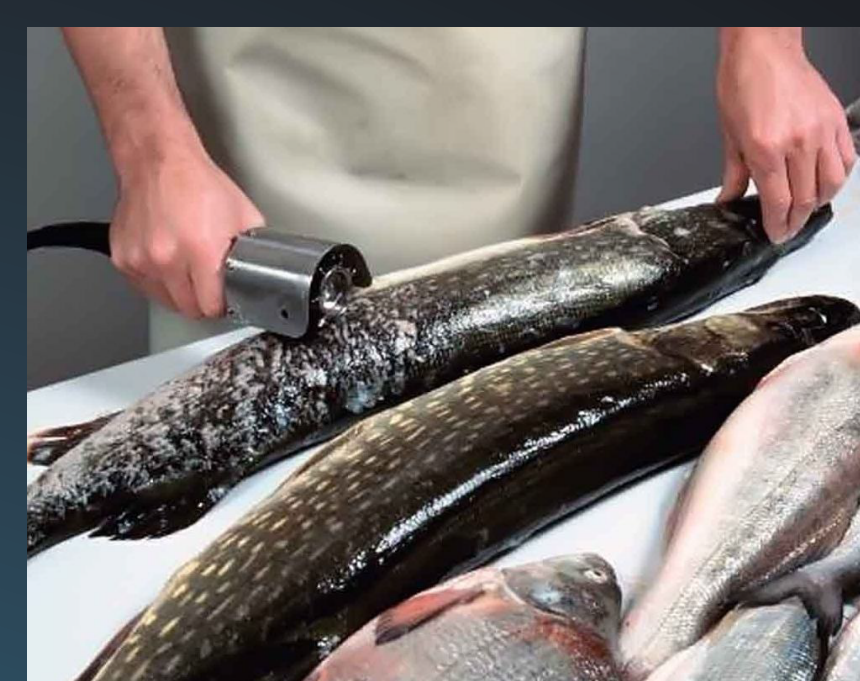


## Innovative fish descaling - method and device Polish patents no 226155 and no 226156

The process of removing the scales from a fish is known as "scaling or descaling" and individually can be done on a single fish:



manually with kitchen gadgets

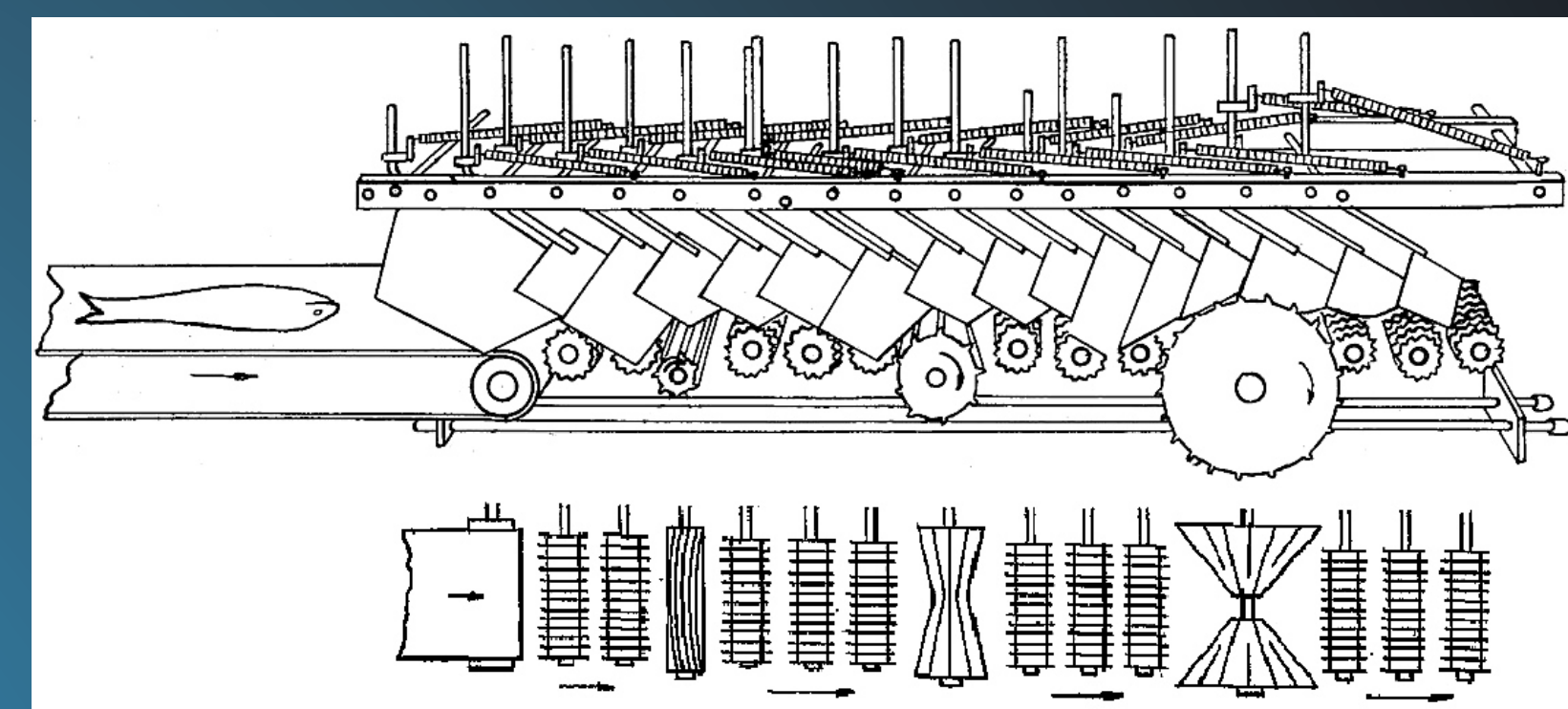


with hand-held electric fish scaler

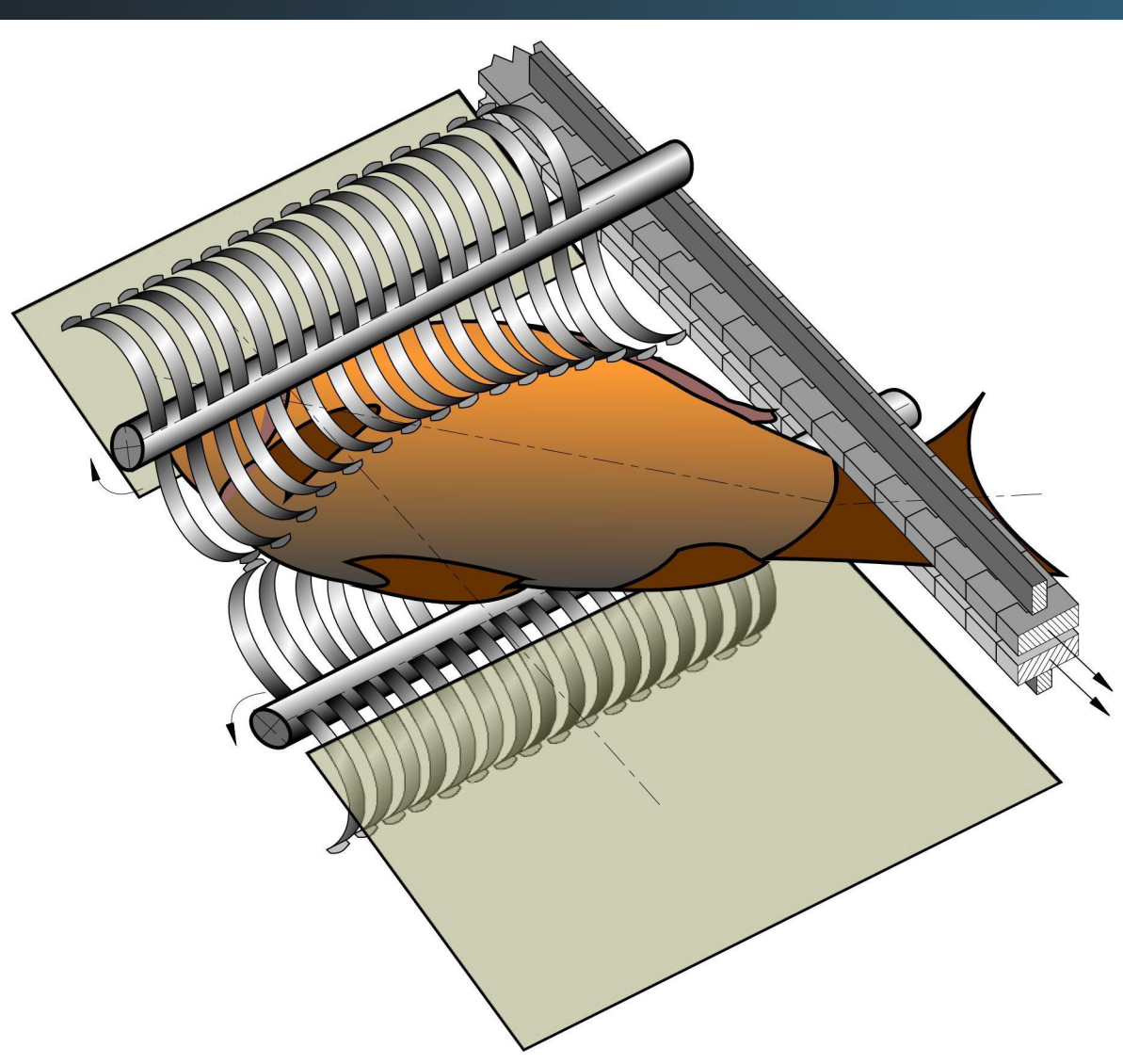


with scaler machine

The fish scaling machines have a series of revolving rolls. Their shapes and sizes are fitted to descaled fish. Thus descaling the fish of different size and shape requires either exchange of rolls series or application of another descaler.

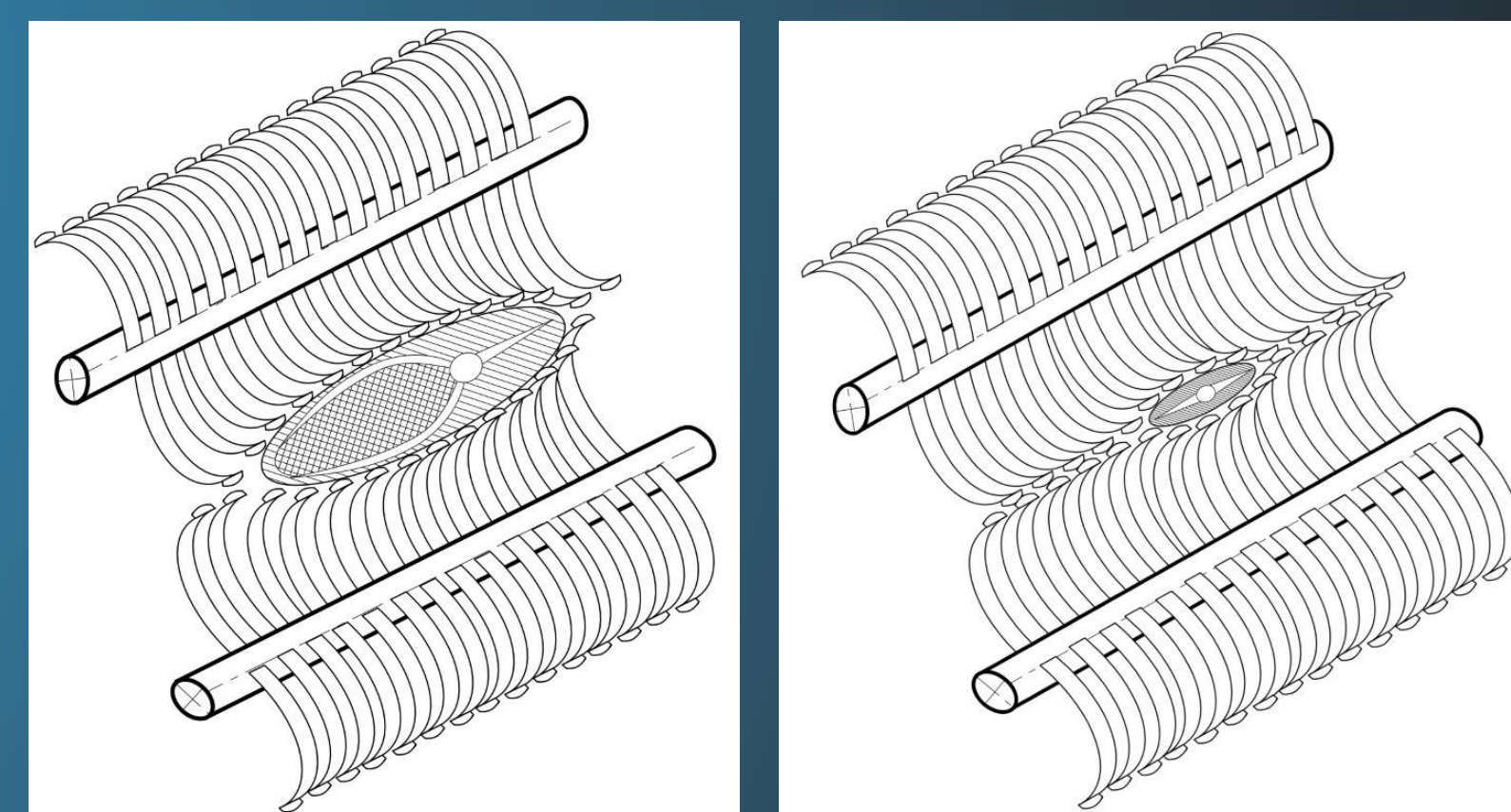


For the avoidance of such inconveniences in NMFRI the innovation scaling method was designed. In this method the series of stiff scaling rollers are replaced with flexible metallic scrapers. The scrapers can adapt to fish shape on both its sides, thus they can scaling fish of **different size and species**.



Application of one pair of flexible scrapers scaling both side of fish at the same time allowed to reduce size of machine. Now its dimensions (prototype - LxBxH - 850x430x550 mm) allow to

place it even on the table. **Thus a new machine based on innovation descaling method can replace series of types currently used descalers.**



Fish before descaling



Fish after descaling

In industrial conditions fish like: bream, roach, sea bass and sea bream were descaled in the prototype. It was found that the prototype replaced the work of three employees and descaled all these fish species correctly.



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